



CABINET
Monday, 7th March, 2022

You are invited to attend the next meeting of **Cabinet**, which will be held at:

Council Chamber, Civic Offices, High Street, Epping
on Monday, 7th March, 2022
at 7.00 pm .

G. Blakemore
Chief Executive

Democratic Services
Officer

A. Hendry (Democratic Services)
Tel: (01992) 564246 Email:
democraticservices@eppingforestdc.gov.uk

Members:

Councillors C Whitbread (Leader of the Council & Leader of the Conservative Group) (Chairman), , N Avey, N Bedford, L Burrows, A Patel, J Philip, S Kane, D Sunger and H Whitbread

PLEASE NOTE THAT THIS MEETING IS OPEN TO ALL MEMBERS TO ATTEND

1. WEBCASTING INTRODUCTION

This meeting is to be webcast and Members are reminded of the need to activate their microphones before speaking.

The Chairman will read the following announcement:

“I would like to remind everyone present that this meeting will be broadcast live to the Internet and will be capable of subsequent repeated viewing, with copies of the recording being made available for those that request it.

By being present at this meeting, it is likely that the recording cameras will capture your image and this will result in your image becoming part of the broadcast.

You should be aware that this may infringe your human and data protection rights. If you have any concerns then please speak to the Webcasting Officer.

Please could I also remind Members to activate their microphones before speaking.”

2. APOLOGIES FOR ABSENCE

To be announced at the meeting.

Please use the Members Portal webpage to report non-attendance at meetings https://eppingforestdc-self.achieveservice.com/service/Member_Contact to ensure your query is properly logged.

Alternatively, you can access the Members portal from the front page of the Council’s website, at the bottom under ‘Contact Us’ <https://www.eppingforestdc.gov.uk/your-council/members-portal/>

3. DECLARATIONS OF INTEREST

To declare interests in any item on this agenda.

4. MINUTES (Pages 5 - 22)

To confirm the minutes of the meetings of the Cabinet held on 25 January 2022 and 7 February 2022.

5. REPORTS OF PORTFOLIO HOLDERS

To receive oral reports from Portfolio Holders on current issues concerning their Portfolios, which are not covered elsewhere on this agenda.

6. PUBLIC QUESTIONS AND REQUESTS TO ADDRESS THE CABINET

To receive any questions submitted by members of the public and any requests to address the Cabinet.

(a) Public Questions

To answer questions asked by members of the public after notice in accordance with the provisions contained within Part 4 of the Constitution (Council Rules, Rule Q3) on any matter in relation to which the Cabinet has powers or duties or which affects the District.

(b) Requests to Address the Cabinet

Any member of the public or a representative of another organisation may address the Cabinet on any agenda item (except those dealt with in private session as exempt or confidential business) due to be considered at the meeting, in accordance with the provisions contained within Article 7 of the Constitution (The Executive, Paragraphs 27 and 28).

7. OVERVIEW AND SCRUTINY

To consider any matters of concern to the Cabinet arising from the Council's Overview and Scrutiny function and to identify any matters that the Cabinet would like the Overview and Scrutiny Committee to examine as part of its work programme.

8. COUNCIL HOUSEBUILDING CABINET COMMITTEE - 13 DECEMBER 2021 (Pages 23 - 26)

(Housing Services Portfolio Holder) to consider the attached minutes from the meeting of the Council Housebuilding Cabinet Committee, held on 13th December 2021, and any recommendations therein.

9. EFDC SUSTAINABILITY GUIDANCE VOLUME 3 (EXTENSION & REFURBISHMENTS) (Pages 27 - 292)

Planning and Sustainability – (C-044-2021-22) - This report sets out the changes proposed to the draft EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions following the consultation process.

10. COVID 19 DEVELOPMENT PLAN - TRAVEL LOCAL DEMAND RESPONSIVE (DRT) TRIAL (Pages 293 - 304)

Environmental & Technical Services – (C-045-2021-22) - Review of the DRT trial.

11. ALLOCATIONS POLICY (Pages 305 - 422)

Housing Services – (C-046-2021-22) - Cabinet is asked to agree the revised Housing Allocations Scheme for 2022- 2027.

12. HOMELESSNESS AND ROUGH SLEEPING STRATEGY (Pages 423 - 484)

Housing Services - (C-048-2021-22) -to approve the draft Homelessness and Rough Sleeping Strategy for 2022 - 2027 (the strategy).

13. TENANCY POLICY (Pages 485 - 514)

Housing Services - (C-047-2021-22) - To approve the renewal of the Tenancy Policy for the period 2022-2027.

14. PROPOSED SITE DISPOSALS TO QUALIS FOR REDEVELOPMENT (Pages 515 - 518)

Finance, Qualis Client and Economic Development – (C-049-2021-22) - This report presents the two proposals put forward by Qualis for Cabinet consideration and decision.

15. ANY OTHER BUSINESS

Section 100B(4)(b) of the Local Government Act 1972, together with paragraphs 6 and 24 of the Council Procedure Rules contained in the Constitution requires that the permission of the Chairman be obtained, after prior notice to the Chief Executive, before urgent business not specified in the agenda (including a supplementary agenda of which the statutory period of notice has been given) may be transacted.

In accordance with Operational Standing Order 6 (non-executive bodies), any item raised by a non-member shall require the support of a member of the Committee concerned and the Chairman of that Committee. Two weeks' notice of non-urgent items is required.

16. EXCLUSION OF PUBLIC AND PRESS

Exclusion

To consider whether, under Section 100(A)(4) of the Local Government Act 1972, the public and press should be excluded from the meeting for the items of business set out below on grounds that they will involve the likely disclosure of exempt information as defined in the following paragraph(s) of Part 1 of Schedule 12A of the Act (as amended) or are confidential under Section 100(A)(2):

Agenda Item No	Subject	Exempt Information Paragraph Number
Nil	Nil	Nil

The Local Government (Access to Information) (Variation) Order 2006, which came into effect on 1 March 2006, requires the Council to consider whether maintaining the exemption listed above outweighs the potential public interest in disclosing the information. Any member who considers that this test should be applied to any currently exempted matter on this agenda should contact the proper officer at least 24 hours prior to the meeting.

Background Papers

Article 17 of the Constitution (Access to Information) define background papers as being documents relating to the subject matter of the report which in the Proper Officer's opinion:

- (a) disclose any facts or matters on which the report or an important part of the report is based; and
- (b) have been relied on to a material extent in preparing the report and does not include published works or those which disclose exempt or confidential information and in respect of executive reports, the advice of any political advisor.

The Council will make available for public inspection one copy of each of the documents on the list of background papers for four years after the date of the meeting. Inspection of background papers can be arranged by contacting either the Responsible Officer or the Democratic Services Officer for the particular item.

EPPING FOREST DISTRICT COUNCIL CABINET MINUTES

Committee: Cabinet **Date:** 25 January 2022
Place: Council Chamber - Civic Offices **Time:** 7.00 - 7.50 pm
Members Present: C Whitbread (Chairman), N Avey, N Bedford, L Burrows, A Patel, J Philip, S Kane, D Sunger and H Whitbread

Other Councillors: R Baldwin, J Lea, B Vaz and J H Whitehouse

Apologies:

Officers Present: G Blakemore (Chief Executive), N Dawe (Chief Operating Officer), D Fenton (Service Director (Housing Revenue Account)), A Hendry (Democratic Services Officer), V Messenger (Democratic Services Officer), S Mitchell (PR Website Editor), N Polaine (Harlow and Gilston Garden Town Director), A Small (Strategic Director Corporate and 151 Officer), H Thorpe (Property Maintenance Operational Assets and Compliance) and J Warwick (Acting Service Director (Contracts))

83. WEBCASTING INTRODUCTION

The Leader of Council made a short address to remind everyone present that the meeting would be broadcast live to the internet, and would be capable of repeated viewing, which could infringe their human and data protection rights.

84. DECLARATIONS OF INTEREST

Pursuant to the Council's Member Code of Conduct, Councillor C Whitbread declared a non-pecuniary interest in agenda item 12 – 'NEPP Joint Committee Agreement', by virtue of being the Essex County Council's Portfolio Holder for Finance. The Councillor had determined that his interest was non-prejudicial and that he would stay in the meeting for the consideration of the item.

85. MINUTES

Decision:

That the minutes of the Cabinet meeting held on 6 December 2021 be taken as read and would be signed by the Leader as a correct record.

86. REPORTS OF PORTFOLIO HOLDERS

There were no verbal reports made by Members of the Cabinet on current issues affecting their areas of responsibility.

87. PUBLIC QUESTIONS AND REQUESTS TO ADDRESS THE CABINET

The Cabinet noted that no public questions or requests to address the Cabinet had been received for consideration at the meeting.

88. OVERVIEW AND SCRUTINY

The Cabinet noted that the Chairman of the Overview & Scrutiny Committee had given her apologies and was unable to attend the meeting.

89. ENDORSEMENT OF HARLOW AND GILSTON GARDEN TOWN TRANSPORT STRATEGY

In the absence of Councillor Bedford for this item, the Finance, Qualis Client and Economic Development Portfolio Holder, Councillor Philip, introduced this report.

He noted that the report concerned the endorsement of the Harlow and Gilston Garden Town (HGGT) Transport Strategy. The HGGT Transport Strategy had been prepared on behalf of the five HGGT Authority partners (Epping Forest, Harlow and East Herts District Councils, and Essex and Hertfordshire County Councils). The new communities in the Garden Town which were within Epping Forest District would deliver 3900 homes in the Local Plan period (to 2033), over a third of the allocated housing in the District.

The Transport Strategy was crucial in meeting the ambitions for sustainable movement set out within the HGGT Vision, against the backdrop of the challenges of future travel demand linked to planned growth in new Garden Communities, as set out in the Council's emerging Local Plan.

The Transport Strategy would assist decision-makers in transport matters, enabling Members to review and determine masterplans and planning applications against the objectives, principles and actions within the document. The Strategy will also be used to secure funding from developers, central government and other bodies.

In response to a member's question on the rapid transit system, its connection to Epping and what would differentiate it from a normal bus service. Councillor Philip noted that a key part of this was a Harlow and Gilston Garden Town Transport Strategy, contained within the boundaries of the garden town and places surrounding the garden town such as North Weald and Epping. The rapid transit service could be all sorts of other transports solutions other than a bus, such as a light rail service. This strategy set out the principals in which we can all work together in partnership.

Councillor Lea asked that consideration be given to the amount of extra traffic that may be generated. She was told that a lot of work had been done on traffic modelling in and out of the garden town; so, they had considered this and worked it out in detail.

Decision:

(1) The Cabinet considered the HGGT Transport Strategy together with the accompanying appendices including the high level programme, consultation report and equality impact assessment;

(2) The Cabinet agreed that the HGGT Transport Strategy would be considered as a material planning consideration in connection with the preparation of masterplans, pre-application advice, assessing planning applications and any other development management purposes for sites within the Harlow and Gilston Garden Town;

(3) The Cabinet agreed to delegate to the Planning Portfolio Holder for Planning and Sustainability in consultation with the Director of the Garden Town to make any minor text or design amendments to the HGGT Transport Strategy prior to publication should there be necessity for clarification or changes proposed by the respective decision makers of East Herts, Harlow and Epping Forest Districts and Essex and Hertfordshire Counties in order to ensure a consistent document.

(4) The Cabinet acknowledged that the ambition, mode share objective and principles in the Transport Strategy should help shape existing and future work programmes of the Highway Authorities and the Local Planning Authorities across the Garden Town and can provide supporting justification for funding submissions and spending commitments in relation to transport. Content will also be relevant to initiatives undertaken by Epping Forest District Council.

Reasons for Proposed Decision:

To ensure that the HGGT Transport Strategy was afforded suitable planning weight through endorsement as a material consideration in the planning process. This would ensure that development proposals across the Garden Town contribute to the Council's and HGGT's sustainable mobility ambitions, and that clear parameters were established for future pre-application advice, preparation of masterplans, assessing planning applications and any other development management purposes.

Other Options for Action:

Not to agree the HGGT Transport Strategy or endorse the HGGT Transport Strategy as a material consideration in the planning process, which would mean that there would be no guidance to support the delivery of development proposals and achieve the objectives set out in the HGGT Vision and Council's emerging Local Plan.

90. HGGT LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN (LCWIP)

In the absence of Councillor Bedford for this item, the Finance, Qualis Client and Economic Development Portfolio Holder, Councillor Philip, introduced this report.

He reminded the meeting that this report was for noting the HGGT Local Cycling and Walking Infrastructure Plan (LCWIP). The HGGT LCWIP was the HGGT partnership's response to the Government's call to develop a local LCWIP. The LCWIP will assist Highway and Planning Authorities in obtaining funding from Government, Local Enterprise Partnerships, sub national transport bodies and developers. The HGGT LCWIP along with other plans, also informed the delivery of sustainable zero emission movement as set out in the HGGT Vision and HGGT Transport Strategy

Decision:

(1) The Cabinet noted the HGGT LCWIP, as approved by the HGGT Board and submitted to the relevant portfolio holder of Essex CC for noting and endorsement; to Herts CC Exec Members and to the appropriate portfolio holders and Cabinets at Herts CC, East Herts DC, Epping Forest DC, and Harlow DC for noting; and

(2) The Cabinet noted that the HGGT LCWIP document would be reviewed every three years co-ordinated by the HGGT Partnership.

Reasons for Proposed Decision:

To ensure that EFDC Cabinet and relevant Portfolio Holders were aware and updated on the content and purpose of the HGGT LCWIP, and the HGGT Board's decision to approve the LCWIP and commitment to review.

Other Options for Action:

Not to note the HGGT LCWIP would be contrary to the agreed recommendations of the 14 December HGGT Board report.

91. POLICY ON OUR APPROACH TO TREES CAUSING STRUCTURAL DAMAGE TO ASSETS

The Housing Services Portfolio Holder introduced the report. She informed the Cabinet that this was a draft policy on the Council's approach to dealing with trees which were causing structural damage to its assets and was presented to the Overview and Scrutiny Committee in June 2021. Various comments and suggestions were made. As such the policy had been updated and was now being presented to Cabinet.

As the tree or trees grow, encroaching roots and overhanging branches can extend beyond the legal boundary into neighbouring properties, causing inconvenience, damage or even injury. When the tree roots enter a shrinkable, clay soil, they can take up sufficient moisture to cause the clay to dry and shrink. As a result, any property foundation built upon the clay may move or subside.

The Council had a dual responsibility, to protect trees in the interests of public amenity, but also to try and ensure that no individual suffered undue loss, distress or damage resulting from Council owned and managed trees. Our Current approach was ad-hoc and some residents were experiencing issues such as not being able to open windows or keep properties warm due to tree root damage. Our proposed policy took a structured approach and enabled us to take a consistent approach to the challenges of tree root damage. It also defined the decision-making process.

Councillor Patel asked if we had a register of the trees that fell within this policy saying if any were currently causing any damage and if any were TPO'd. He was told that the council knew what trees they owned and if we had to dispose of any tree, we would replace it with two others in more suitable situations. We did not have any TPOs on Council owned trees.

Councillor Philip looking at the resources, asked how many cases did the council get over a five year period. He was told there were quite a few of these cases especially in some of our older estates. There were on average about five cases a year but that was increasing.

Councillor Baldwin asked about street trees owned by Essex County Council did the policy cover this? He was told that Essex Highways trees had a separate policy and ours ran in parallel with that policy.

Councillor Patel asked if we had consulted with our insurance company to ensure that we had covered all the criteria that they have set out. He was told that yes, we had done that.

Decision:

The Cabinet approved the new policy - 'our approach to dealing with trees which are causing structural damage to our assets'.

Reason for decision:

Asset management are dealing with an ever-increasing number of structural issues these are having an impact on the condition of our assets and in some instances the lives of our residents. The policy sets out to formalize our approach.

Options considered and rejected:

Officers considered continuing with the adhoc approach however that presents several risks to the organization.

92. SHELTERED HOUSING - EMERGENCY ALARM SYSTEM UPGRADE

The Housing Services Portfolio Holder introduced the report on the emergency alarm upgrade. She noted that our sheltered schemes have an analogue telephone system. This meant that it operated on the public switched telephone network (PSTN). This network was being switched off in 2025 as we move to an IP network. This means that we were moving from analogue to digital.

Technology had moved on and so have emergency alarm systems. To ensure the alarm systems in our sheltered housing schemes continue to provide a reliable service, and meet the needs of our residents, we needed to upgrade them to digital.

Officers had undertaken a review of systems currently on the market and had recommended Everon's Lyra alarm call system.

Councillor Patel asked if there was any merit in spreading the costs over the years until 2025. He was told that they had investigated that, and this had proved to be the most cost efficient method (as set out in the report).

Decision:

The Cabinet agreed the proposal to use Everon to replace the existing Hard-Wired Alarm system, noting the positive changes for residents and the ability to make VFM savings for EFDC (HRA).

Reason for decision:

There was a requirement to upgrade the alarm system due to the analogue signal being discontinued in 2025.

Options considered and rejected:

The option was considered to not upgrade the system, this was rejected as we would not be able to offer an alarm service.

93. NORTH ESSEX PARKING PARTNERSHIP JOINT COMMITTEE AGREEMENT

The Customer and Partnership Services Portfolio Holder, Councillor S Kane introduced the report. The purpose of this report was to seek Cabinet agreement to

continue Epping Forest District Council's membership of the North Essex Parking Partnership (NEPP) Joint Committee from 1 April 2022.

On 21 September 2021, Essex County Council's (ECC) Cabinet approved the new Joint Committee arrangements with NEPP and SEPP from 1 April 2022 for a five-year period with the option of extending the contract on an annual basis on 3 consecutive occasions (8 years in total to 2030).

At its Cabinet meeting on 17 November 2021, Colchester Borough Council decided to continue to be a part of the Parking Partnership Agreement, part of the Joint Parking Committee, and to continue to be the lead authority for the North Essex Parking Partnership.

This means that a replacement, new, Joint Committee can be formed between Essex and Colchester from 01/04/2022, and a new Joint Parking Agreement made, to which Epping Forest District Council could become party to if they so choose.

Councillor Philip agreed that this was the right thing to do as we needed to be part of the parking partnership and have the ability to have our say in it.

Councillor Janet Whitehouse would like any strategy and policy development discussed by the wider membership of this Council before we discussed it with NEPP. Councillor S Kane said he would take this under consideration to see how this could be formalised. Members could also always to speak to him about their concerns. Also, it was noted that any proposed schemes were consulted on with the relevant ward members and residents.

Decision:

(1) The Cabinet agreed the Council's continued membership of the North Essex Parking Partnership (NEPP) Joint Committee with effect from 1 April 2022 up to and including 31 March 2027; and

(2) Agreed to delegate authority to the Service Director (Contracts) in consultation with the Customer & Partnerships Services Portfolio Holder to approve the new Parking Partnership Joint Committee Agreement.

Reasons for Proposed Decision:

Membership of the North Essex Parking Partnership (NEPP) enables the Council to have a say in the traffic orders which were installed within its area, and to direct the policy of the operational service.

NEPP was considered by other local authorities as being a national leader in parking operations, innovation and enforcement with whom other local authorities consult for best practice advice and has been recognised in its sector for multiple awards at the British Parking Awards, winning seven in three years, with a further PATROL Award in 2019.

Other Options for Action:

If Epping Forest District Council did not agree to sign up to the new On-Street Agreement, then only a baseline level of services would be provided for the on-street part of the operation by the North Essex Parking Partnership.

Epping Forest District Council would have no say or input to how this service was provided. Epping Forest District Council would not have any say or part in determining TRO's (Traffic Regulation Orders), policy, schemes or operation.

94. EXCLUSION OF PUBLIC AND PRESS

Decision:

That, in accordance with Section 100(A)(4) of the Local Government Act 1972, the public and press be excluded from the meeting for the items of business set out below as they would involve the likely disclosure of exempt information as defined in the paragraphs of Part 1 of Schedule 12(A) of the Act indicated, and the exemption was considered to outweigh the potential public interest in disclosing the information:

<u>Agenda Item</u>	<u>Subject</u>	<u>Paragraph Number</u>
14	Waste & Recycling Collection/Street Cleansing Contract.	3

95. WASTE AND RECYCLING COLLECTION / STREET CLEANSING CONTRACT

The Environmental and Technical Services Portfolio Holder, Councillor N Avey introduced the report.

The Council was currently in contract with Biffa Municipal Ltd. for the delivery of waste, street cleansing and processing of dry recycling services. The Contract was due to expire in November 2024 after an initial period of ten years and has the option to extend by (up to) a further ten years, by mutual agreement. Ricardo Energy & Environment (Ricardo) were commissioned by the Council to conduct a high-level review of their current waste contract in August 2020, finding that the Council's current service contract was working very well with the core service costing £42,000 less per annum than Ricardo's initial modelling. However, it should be noted that this initial modelling was conducted on information provided by the Council rather than directly from Biffa and did not include the wider service requirements beyond core waste collection and cleansing activities.

Any extension to the Contract needs to be agreed and formalised at least 18 months in advance of the expiry of the initial period, which was by May 2023. The alternative would be to carry out a full procurement exercise, expected to take approximately two years (including a six-month mobilisation period) and would therefore need to commence by November 2022. It was stressed that at this stage a decision to extend only in principle was required.

Decision:

The Cabinet agreed, in principle, to an extension of up to ten years on the current Waste / Cleansing Contract, from November 2024.

Reasons for Proposed Decision:

Ricardo's assessment broadly concurs with the resources Biffa are currently deploying to deliver the services as they stand. Should the services be re-procured on an 'as is' basis, a diligent waste services provider should be deploying

approximately the same resources at approximately the same costs, with all providers likely facing the same pressures in terms of staff retention and the shortage of HGV drivers. This is compounded by the current lack of Council-owned operational depot, which presents a significant weakness for any re-procurement of waste services and gives Biffa a very strong competitive advantage.

Other Options for Action:

Devise a re-procurement strategy to fully test the market. This should incorporate the strategy to build a Council-owned depot that will be fully operational, ideally by May 2024 to allow a six-month mobilisation of any new Contract starting in November 2024.

96. ANY OTHER BUSINESS

It was noted that there was no other urgent business for consideration by the Cabinet.

CHAIRMAN

EPHING FOREST DISTRICT COUNCIL CABINET MINUTES

Committee: Cabinet **Date:** 7 February 2022

Place: Council Chamber, Civic Offices, High Street, Epping **Time:** 7.00 - 8.01 pm

Members Present: C Whitbread (Chairman), N Avey, N Bedford, L Burrows, A Patel, , S Kane, D Sunger and H Whitbread

Members Virtual Attendance: R Balcombe, R Brookes, C McCredie, J Philip, M Sartin, B Vaz, D Wixley

Other Councillors: J Lea and D Stocker

Apologies:

Officers Present: G Blakemore (Chief Executive), N Dawe (Chief Operating Officer), I Braddick (Garden Town Liaison Lead), D Fenton (Service Director (Housing Revenue Account)), C Hartgrove (Interim Chief Financial Officer), A Hendry (Democratic Services Officer), J Houston (Specialist Partnerships & Economic Development), S Jevans (Qualis Group Managing Director), L Kirman (Democratic Services Officer), P Messenger (Town Centres Project Manager), R Moreton (Corporate Communications Officer), N Polaine (Harlow and Gilston Garden Town Director) and A Small (Strategic Director Corporate and 151 Officer)

97. WEBCASTING INTRODUCTION

The Leader of Council made a short address to remind everyone present that the meeting would be broadcast live to the internet, and would be capable of repeated viewing, which could infringe their human and data protection rights.

98. DECLARATIONS OF INTEREST

There were no declarations of interest pursuant to the Council's Code of Member Conduct.

99. REPORTS OF PORTFOLIO HOLDERS

The Corporate Services Portfolio Holder, Councillor Sunger, noted that work had started on the latest employee survey which will be delivered in quarter 1 of the new municipal year.

The Councillor added that the data migration to the Her Majesty's Land Registry (HMLR) had now been completed and a data cleansing exercise was under way. They were now waiting for HMLR to provide us with their delivery plan.

Finally, he noted that a recent exercise had given the cost of printing and posting was costed at about £25k per year. Meanwhile, Members were being encouraged to move to a paperless system where they could.

100. PUBLIC QUESTIONS AND REQUESTS TO ADDRESS THE CABINET

The Cabinet noted that no public questions or requests to address the Cabinet had been received for consideration at the meeting.

101. OVERVIEW AND SCRUTINY

The Chairman of the Overview & Scrutiny Committee, Councillor Sartin reported that their last meeting was held on 27 January 2022 where they received a presentation from the West Essex Clinical Commissioning Group, where we discussed the delivery and organisation of health services in Hertfordshire and West Essex.

The meeting also considered the HRA Business plan and agreed it should go to Cabinet for approval and any updates by the Stronger Communities Select Committee.

102. ANY OTHER BUSINESS

It was noted that there was no other urgent business for consideration by the Cabinet.

103. IMPROVING PAYMENT OPTIONS FOR LEASEHOLDERS

The Housing Services Portfolio Holder, Councillor H Whitbread, introduced the report.

On 4th November 2021, Members of Stronger Place had considered a report and paper on improved payment options for leaseholders.

It was well understood that properties had a finite life cycle. To maximise the life span of our blocks, it was vital that we carried out regular improvement works. The process of improving blocks was worked out using life cycles; there was an industry average for all components for buildings.

To support leaseholders, it was commonplace to offer a payment plan. This gave leaseholders the option to spread the payments over a longer period.

Our residential assets were reaching the point where major investment was required. Choosing not to invest would lead to a situation where the asset could become dangerous. Furthermore, lead to a disintegration of quality of life for our residents.

Councillor Brookes was pleased to see that a survey had been completed and was pleased by the payment plan.

Councillor Patel referred to recommendation 4 of the report and asked what the definition of extreme hardship was and who would the authority be delegated to. He was told that it would be delegated to D Fenton and the definition would be based the individuals needs and circumstances.

Councillor H Whitbread proposed that recommendation 4 be amended to include 'in consultation with the Portfolio Holder'. This was agreed.

Decision:

- (1) The Cabinet accepted the recommendations from the Stronger Place Select Committee and agreed that the revised options for payment (Capital works – Leaseholder contributions) be adopted and implemented.
- (2) The Cabinet agreed the proposed level of interest to be applied, which was tapered to support leaseholders with repayment of charges.
- (3) The Cabinet agreed that any repayment plan for a sum of £7500 or above was secured as a voluntary charge on the property.
- (4) The Cabinet agreed that delegated authority to the relevant Director, in consultation with the Portfolio Holder, be approved in the matter of extreme hardship or in cases where the bill was likely to be in excess of £12,500.

Reason for decision:

Several estates were now requiring major investment. This work needed to be carried out to improve both the living environment for tenants and leaseholders, in addition to protect and prolong the life of the asset.

Options considered and rejected:

The option was considered to not introduce payment options, this was rejected as it would lead to financial hardship.

104. HRA BUSINESS PLAN

The Housing Services Portfolio Holder introduced the report.

The HRA business plan had been developed in partnership with our retained consultant Abovo-Consult. A bespoke HRA model is used which enables the Council to provide a reasonable cashflow projection for the next 30 years. It was based on evidential data from the Council's current systems and projections for economic assumptions in the social housing sector. Furthermore, the plan gave the Council the ability to stress test. This was vital given key dynamic risks such as the borrowing rate and changes in Government legislation regarding Social Housing.

Officers had taken both a safe and prudent approach when developing the business plan, with a balance between borrowing, developing, and improving the housing stock. The agreed minimum £2m revenue working capital balance was maintained throughout the plan.

Councillor Bedford thanked officers and the Portfolio Holder for recognising the need for investment in the Shelley area.

Councillor Philip welcomed the business plan and the fact it was to be reviewed every year.

Councillor Patel wondered what was a 'decent home standard' and how were we benchmarking ourselves. He was told that the decent home standard was set out by the government in 2002 and was seen as the standard we had to work to, although we now worked to a higher standard, the 'passive home' standard. Councillor Patel said that this higher standard should be reflected in the report. Did this standard also encompass the drive to a carbon neutral standard. He was told that the decent homes standard referred to the council's existing estates. The new builds conformed to the higher standards and the drive to net zero homes. The Council was also

currently in discussion with 'Eon' for a pilot project for 50 houses to retro fit these houses to achieve net zero and were also looking to install solar panels on current properties to investigate their value. Councillor Lea was glad to hear this especially due to the current rise in fuel prices.

Decision:

- (1) That Cabinet noted the verbal update from Stronger Communities and noted their recommendation to Cabinet for approval;
- (2) The Cabinet agreed to receive a yearly performance update, which would include stringent stress testing;
- (3) The Cabinet agreed to implement the proposed business plan, noting that the business plan included all assumed costs but not all income streams, as such the Cabinet also noted appendix B of the report which was an alternative plan including some potential income; and
- (4) The Cabinet noted the opportunity to improve our estates which would improve the life span of our assets and feed into our ongoing work to 'create great places where people want to live'.

Reason for decision:

Although stock holding councils no longer must submit a Housing Revenue Account Business Plan, it was still prudent to produce one as it acts as a planning tool for both financial and personnel resources.

Options considered and rejected:

- To not meet decent homes standard was considered, however that would lead to increase spend in the future as the life span of the asset would be minimised.
- To stop development. This would lead to a net loss of stock due to the RTB, in addition there would not be a compounded increase in income, which may impact the investment in stock in the future
- To not invest in the urgent works and continue to repair on an ad-hoc bases. This would lead to a long-term deterioration of stock, leading to an increase in costs.

105. HGGT FUTURE LEADERSHIP AND GOVERNANCE

The Planning and Sustainability Portfolio Holder, Councillor Bedford introduced the report.

He noted that the Harlow & Gilston Garden Town (HGGT) would enable approximately 16,000 new homes by 2033 with an additional 7,000 delivered beyond that. To bring these homes forward the Garden Town would require over £1.7 bn of infrastructure investment into transport, education, healthcare, emergency services, community facilities, open space, sports and leisure, utilities and flood defences.

The growth will cross the boundaries of the five council Partners (which comprise East Hertfordshire, Epping Forest and Harlow District Councils, and Essex and

Hertfordshire County Councils) and the Garden Town initiative was originally established under the 'Duty to Cooperate' arrangements to reach common agreement between those partners.

The scale of planned activities poses a significant delivery challenge to the partner Authorities and this report outlined the options for the future governance of the Harlow & Gilston Garden Town (HGGT) project. It set out the work carried out by officers, the HGGT Board and the governance Task and Finish group established by that Board, in appraising options and their recommendation, in principle, to explore the proposal of a HGGT Joint Committee. This report recommends Cabinet/Executive Committee approval, in principle, of that decision to the establishment of a HGGT Joint Committee.

In order to progress work to the next detailed stages and to enable implementation of new formalised governance arrangements for the beginning of the new municipal year, a formal decision by all five Partners on the principle of the new governance arrangements for HGGT was required.

Councillor Philip agreed with the report and noted that details would come back to the Cabinet for further consideration when appropriate; but would like to put down a marker to ensure that we were properly protected in what we do going forward.

Councillor Sartin raised concerns that the possibility of a joint planning committee should be avoided in the future.

Decision:

(1) The Cabinet agreed 'in principle' to explore the creation of a Harlow & Gilston Garden Town Joint Committee, consisting of representation by all five Partner Councils; and

(2) That the details of the constitution, priorities and operating model of the proposed Joint Committee would return to Epping Forest District Council for further consideration.

Reasons for Proposed Decision:

In order to progress work to the next detailed stages and to enable implementation of new formalised governance arrangements for the beginning of the new municipal year, a formal decision by all five Partners on the principle of the new governance arrangements for HGGT was required.

Other Options for Action:

Not to agree to explore the creation of the HGGT Joint Committee and return to Cabinet with details of the constitution, priorities and operating model of the Joint Committee would be contrary to the Partner Councils Members and Officer Task & Finish Group instruction, and would mean the work to formalise and implement new governance arrangements at the beginning of the municipal year would not take place.

106. TOWN CENTRE REGENERATION - AN UPDATE & PROGRESS REPORT

The Finance, Qualis Client and Economic Development Portfolio Holder and J Houston introduced the report.

The report provided a further update to Cabinet on the delivery of projects within the Town Centre Regeneration programme. It set out the current funding packages secured from central government and their allocation. It also provided further information around guidance and advice from national high street bodies for town centre regeneration.

Councillor Philip proposed a change to recommendation 3, that the following be added at the end "...subject to getting a financial buy in from the involved Town and Parish Councils". This was seconded and agreed.

Councillor Philip went on to recommend that recommendation 4 be removed as he thought the Cabinet should not be referring anything to a Task and Finish Panel as they were set to carry out a particular job and then finish. If needs be, we can have a further report identifying any work that may need doing and we can then ask the Overview and Scrutiny Committee to identify where it should go. This was seconded and agreed.

Councillor Patel was happy to note the progress made. As far as recommendation 3 was concerned he wanted to know what the level of partnership working was with the Town and Parish councils. He was told that the relationships with them were good as they could see the value in what we were doing. What we wanted was to show the Parish and Town Councils that what we were doing was valuable and, in our talks, we had asked for some funding from them, of about £5,000 per town centre.

Councillor S Kane acknowledged the excellent work done during the lockdown and as we were coming out of it, he hoped that the emphasis of the programme would now start to shift to deal with the changing face of the High Streets (moving away from retail) in the coming years. He was told that that this would come from the partnership working, which was reflected in the second recommendation.

Councillor Sunger said it was a very good report. He noted that it had been a bad year for local businesses and asked how we were reaching out to local business to let them know we were there for them. He was told that along with a business newsletter there was a number of other ways that we reached out, including web based solutions. We did what our resources allowed but it was also about partnership work.

Councillor Wixley asked when would the bill (as alluded to in recommendation 3) turn up. He was told it was not a bill, we had contacted the Town and Parish councils back in December highlighting this. In comparison with the amount of money we were supplying, £5,000 per town centre did not cover half the costs. Councillor Wixley asked if Loughton would have to make two contributions for their two High Streets (the Broadway and the High Road). He was told that yes, it would be a separate contribution for each of the two town centres.

Decision:

- (1) The Cabinet noted and endorsed the contents of the report and gave guidance on further priority activity.
- (2) The Cabinet agreed that a district wide town teams' group be set up with representatives of the district and parish councils who were contributing financially to oversee the regeneration programme and advise on deployment.

(3) The Cabinet agreed to retain the town centre management function moving forward subject to getting a financial buy-in from the involved Town and Parish Councils.

Reasons for Proposed Decision:

To enable progress to be made on the structure and delivery of Town Centre Regeneration initiatives.

Other Options for Action:

The initiatives highlighted in this update report are linked to central government funding requirements and the recommendations of the Town Centre Regeneration studies approved by Cabinet.

107. QUALIS QUARTERLY MONITORING REPORT

The Finance, Qualis Client and Economic Development Portfolio Holder introduced the report.

He noted that the Governance framework for Qualis, as agreed by Cabinet in February 2020, included the requirement that Qualis should report to Epping Forest District Council on its performance Quarterly.

This report presented the fourth Quarter's monitoring report for the Qualis trading year 2020/21 and covered the period from 1 October 2020 to 30 September 2021. The Quarter 1 position covering 1 October 2021 to 31 December 2021 was also provided as part of this reporting.

Although Qualis was reporting a loss in the second year of trading this was essentially a timing issue associated with the granting of Planning permission for the development of the Epping sites. This was granted shortly after the year end (September 2021) and enabled costs associated with achieving Planning permission to be removed from the Profit and Loss account Reserve in the Quarter 1 report for 2021/22.

Noting the point raised above, once the impact of achieving Planning permission was allowed for, the underlying trading position was a small net profit for Year 2 (Quarter 4), broadly in keeping with the Business Plan assumptions. Whilst Quarter 1 of Year 3 also shows a loss, this was similarly associated with achieving Planning consent for Roundhills and once allowed the position would also show a small net profit broadly in line with the target.

Decision:

The Cabinet noted the report and recommended its consideration by Council.

108. BUDGET REPORT FOR 2022/23

The Finance, Qualis Client and Economic Development Portfolio Holder, Councillor Philip, introduced the report. This report contained the final budget proposals for 2022/23 for consideration by the Cabinet. He noted that we had a balanced budget and had factored in the £5 uplift for a Band D property and were the lowest Council Tax authority in Essex. We were doing this without cutting any essential services. We

had also taken this through Scrutiny and had put in details this year at an earlier stage so that people could see more details earlier in the process.

The General Fund draft budget comprises Net Expenditure of £15.631 million and had been funded without recourse to Government Support for Covid-19 (budget of £1.263 million in 2021/22) or any contributions from the General Reserve (budget of £1.350 million in 2021/22). The Local Government Financial Settlement 2022/23 contained additional funding of a one-off nature, which potentially allows a contribution of £337,000 to the General Fund Reserve, which would partially alleviate emerging pressure on the Balance Sheet.

The HRA draft budget for 2022/23 anticipated a deficit of £3.537 million, which was to be partially offset by an estimated surplus of £2.319 million in 2021/22 (projected as at 31st December 2021); it should be noted that the 'surplus followed by a deficit' profile is a one-off position as the HRA adjusts to the long-term strategy within the emerging HRA Business Plan.

Councillor Philip went on to thank the officers and his fellow Cabinet members for the changes worked in from the start of the process.

Mr A Small highlighted the government grant situation and the changes they wished to make to the distribution of money to councils in the future; announcements of details of which had now been pushed back again. It was now likely that the government would introduce this for 2023/24. They would probably use this to promote their levelling up agenda and there was a significant risk that the South East may do quite badly out of this as the government redistributes money across the country. The government when distributing their grants in December made it very clear that this was a one off and that local authorities should not rely on this in the future.

The Leader commented that it was amazing that we came up with a balanced budget and thanked the officers for drawing up this budget in such difficult times. We had been promised a three-year settlement but only had a one-year settlement and the coming challenges were what would happen in levelling up and where we would be in the government grant for next year. We also still had to find year on year savings to ensure that we were financially sustainable as a council. We need to do this by efficiencies and change, but that challenge gets bigger all the time. We must always maintain our front line services and would need Qualis to do well for the benefit of our residents. We will also be looking for in-year savings, we can't just wait for the next budget.

Decision:

- 1) The Cabinet considered the final revenue and capital budget proposals for 2022/23 as presented in the report, together with the comments received from the Stronger Council Select Committee and made amendments that they considered necessary; and
- 2) The Cabinet recommend to Council:
 - a. The budget for 2022/23 and the updated Medium-Term Financial Plan; and
 - b. The level of Council Tax increase for 2022/23.

Reasons for Proposed Decision:

To enable Cabinet to recommend a final budget for 2022/23 to the Council on 24th February 2022.

Other Options for Action:

N/A.

CHAIRMAN

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EPPING FOREST DISTRICT COUNCIL COMMITTEE MINUTES

Committee:	Council Housebuilding Cabinet Committee	Date:	Monday, 13 December 2021
Place:	Council Chamber - Civic Offices	Time:	7.00 - 7.22 pm
Members Present:	A Patel (Chairman), N Avey, N Bedford, J Philip and C Whitbread		
Other Councillors Attending Virtually:	R Brookes, L Burrows and D Wixley		
Apologies:	Councillor H Whitbread		
Officers Present:	R Hoyte (Service Manager - Housing Development), J Leither (Democratic Services Officer), R Moreton (Corporate Communications Officer) and L Kirman (Democratic Services Officer),		

18. CHAIRMAN

In the absence of the Chairman, Councillor H Whitbread, who had tendered her apologies, it was proposed that Councillor A Patel be Chairman for the duration of the meeting.

Resolved:

That Members agreed that Councillor A Patel would assume the role of Chairman for the duration of the meeting.

19. WEBCASTING INTRODUCTION

The Chairman made a short address to remind everyone present that the meeting would be broadcast live to the internet, and would be capable of repeated viewing, which could infringe their human and data protection rights.

20. SUBSTITUTE MEMBERS

The Cabinet Committee noted that Councillor C Whitbread would substitute for Councillor H Whitbread at the meeting.

21. DECLARATIONS OF INTEREST

There were no declarations of interest pursuant to the Council's Code of Member Conduct.

22. MINUTES**Resolved:**

That the minutes of the Council Housebuilding Cabinet Committee held on the 28 September 2021 be taken as read and signed by the Chairman as a correct record.

23. COUNCIL HOUSE BUILDING PROGRESS REPORT - PHASES 4-5

Rochelle Hoyte, Service Manager, Housing Development presented a report to the Cabinet Committee and recommended that the Council House Building Progress Report - Phases 3 to 5 be noted. She advised that the report set out the progress that had been made across Phases 3 to 5 of the Council House Building Programme and that they were either completed, on-site or were currently being procured. The report was as set out in the Agenda on pages 11-90.

Phase 4

Phases 4.1 and 4.2 were currently on-site and were expected to reach practical completion between January and March 2022. Phases 4.3 and 4 would start on site in 2022.

Phase 5

R Hoyte advised that her team were continuing to work with the architects on the design stages for the proposed developments in Phase 5 and stated that early in 2022 she would be able to continue to consult with the Ward Councillors on the relevant schemes under Phase 5.

Councillor N Bedford referred to the recent houses that had been released in North Weald and asked why there was no consideration to put in any electrical car charging points in the houses as one of the residents had bought an electric vehicle and had been making enquiries of getting a charging point installed.

R Hoyte advised that she was aware and believed that it was being dealt with by the sustainability team who were looking to see if one could be installed. She stated that she was unaware if it had been resolved but she would make enquiries and report back to Councillor Bedford.

Councillor N Bedford thanked the officer for the update and asked if assurances could be given for the future at the planning stages and not after the developments had been finished.

R Hoyte assured Councillor Bedford that everything that was being worked on at present including Phase 5 and beyond would include electrical vehicle charging points. She also advised that when the North Weald development was planned quite a few years ago electrical vehicles were at the very early stages and stated that things had greatly improved since as electrical vehicles were becoming more common and affordable.

Councillor D Wixley advised he had a question regarding Chester Road, Loughton which was in Phase 4.1 and asked if there were any particular problems with this site and it was taking a long time for the build to complete. He stated that he had looked at this site a year ago and when work had been going on for several months. He also asked if there were going to be an electrical charging points installed on that site.

R Hoyte advised that all of the schemes in Phases 4.1 and 4.2 had been affected by the issues surrounding the supply of materials and labour supply. Covid had impacted on all the services to the sites in Phase 4. Some of the schemes that were due to be handed over this year will now be delayed until January to March 2022. Phase 4.1 does not have any vehicle charging points being installed but the infrastructure for these had been included. She advised that she would be able to give a further update on Phase 4 at the next meeting.

Councillor R Brookes referred to Kirby Close, Loughton which was in Phase 4.2 and asked if they would have any electric vehicle charging points or have none been planned until the later phases.

R Hoyte advised that Kirby Close had been considered for the infrastructure but the actual charging points were not determined when these sites were being planned. As the infrastructure was in place and when we know what was needed they can then be added.

Councillor J Philip referred to page 33 of the Agenda, Build / Tender Cost Status, and asked why the column headed 'Cabinet Approved Construction Cost' had tbc against every development in Phase 4.1. He highlighted that in all of Phase 4.1 the build cost was significantly higher than predicted and Phase 4.2, which hadn't yet commenced, was currently on target. He asked if going forward Phase 4.2 and beyond would remain very close to the predicted costs.

R Hoyte advised that all of the sites going forward would have a better management of the cash flow as enough contingency had or would be built into the predicted costs. She referred to page 33 of the agenda and advised that there was no reason why the column headed 'Cabinet Approved Construction Cost' stated tbc as it had already been agreed and that she would liaise with the Employers Agent who prepared the table to find out why.

Councillor A Patel referred to Phases 4.1 and 4.2 where the hand over dates had fallen behind what was originally quoted, could the Service Manager give assurances that the hand over will be on the dates that are now given as stated in the report.

R Hoyte advised that her team were meeting with the contractors on a weekly basis so if there were any slippages that would be when they would detail them. The dates in the report are the most recent dates reported by the contractors and she stated that she wouldn't expect to see much more slippage on what had already been due the them being at the end stages of the phases. The snagging process on Phase 4.1 was due to begin the first week of January 2022.

Councillor A Patel referred to Pentlow Way in Buckhurst Hill and as it stated in the report it remained delayed due to the substation he asked the Service Manager to clarify what that entailed.

R Hoyte advised that the delays had been due to legal and when first spoke to UKPN they advised that they had up to a nine month legal process time, this had now recently been agreed and the start on site should be in June 2022.

Councillor A Patel advised that a majority of the Cabinet went on an organised tour of some of the Council's new housing stock and that they were all very impressed with the build quality of what was coming forward. He referred to Hornbeam Close in Buckhurst Hill which was in Phase 5 and asked if officers had now started to engage with the residents.

R Hoyte advised that they had recently met with the architects and the designs were continuing to be worked on. No consultation had yet taken place with the residents regarding Hornbeam A as some issues in the terms of the layout of the scheme, there was a public right of way that went through the site that needed protection and the layout has had to be reworked. An update and new drawings was expected early in the New Year and then consultation with the residents would be arranged.

Councillor J Philip advised historically a table was prepared to show where the Council was in terms of the right to buy receipts and the payments of them and he didn't see any mention of them in this particular report and that was something that Members should be aware of given the potential of having to hand money back to the Government if the Council don't spend in the allotted time the monies from the receipts and particularly when schemes were slipping. He asked if these reports could be included going forward.

Councillor A Patel agreed that Councillor J Philip had made a very good point and that this should be a standard agenda item.

R Hoyte advised that she would include a report in the agenda going forward.

Councillor R Brookes asked why there was scaffolding on the Burton Road development, she thought this site had been completed a few years ago.

R Hoyte advised that it was to do with a leak in the roof to one of the houses and the contractor was repairing it.

Decision:

That the contents of the Progress Report on Phases 4 to 5 of the Council House Building Programme be noted and presented to the Cabinet in line with the Terms of Reference of the Council House Building Cabinet Committee

Reason for Decision:

Set out in its Terms of Reference, the Council House Building Cabinet Committee was to monitor and report to the Council, on an annual basis the progress and expenditure concerning the Council House Building Programme. The report sets out the progress made since reported at the last meeting on the 28 September 2021.

Other Options Considered and Rejected:

The report was to update and for noting purposes only. There were no other options for action.

24. ANY OTHER BUSINESS

The Cabinet Committee noted that there were no other matters of urgent business for consideration.

25. EXCLUSION OF PUBLIC AND PRESS

The Cabinet Committee noted that there was no business for consideration which would necessitate the exclusion of the public and press from the meeting.

CHAIRMAN

Report to the Cabinet

Report reference: ***C-044-2021/22***
Date of meeting: ***07 March 2022***



Portfolio: **Planning and Sustainability – Cllr Bedford**

Subject: **Epping Forest District Council Sustainability Guidance Volume 3**

Responsible Officer: **Merve Anil / Nigel Richardson**

Democratic Services: **Adrian Hendry (01992 564246).**

Recommendations/Decisions Required:

- (1) To note the public consultation process and outcomes (see Appendix B) and endorse the Epping Forest District Council (EFDC) Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions (Appendix A) as a material planning consideration for pre-application advice, assessing planning applications and any other development management purposes within the District.**

- (2) To agree that the Planning Services Director, in consultation with the Planning and Sustainability Portfolio Holder be authorised to make minor amendments to the EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extension.**

Executive Summary:

The Council's emerging Local Plan sets out policies in relation to sustainable and high quality design and construction of developments. On 19 September 2019 the Council declared a Climate Emergency, including a resolution to do everything within the Council's power to make Epping Forest District carbon neutral by 2030. To support these policies and this declaration, the Council produced Sustainability Guidance and Checklist documents for use across the District; Volume 1: Major Developments (10+ units) and Volume 2: Minor Developments (1-9 units). The Harlow and Gilston Garden Town (HGGT) also produced a Sustainability Guidance document that applies to new development within HGGT sites. All three documents went through the public consultation process and following updates were approved by Cabinet as material planning considerations in March 2021. The Council also prepared the draft Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions which was presented to Cabinet at the same meeting as an update on progress, with a summary of the aims, objectives and purpose of the document. This document will provide householders with practical and technical guidance on how any extension or refurbishment work proposed to existing homes across the District can contribute to the Council's sustainability ambitions. It was proposed that the Volume 3 guidance be taken to public consultation following the publication of the London Energy Transformation Initiative (LETI) Retrofit Guidance (industry best practice). Further to updates to align the Volume 3 with LETI guidance, the Portfolio Holder for Planning and Sustainability was given delegated authority to approve the final draft of Volume 3 for public consultation.

This report sets out the changes proposed to the draft EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions following the consultation process and seeks Cabinet endorsement of this document as a material consideration in the determination of householder planning applications.

Reasons for Proposed Decision:

To ensure that the EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions is afforded suitable planning weight by endorsing the document as a material consideration in the planning process. This will ensure that development proposals across the District contribute to the Council's sustainability ambitions, and that clear parameters are established for future pre-application advice, assessing planning applications and any other development management purposes.

Other Options for Action:

Not to agree the EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions or endorse the document as a material consideration in the planning process, which would mean that there would be no guidance to support the delivery of sustainable extension and refurbishment of existing dwellings, and achieve the objectives set out in the Council's emerging Local Plan policies DM5, DM9, DM12, DM15, DM18-22.

Report:

1. The National Planning Policy Framework sets out a presumption in favour of sustainable development. The policies in the emerging Epping Forest District Local Plan are in line with this objective and encourage the delivery of developments that promote growth in sustainable locations, sustainable transport and that mitigate the impact on biodiversity and natural habitats. Epping Forest District Council declared a Climate Emergency in September 2019, and a commitment to target net zero carbon across the District by 2030.

2. Sustainability Guidance documents have been developed to support key policies on sustainable and high-quality place making alongside the Council's commitment to deliver net zero carbon developments by 2030. The first two documents in the suite; EFDC Sustainability Guidance documents (Volume 1: Major Developments and Volume 2: Minor Developments) were endorsed by Cabinet in March 2021 following public consultation as material planning considerations. These documents focus on new build developments. The EFDC Sustainability Guidance Volume 3: Refurbishment and Extensions is the third document in the suite which deals with work to existing homes. It has recently undergone the public consultation process. The following documents are attached to this report:
 - Appendix A – EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions
 - Appendix B – EFDC Sustainability Guidance Volume 3: Refurbishment and Extensions Engagement Tracker
 - Appendix C – LETI Climate Emergency Retrofit Guide

3. The National Design Guide (NDG) (published in 2019 and updated January 2021) supports the National Planning Policy Framework by setting out a list of 10 characteristics outlining the Government's priorities with regards to good design. The Sustainability Guidance documents align with the National Design Guide, especially with regards to the following principles;
 - Built Form; the NDG states that new developments should be compact in form and efficient in energy and material use. This aligns with the Energy Efficiency and Orientation sections of the Sustainability Guidance Volume 3.
 - Nature; the NDG's three ambitions as relating to the natural environment are (1) provide a network of high quality green infrastructure, (2) improve and enhance water management and (3) support rich biodiversity. These ambitions align with the Landscape Led Design section of the Sustainability Guidance Volume 3.
 - Resources; the NDG places an emphasis on the energy hierarchy and careful selection of environmentally friendly materials and construction techniques. This aligns with the Fabric-First Approach and Materials and Finishes sections of the Sustainability Guidance Volume 3.
 - Lifespan; the NDG supports developments that are built to last, maintained

by the communities that occupy them and adaptable to future needs. This aligns with the Adaptable and Futureproof Design section of the Sustainability Guidance Volume 3.

4. This report seeks Cabinet endorsement for the EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions to become a material planning considerations when providing pre-application advice, assessing planning applications and any other development management purposes.
5. Applicants and designers will need to demonstrate how their proposals address the checklist section of the EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions. This checklist will also become part of the Council's Validation Checklist, and a requirement for planning applications. Applicants will use the checklist to demonstrate that the principles of sustainable householder development have been considered across all aspects of the project.
6. The LETI Climate Emergency Retrofit Guide will be included as an Appendix to the EFDC Sustainability Guidance Volume 3, as further technical resource.

Objectives

7. The principle objective for the EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions is to act as a practical and technical guide on sustainability principles as they apply to householder applications to ensure development of existing homes within the District meets sustainability targets. It sets out the EFDC policy context as it relates to sustainable development, provides best practice sustainable design principles that can be implemented by homeowners and signposts to other relevant guidance documents. The document also refers to the LETI Retrofit Guide (providing best-practice advice from industry experts, published in October 2021) which is included as an Appendix.
8. Within this overarching objective is a focus on high-quality design and a fabric-first approach to environmental sustainability, to deliver high quality development while also ensuring carbon and energy efficiency.
9. The design of all new development should be landscape led and cross disciplinary and this should inform a proposal from its initial scoping through to detailed design submission of a planning application and discharge of conditions. The design should not address only a limited aspect of sustainability but demonstrate holistic consideration of the different topics presented within the guidance including; energy efficiency and carbon, renewable energy, water efficiency, green infrastructure, circular economy, waste, pollution and air quality. It is important that this design process is iterative and, where appropriate, involving the Council's urban and landscape design officers.
10. The EFDC Sustainability Guidance Volume 3: Refurbishment and Extensions was

approved by Cabinet in March 2021 for a 6 week public consultation period. Following the consultation (see details below), changes have been made based on the comments that were received. The intention is for the updated EFDC Sustainability Guidance and Checklist to be endorsed as a material planning consideration in the consideration of planning proposals dealing with works to existing homes.

Consultation

11. The Council undertook some informal engagement prior to the development of the draft EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions and the draft document was presented to Cabinet in March 2021 to note progress. Following updates made to the EFDC document based on the LETI Retrofit Guide, the Portfolio Holder for Planning and Sustainability approved the document for public consultation, and the document was published for formal consultation for a six-week period from 10 January 2022 to 21 February 2022.
12. The early engagement involved whole-document reviews (including with the Local Plan Implementation Forum) as well as specific topic-focused workshops with relevant officers across the Council (including from Planning and Housing).
13. The formal consultation was undertaken in accordance with the Council's adopted Statement of Community Involvement. It involved both digital and non-digital means.
14. The following list provides a summary of the various engagement methods used during public consultation.

Digital engagement:

- Consultation notice via email to EFDC databases, statutory consultees and other targeted stakeholders.
- Provision of an email address for enquiries and consultation response submissions.
- Dedicated consultation page on EFDC website, including PDFs of EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions, the LETI Retrofit Guide and link to questionnaire.
- Social Media awareness campaign
- Staffed online Q&A for Members and the public

Non-digital engagement:

- Limited number of hard copy consultation packs on request
- Address available in case any stakeholders wished to return consultation response by mail.

15. The Council received comments through email responses, online events and an

online questionnaire. A full schedule of the representations received is attached at Appendix B.

The comments received in response can be broadly categorised into the following themes:

- Recommendations on stronger wording within the guidance document to enforce the principles of sustainable design and their implementation within refurbishment projects.
- Suggestions of further useful guidance / reference documents that the EFDC document could signpost to, for further technical information
- The importance of providing information on funding and grant opportunities, as these will form the greatest incentives to residents.
- More detailed suggestions to the 'Design Principles' section to include (but not limited to) information on biodiversity, guidance for paving in gardens, hydrogen boilers and electric vehicle charging points.

16. Key updates and changes to the Guidance documents, to respond to the above consultation and comments, include:

- Guidance makes clear that there is a requirement to submit the Checklist as part of any planning application, and that the Checklist will form part of the Council's Validation Checklist.
- List of key documents / websites / resources to refer to have been updated to incorporate references made through consultation responses.
- List of funding and grant options have been reviewed to ensure it is up to date.
- Updates have been made to various headings under the 'Design Principles' section to include additional measures / considerations such as (but not limited to): biodiversity, paving, use of hydrogen boilers, window replacement, vehicle charging points.

17. The amended document has sought to address the issues raised in the consultation, to ensure that a robust Guidance has been produced. Beyond publication of the guidance next steps include: ongoing work with planning applicants to ensure that sustainable and good quality design, as set out, is being achieved; ensuring that the Guidance documents are understood and disseminated to key Service areas and officers within the Council, providing colleagues in the Planning Service department with training sessions to ensure best use of guidance documents.

Resource Implications

The work to support the EFDC Sustainability Guidance Volume 3: Refurbishment and Extensions to be viewed alongside the emerging Local Plan is covered by the local plan budget and staff within the Local Plan and Implementation teams.

Safer, Cleaner and Greener Implications:

The Sustainability Guidance Volume 3: Refurbishment and Extensions seeks to take forward emerging Local Plan policies designed to promote the notion of making good places to live, work and visit, and apply this to householder development. This will include sustainable development, energy efficiency and environmental considerations.

The delivery of the Sustainability Guidance Volume 3: Refurbishment and Extensions will help contribute to safer, cleaner, greener objectives by planning for sustainable development.

Consultation Undertaken:

Informal engagement has been undertaken with officers, the EFDC Leadership Team, Local Plan Implementation Forum and EFDC Councillors.

Formal consultation was then undertaken in accordance with the Council's adopted Statement of Community Involvement.

Background Papers:

- 19th March 2021 Cabinet Report
- EFDC Sustainability Guidance Volume 1: Major Developments
- EFDC Sustainability Guidance Volume 2: Minor Developments
- HGGT Sustainability Guidance

Risk Management:

The use of this document as a material planning consideration will support the Council's objectives of achieving high quality and sustainable design in the district and encourage good quality development.

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3 ///

EFDC

SUSTAINABILITY

GUIDANCE &

CHECKLIST

/

REFURBISHMENT

& EXTENSIONS

(householders)

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Issue and Revision Record

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-	7th January, 2021
01	3rd February, 2021
02	16th February, 2021
03	20th December, 2021
04	16th February 2021

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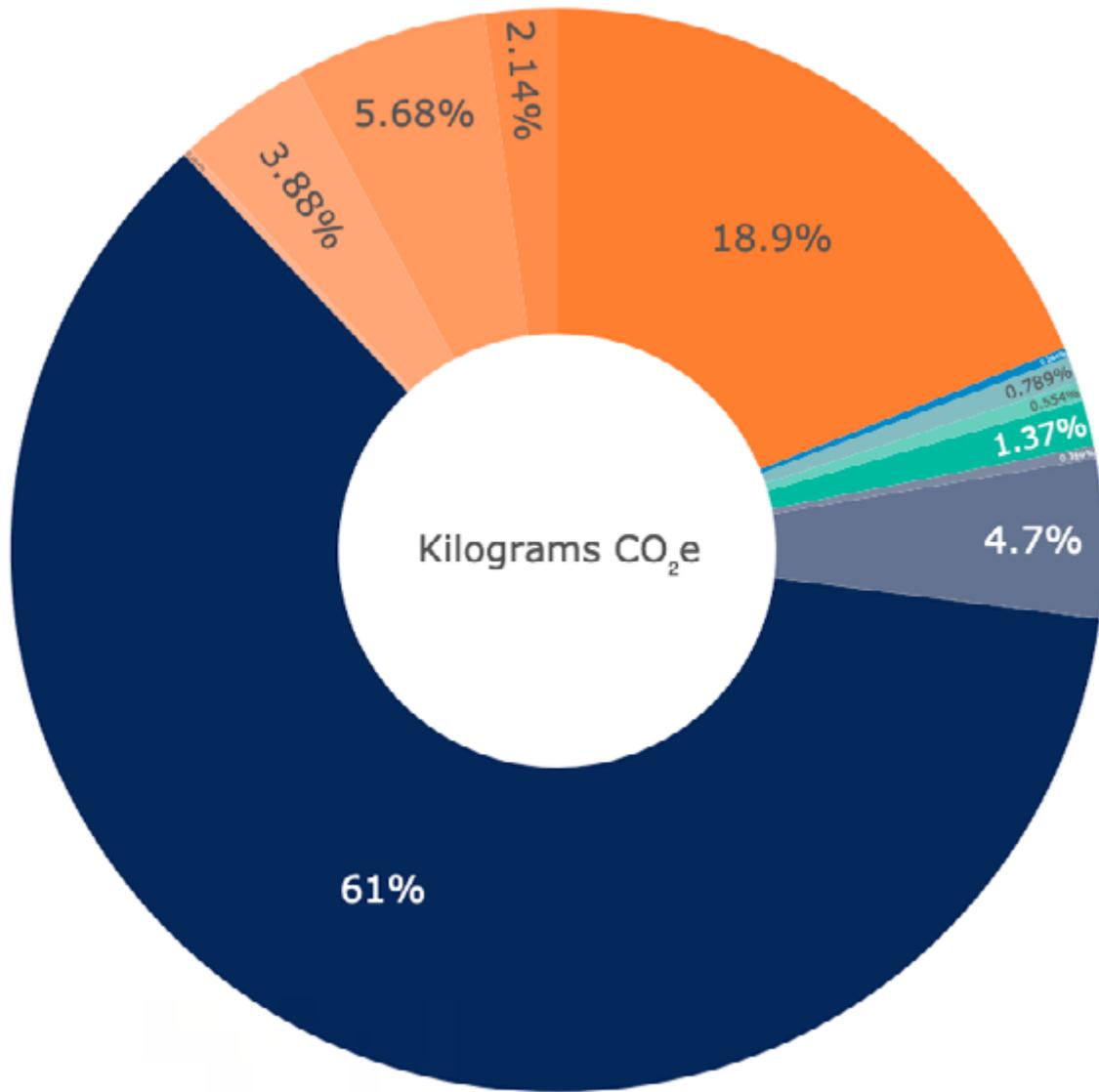
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INTRODUCTION

This document supports the highest environmental commitment across the District - to become net zero carbon by 2030

Overview

Epping Forest District has an annual carbon emission contribution of 2,048 CO₂ (kt) across all industries (2017 data). The graph below provides a break down of the District's emissions based on sector:



- Residential buildings
- Commercial buildings & facilities
- Institutional buildings & facilities
- Industrial buildings & facilities
- Agriculture
- Livestock
- Industrial Process
- Wastewater
- Solid waste disposal
- Off-road
- Aviation
- On-road

Source: scattercities.com

Overview

CLIMATE EMERGENCY

The UK Government and Epping Forest District Council have declared a Climate Emergency.

The global climate is changing, primarily as a result of greenhouse gas emissions from human activity. Communities, businesses and the natural environment are already feeling the impacts of the changing climate. Continued change is now unavoidable and will disrupt everyday life, with higher average temperatures and more extreme weather events.

This Sustainability Guidance supports the highest commitment across the District, which is to produce net zero carbon emissions by 2030. It sets out practical solutions to set out a clear design and construction process for any new development, into a net zero future. EFDC believes that in order to meet our climate change targets, all new buildings must operate at net zero carbon by 2030.

Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs. High quality sustainable developments require adopting a holistic approach to environmental, social and economic sustainability.

EPPING FOREST DISTRICT COUNCIL

The Council's emerging Local Plan sets out the most significant level of development to be brought forward across the District in a generation. Within the period 2011-2033 the growth proposed in the emerging Local Plan will provide for a minimum of 11,400 new homes. Much of this will be delivered through larger strategic sites.

The emerging local plan also recognizes the importance of adapting existing homes within the District to ensure they are liveable and comfortable in a changing climate. Housing stock improvement should be an integral part of future climate impact mitigation..

PLANNING POLICY CONTEXT

There is a strong and committed national and local policy context for planning environmentally, socially and economically sustainable places and developments, and climate adaptation.

The National Planning Policy Framework (NPPF) (February 2019) sets out national policy for local planning authorities and decision makers. The NPPF states that there is a presumption in favour of sustainable development (paragraph 11), with sustainable development having economic, social and environmental objectives.

The environmental objective is that development should protect and enhance the natural, built and historic environment as well as protecting biodiversity, minimising pollution and adapting to climate change and the demands of a low carbon economy.

In addition, in October 2021 the UK Government published their Net Zero Strategy which is a long-term plan for transitioning to a low carbon economy. The retrofit of existing homes plays an important part within this plan, especially with reference to providing low-carbon solutions for heating.

COVID-19 RECOVERY

The guidance has been developed during the COVID-19 pandemic, which has highlighted stark health inequalities relating closely to environmental, social and economic inequalities.

Now more than ever, high quality, sustainable and resilient design and development is needed to ensure that existing and new residents of Epping Forest District recover from the pandemic in a long term and locally-led manner.

Opportunities to foster community strength, support green and local economies and bolster residents health must be taken. All stakeholders are therefore expected to work collaboratively to contribute to this recovery, and ensure that Epping Forest District is a joyful and sustainable place to live, work and play.

How to use this guidance?

1 / PURPOSE OF THIS GUIDANCE

The purpose of this guidance is to help both homeowners and applicants meet EFDC's goals of becoming net zero carbon by 2030.

EFDC will set the agenda for Sustainable living, making it is easy for residents to adopt sustainable lifestyles. This means the choices offered across all aspects of living, work, and play are sustainable. This document provides practical and technical guidance on how relevant Sustainability indicators and policies (environmental, social, and economic) in the Epping Forest District Local Plan will be applied to residential extensions and refurbishments across the district.

This guidance is the third in a suite of guidance documents prepared by EFDC. The other two documents were endorsed by EFDC Cabinet in March 2021 and are material planning considerations. They include; Volume 1: Major Developments (10+ units) and Volume 2: Minor Developments (1-9 units).

2 / WHO USES THIS GUIDANCE?

Homeowners + Applicants:

The document is to be used by homeowners, design teams, consultants and contractors in shaping development proposals, This will guide design, and ensure coordinated and integrated consideration of sustainability principles and targets at an early stage.

Local Authority Officers and decision-makers:

This document will be endorsed to have material planning weight and the Checklist will help guide the assessment of planning applications for residential extensions within the District.

3 / WHEN TO USE THIS GUIDANCE?

Best Practice: The guidance can be used as best practice guidance by any homeowner or resident within Epping Forest District who may be doing refurbishment or extension work to their home, the work does not require planning permission.

Pre-Application; The Sustainability Checklist should accompany pre-application discussions to ensure all applications have considered and incorporated sustainability measures from the outset of their design.

Planning Application; A Sustainability Strategy incorporating the Checklist, with relevant certification, is to be submitted alongside planning applications.

Post-Planning; Relevant conditions will be discharged and planning obligations and monitoring will be coordinated to ensure that sustainable measures are in place through to delivery and beyond. Tools such as Post-Occupancy Evaluation for ongoing monitoring will be expected relating to key indicators.

4 / HOW TO USE THIS GUIDANCE?

The guidance is split in to the following sections:

1. EFDC & Refurbishment - provides an introduction to the importance of Sustainability for existing buildings in the District
2. Design Principles - this section presents practical and technical guidance on how to approach sustainable refurbishments projects during early design stages. The principles encourage a holistic approach to sustainability, and their incorporation at an early stage of a project will make it easier to meet Sustainability principles set out in the remainder of the Guidance.
3. Checklist (to be completed and submitted) - for use in planning applications
4. Appendix: LETI Guide to Refurbishments and Extensions - practical and technical best practice guidance from industry specialists on Sustainability targets for refurbishment and extension projects

5 / SUBMISSION REQUIREMENTS

1. Checklist
2. Sustainability Statement

The Sustainability Statement should be accompanied with relevant certifications where applicable.

6 / APPLICATION OF GUIDANCE

The guidance is applicable to all projects involving the refurbishment and/or extension of existing building within Epping Forest District.

8 / RELATIONSHIP TO THE LOCAL PLAN

This guidance should be read in conjunction with the policies found in the [Epping Forest District Council Local Plan](#). The Sustainability guidance will be endorsed to have material planning weight when determining applications.

This EFDC sustainability guidance will need to be considered as part of the wider policy context but is expected to compliment the policies by providing a practical tool for enhancing the sustainability of development in the District.

9 / REVIEW & MONITOR

Requirements in this guidance are based on current (2021) regulations and best practice, and may be superseded by future standards. It is intended that the guidance will be updated every 3 years.

This document provides practical and technical guidance on how relevant Sustainability policies in the Epping Forest District Local Plan will be applied to residential extensions and refurbishments across the district.

Sustainability policies that relate to refurbishments and extensions in the Local Plan are:

- DM1** Habitat protection and improving biodiversity
- DM2** Epping Forest SAC and the Lee Valley SPA
- DM3** Landscape character, ancient landscapes and geodiversity
- DM5** Green and blue infrastructure
- DM9** High quality design
- DM12** Subterranean, basement development and lightwells
- DM15** Managing and reducing flood risk
- DM16** Sustainable drainage systems
- DM17** Protecting and enhancing water courses and flood defences
- DM19** Sustainable water use
- DM20** Low carbon and renewable energy
- DM21** Local environmental impacts, pollution and land contamination
- DM22** Air quality

EFDC Green Infrastructure Strategy
EFDC Open Space Strategy
EFDC Health and Wellbeing Strategy
EFDC Air Pollution Mitigation Strategy
Essex SuDS Design Guide

EFDC & RETROFIT

This section looks at how adapting existing buildings will help Epping Forest District Council become net zero carbon by 2030.

Why is refurbishment important?

Why is refurbishment important?

Housing stock contributes a significant amount to carbon emissions across the country. We know that in Epping Forest District, existing residential buildings make up just under 20% of our annual carbon emissions.

The majority of Epping Forest District's inhabitants live in existing homes. Of these homes, the overwhelming majority - if not all - were designed for climatic conditions prevalent at the time of build rather than the climate we can expect to experience now and over the coming decades. This means that much of our housing stock will not deliver levels of comfort, safety and resource efficiency required in the 21st century. It is predicted that 70% of housing stock in 2050 will consist of the buildings that exist today. As our climate changes our housing stock will become increasingly inappropriate.

Therefore, widespread adaptation of existing homes is crucial to ensuring that they are comfortable, marketable, resource efficient and fit for purpose in the present and future. Refurbishment of existing dwellings should be prioritised over demolition and rebuilding.

What are the potential future effects of climate change on existing homes?

Flooding, water stress and overheating are the key changes projected for the East of England.

01. Flooding - increased urbanization as well as changes in weather patterns can result in a reduced capacity for regions to absorb water, leading to more water surface runoff and increased flooding.

02. Water Stress - climate change projections suggest that in the period to 2050 and beyond, the UK will experience wetter winters and drier summers. Overall precipitation may decrease by up to 15%.

03. Overheating - there is low awareness of domestic overheating as an impact of climate change. This can result in thermal discomfort, especially in more urban areas.

Effective adaptation options are available for all three of these impacts. Early, widespread adoption of appropriate adaptation measures will enable existing homes to remain habitable in increasing summer temperatures, be reoccupied more quickly after floods and consume less water.

What are the challenges facing householders?

01. Uptake of climate change adaptation measures is low because of the lack of information and awareness about adaptation options and access to appropriate technical advice.

02. In contrast to new buildings, the adaptation of existing homes is the responsibility of a complex range of independent actors, including the individual homeowner. It may be difficult for individual homeowners to raise the initial capital costs associated with refurbishment work.

03. As there is variation in the construction, age and condition of existing housing stock in the District, a level of individual assessment is necessary to select the most appropriate adaptation measures.

The Sustainability Guidance aims to help homeowners overcome some of these challenges by providing guidance on how to undertake refurbishment or extension work as well as signposting to successful case studies and additional resources. The guidance does not take a 'one-size-fits-all' approach but rather offers best practice advice that can be adapted to specific cases by individual homeowners.

The 'Incentives' section (p.14) also provides information on financial incentives for individuals.

Incentives

1 / INCENTIVES FOR THE DISTRICT

Planning

National planning policy is setting increasingly higher sustainability standards for development. Both the Planning White Paper and Affordable Housing White Paper place special emphasis on quality design and sustainability. Compliance with sustainability standards will ensure compliance with wider regulatory framework.

Awards and Recognition

Exemplar schemes will be shared as case studies. Schemes with excellent sustainability credentials may be put forward for local and national awards, gaining the Council recognition.

Building Regulations

The minimum energy efficiency standards for domestic rental properties are changing - from April 2020, a rental property will require a minimum rating of EPC E and this is likely to increase to a rating of EPC C by 2030. This will be applicable to social housing and housing associations as well as private landlords.

Cost Benefits

The long-term operation costs of refurbished homes are vastly reduced due to their lower energy demand, helping to eliminate issues such as fuel poverty, and providing cost savings of 30%-40% over 30 years.

Health & Wellbeing

There are numerous health benefits associated with sustainable homes. The comfort and wellbeing of inhabitants will be improved due to environmental factors such as healthier air quality and temperatures, improved humidity and noise levels.

Sustainable and healthy living also provide mental health benefits through the reassurance provided to inhabitants when their home is futureproofed and built to last.

2 / INCENTIVES FOR INDIVIDUALS

Cost Benefits

Studies have demonstrated correlations between homes with better energy efficiencies, and higher house prices. Furthermore, the long-term operation costs of refurbished homes are vastly reduced due to their lower energy demand, and can provide cost savings of up to 30%-40% over 30 years. Futureproofing a home to rely more on energy from renewable sources protects it from rising energy costs.

Funding Opportunities

Funding schemes provide financial incentives for homeowners to refurbish their homes to higher energy standards. These schemes include;

- Eco Flex (low-income households)
- Domestic Renewable Heat Incentive

Businesses that are looking to refurbish their offices may be eligible for tax incentives.

Design and Planning

Compliance with sustainability standards may lead to a smoother planning process and faster assessment time.

Awards and Recognition

Exemplar schemes will be shared as case studies. The Council will work with applicants to put their schemes forward for local and national awards.

Building Regulations

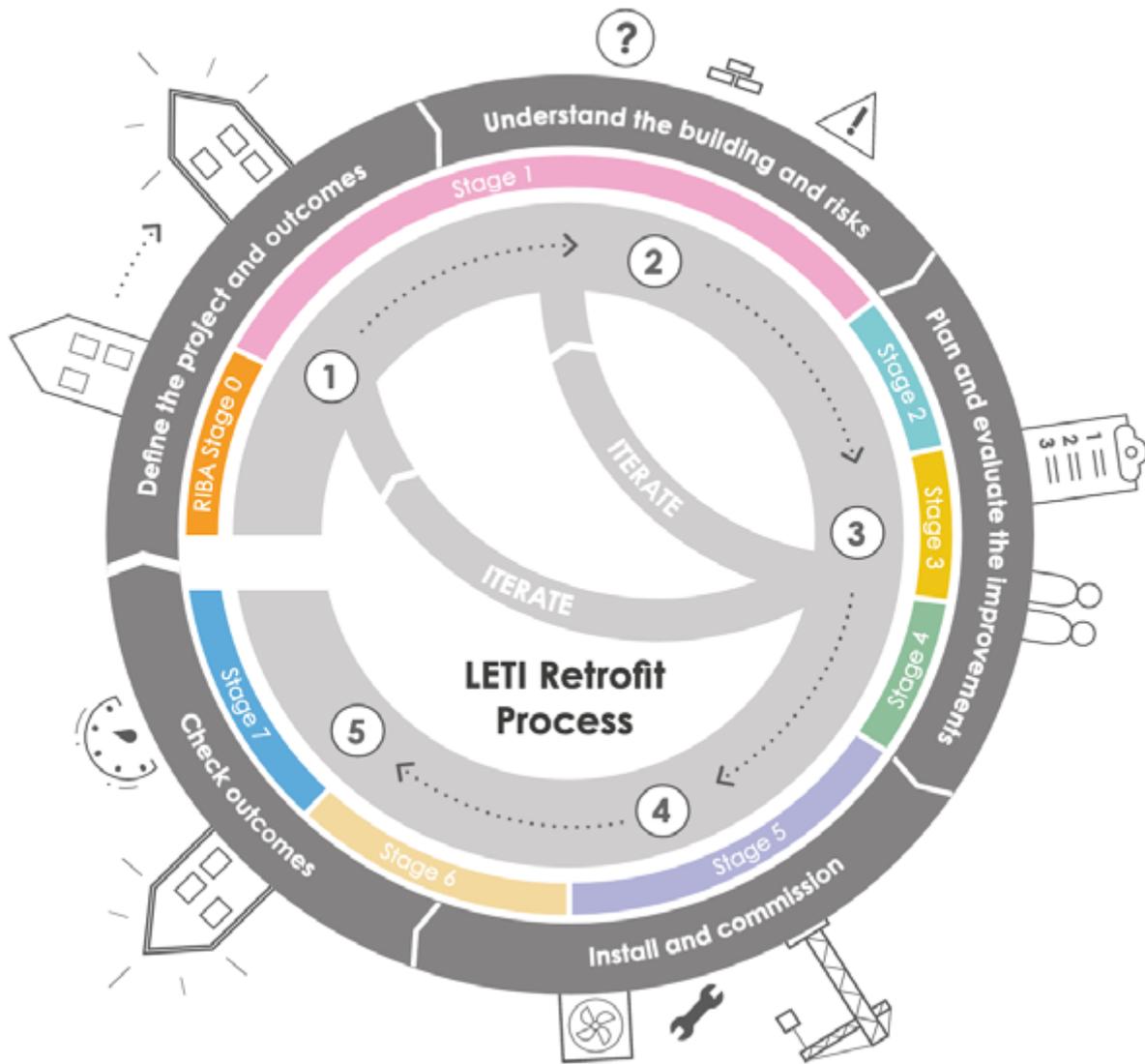
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EXTENSION & REFURBISHMENT DESIGN PRINCIPLES

This section looks at how the principles of sustainability can be incorporated in to a project at the design stages.



LETI Retrofit Process summary diagram showing the key stages and how, where necessary, early design and evaluation gives a chance to revisit the project definition and building evaluation with new information. Source: LETI Retrofit Guide

0 / Preparing a Project Plan

A COORDINATED APPROACH

Preparing a project plan before embarking on a refurbishment or extension project will make it easier to achieve the energy savings and health and comfort improvements you are looking for in your home. Having a coordinated approach to your home - rather than carrying out work piecemeal - can deliver the most benefits.

This section provides a simple introduction as to how to prepare a project plan before starting any work.

(Please note - this approach is based on the LETI 'Retrofit Process' - for a more detailed overview, please refer to Chapter 5 of the LETI Retrofit Guide, provided in the Appendix).

THE PROJECT PLAN

The project plan should include the following steps -

01. Define the project and outcomes:

- The plan should start with identifying the scope of work you wish to carry out. Are you refurbishing a single home, or does it make sense to coordinate with neighbours to reduce the cost and have more impact?

- Set out the project outcomes - what is the primary aim of the refurbishment? Is it to gain more space, improve the health and comfort of your home, or to reduce your energy bills?

- Does it make sense to seek professional help? Having an Architect or contractor on board at an early stage might help you save on costs and time in the long term.

02. Understand the building:

- Set out key building information related to your home and its context. This should include information on any potential constraints, risks and opportunities (e.g. Is your home in a flood risk zone? Is there local air pollution? Are there external walls onto a street or public highway?)

- Survey your home - list the main construction for floors, walls and roofs. List the types of window and doors, material, glazing type, approximate age. Identify the current ventilation strategy and record any areas of damp in the home. You can also consider getting a professional building surveyor to carry this out for you.

03. Plan and evaluate the improvements

- Identify the parts of your home that require maintenance, as well as easy temporary wins that can reduce energy in the short term (e.g. simple draught proofing around door and window frames).

- List all the measures that will form the refurbishment or extension work and decide whether you will be phasing these works out over a period of time.

- Consider how the phases of work could best be procured and delivered. How much of the work can you do yourself, and which parts require help from a contractor?

04. Install and commission

- Engage a builder or contractor if you are going to use one, and share your project plan with them.

- Carry out the planned phase of works. Make sure there is enough slack left in the project plan for changes that may be required if you come across unexpected challenges.

- Commission ventilation, heating and any other systems you require.

05. Check outcomes

- Monitoring the work over a period of time will allow you to check whether the project outcomes have been met (for example meter readings, a meeting with the design team to review). Consider setting up monitoring devices (e.g. CO2 or humidity sensors).

1 / Landscape Led Design

OBJECTIVE

Landscape and natural environments contribute both to the quality of a place, and the quality of life of its occupants. Whenever we build, we must protect and plan for the plants and animals that already live on the site. We should also look for opportunities to enhance and create new habitats and support biodiversity.

The land on sites of extensions or refurbishment projects should be used efficiently with new planting supporting existing local species of flora and fauna. Opportunities for the enhancement of existing species can be incorporated in to the design of your extension; e.g. bird boxes, swift bricks or bat boxes. Opportunities to connect and introduce multifunctional green infrastructure should be considered e.g. by adding green roofs or spacing out pavers to allow planting to continue growing around it. Find out more about the green infrastructure networks in your area (look at the EFDC Green Infrastructure Strategy) which include open spaces, parks and gardens, allotments, woodlands, fields, hedges, lakes, ponds, playing field, as well as footpaths, cycleways and waterways. Consider how your landscape can strengthen and connect to local green infrastructure.

THINGS TO CONSIDER

Are there opportunities to retain and/or enhance habitats and biodiversity?

Integrate green roofs with native wildflower and grass species, and plant small areas of green space around the extension. Retain protected trees and/or consider re-planting existing trees within the garden. Choose permeable paving over non-permeable to reduce flood risk.

Some animals and plants are legally protected – are there any on your site?

To find out, a protected species survey may be required. For example, bats may roost in trees and buildings, and a pond may contain newts.

Where a new extension impacts on existing habitats, what mitigation measures will be put into place?

Phase construction works around local species' seasonal patterns of nesting, mating, foraging and hibernation.

CASE STUDY



The Black Curve (Bromley) by Ar'Chic

A rear house extension that includes the creation of a garden terrace. The green meadow roof installed as part of the extension will enhance the insulation of the home, reducing energy usage, and give opportunities to wildlife to take over.

USEFUL RESOURCES

The following are good sources of information on green infrastructure, and how to protect animals and plants on your construction site:

EFDC Green Infrastructure Strategy

Green Essex Strategy

Essex Biodiversity Action Plan

Stort Catchment Management Plan

Green Arc Strategy

Natural England

Front Gardens: Permeable Paving (Guide by Royal Horticultural Society)

Wildthings Biodiversity Action Plan

National Design Guide

2 / Orientation

OBJECTIVE

Early adoption of passive design principles can allow your home to benefit from natural lighting whilst avoiding overheating.

When designing extensions, there is an opportunity to orient them to maximise natural daylight and sunlight into the building and take advantage of passive solar gain (absorbing the sun's heat energy to warm internal spaces).

Building axis' should be orientated in the east-west direction – to take advantage of maximum daylight and heat from the sun which significantly reduces the energy consumption of a building, and can reduce a homes' heating and cooling costs by up to 85%. External shading can help a home stay cool in the summer months and avoid overheating, including the use of landscape and plants. A Daylight / Sunlight Assessment can help provide more information on how much natural light your development will be exposed to.

Buildings in close proximity to each other can block out a neighbours natural light, so take care not to overshadow nearby homes.

THINGS TO CONSIDER

Is your glazing sized and oriented to reduce heat loss, while allowing light and heat from the sun to enter?

Rooms facing south should be designed with shaded glazing (to exclude high-angle summer sun) and good ventilation (to remove summer heat gains).

Are your windows shaded to avoid overheating in the summer?

Features such as awnings, shutters, blinds or planting can protect rooms from the sun while allowing light, window ventilation and views out.

Have you incorporated other passive design features to avoid overheating in your home?

Replacing fitted carpets with wooden floors or tiles can expose the ground's cooling effects. Installing secondary glazing behind existing glazing to create triple glazing, with external ventilation of outer cavity, can greatly reduce solar heat gain.

CASE STUDY



Manor Farm (Oxfordshire) by Transition by Design

Extension to a listed Georgian country house that provides the home with new kitchen, dining room, garden room and utility spaces and follows sustainable design principles. The solar gains are optimised to the south allowing light and warmth to pour into the garden room yet protected in excess summer heat by the oversailing roof

USEFUL RESOURCES

The following are good sources of information on passive design principles:

Energy Saving Trust

3 / Energy Efficiency

OBJECTIVE

There are two ways buildings use energy: embodied and operational. When trying to reduce the amount of energy your home is responsible for, consider both types and follow the 'energy hierarchy' approach: (1) reduce the need for energy at home, (2) install different types of energy efficiency measures and (3) install renewable energy measures. By reducing energy demand through the first two stages, you should have cut down on how much energy you need to produce ([Renewable Technologies](#)).

Embodied Energy

The total energy required to manufacture or construct a building. You can reduce your embodied energy by using environmentally friendly, locally sourced and low impact building materials ([Materials and Finishes](#)).

Operational Energy

The energy used on a daily basis for heating and electrical appliances. You can reduce your operational energy by designing your home to be more energy efficient ([Fabric-First Approach](#)). This includes using high performance building components and installing smart appliances to control and monitor your energy usage.

THINGS TO CONSIDER

Could you install smart meters in your home? *Smart meters monitor your energy use and make sure you are billed accurately. They are usually provided and fitted without charge by your energy supplier.*

How will your new extension contribute to reducing energy demand for heating, lighting and cooling within your home?

Following sustainable design principles such as orientation to maximise natural daylight, avoiding overheating and natural ventilation will help you reduce energy demand.

Are your new appliances energy efficient? *The Energy Saving Trust register is an extensive database of energy efficient products - use this to ensure any new appliances you purchase are energy efficient, and can help you reduce your energy consumption.*

CASE STUDY



80% House (London) by Prewett Bizley Architects

An extension to a townhouse that includes living, cooking and dining spaces. A rooftop extension adds a third bedroom-cum-study. The house achieves an 80% reduction in CO2 emissions, primarily by incorporating high levels of insulation and air tightness. Fresh air is supplied by an MVHR system. A photovoltaic array on the roof provides a little over half the annual electricity requirement.

USEFUL RESOURCES

The following are good sources of information on how to make your home more energy efficient:

Centre for Sustainable Energy
LETI Embodied Carbon Primer
Energy Saving Trust
Smart Energy GB
Superhomes.org.uk

<https://historicengland.org.uk/whats-new/statements/modifying-historic-windows-as-part-of-retrofitting-energy-saving-measures/>

<https://www.britishgas.co.uk/the-source/greener-living/hydrogen-boilers.html>

4 / Renewable Technologies

OBJECTIVE

Buildings can reduce their energy consumption by generating their own energy using renewable technologies. These technologies use little or no energy and are therefore cheap to operate.

Photovoltaics (PVs): Solar PV systems turn sunlight into electricity through the 'solar cells' they contain - this electricity can be used to power home appliances.

Solar Thermal Panels: Solar panels are used to absorb the heat of the sun and transfer it to heat the water you use in your home.

Ground Source Heat Pumps: This captures the heat trapped under the surface of the ground, and uses it to run central heating systems in homes.

Air Source Heat Pumps: An air source heat pump uses heat from the air outside (even when its freezing) to heat your home - via radiators, underfloor heating or to heat water in a storage tank for use in the kitchen or bathroom.

Electric Vehicles: Providing charging points for electric vehicles help support sustainable movement.

THINGS TO CONSIDER

Could you create suitable space for solar thermal panels in your home?

Your roof should face south and have between 2-5 sq.m of available space free of shading. Some systems involve the installation of an additional hot water cylinder, so you may need space to fit this.

Is your home suitable for a ground or air source heat pump?

These technologies work best in well-insulated homes, as they are most effective in homes which warm up quickly, and keep the heat in. Improving the general energy efficiency of your home will help make it suitable for these pumps.

Have you checked what financial incentives are available for you?

You can earn an income from the Renewable Heat Incentive (RHI) if you install any of the above technologies.

CASE STUDY



1860s Farm (Huntingdon), pump by Finn Geotherm

A ground source heat pump was installed in this 1860s farmhouse to replace an oil-fired boiler. The pump heats up radiators throughout the house, as well as provides hot water. The heat pump also runs entirely on renewable energy generated by the farm's own turbine, making the farm carbon positive.

USEFUL RESOURCES

The following are good sources of information on renewable energy technologies, and funding incentives:

Domestic Renewable Heat Incentive (RHI)
Renewable Energy Consumer Code
Microgeneration Certification Scheme

Heat Pump Association
Ground Source Heat Pump Association
Superhomes.org.uk
<https://mcscertified.com/wp-content/uploads/2020/07/Heat-Pump-Guide.pdf>

5 / Adaptable & Future Proof Design

OBJECTIVE

We can ensure that homes designed today can be used by future generations by designing them to be flexible and adaptable to changing needs.

Internal walls can be lightweight and demountable construction, allowing layout arrangements to be reconfigured if required. The foundations of extensions can be future-proofed to accommodate for a potential additional future floor. Garage spaces could be incorporated in to the design, that have the potential to be converted in to living rooms in the future.

Doorways, floor levels and circulation space within the home and garden areas should be designed for easy access by all abilities and avoid creating trip hazards. Not just internal layouts, but any landscape features should also be designed with potential future needs in mind.

Future-proofing your home when doing extension or refurbishment work to it may help you save on additional costs in the future.

THINGS TO CONSIDER

Is the layout of your home flexible enough to allow for adaptation, conversion or extension?

Extensions should be designed to be adaptable - demountable internal walls, foundations able to support an additional floor, and easily accessible circulation will cater to potential future needs.

Is there space to work from home if you need to?

In a post Covid-19 society, more people will be working from home and this trend is likely to continue as our digital infrastructure continues to develop.

Extensions to a home should look to accommodate future working space, if your home does not currently have it.

CASE STUDY



The Linney (Devon) by Casswell Banks Architects

An old 45 sq.m stone barn is refurbished to provide a home for a family of 6. The existing stone walls are left intact and a secondary skin is built behind it, allowing for a more flexible configuration of the interior, built with sustainable materials, without compromising the original walls. A series of lightweight insertions and sliding doors create an open plan ground floor that can be used in many different ways by the family.

USEFUL RESOURCES

The following are good sources of information on designing your home to be adaptable and future-proof:

National Design Guide

6 / Fabric-First Approach

OBJECTIVE

A fabric first approach prioritises design and construction that minimises the need for heating and cooling. It is worth following the 'energy hierarchy' (introduced under [Energy Efficiency](#)) to conceptualise this: (1) reduce the need for energy at home, (2) install different types of energy efficiency measures and (3) install renewable energy measures.

This translates to optimising building orientation or elemental aspects (i.e. triple-glazed windows) for passive solar gain; lots of insulation; high-performance windows and doors; and good overall air-tightness, so that no drafts can get in and no warm air can escape. A well-insulated, airtight house relies not just on the efficiency of its components but on the quality of the workmanship behind it.

When building an extension to your home, take care to reduce thermal bridging (where heat escapes from the interior via structural elements that cut across the tightly-sealed fabric). This can occur at weak spots such as junctions between walls, floors and roofs, and around windows and doors.

THINGS TO CONSIDER

Can walls, floor, and roofs be insulated?
This is beneficial to reduce heat loss from your home, reducing your annual energy bills. You could consider insulating the inside face of your external walls, or, the outside face of your external walls where Planning permits.

Can windows, doors, and rooflight elements be replaced with more energy efficient elements?
You should aim for these elements to have low 'u-values' (ideally aim for a u-value below 1.00W/m².K).

Could you look to measure the existing energy used in your home, with a view to analyse the energy savings you are likely to make once a refurbishment has been completed?

Monitoring the before-and-after energy use of your home will allow you to quantify the energy and financial savings afforded by the refurbishment.

CASE STUDY



Almshouses (Cambridgeshire) by ECD Architects

Refurbishment of a mid-terrace, 1-bed almshouse property in Cambridge. The approach to energy saving and CO₂ reduction is to follow a lean-clean-green hierarchy: minimising heat losses from the property thermal fabric and ventilation method; supplying heating using replicable, low carbon technology; minimising lighting and appliance energy loads; and micro-generation using proven, renewable energy systems

USEFUL RESOURCES

The following are good sources of information on adopting a fabric-first approach for your home:

British Fenestration Rating Company
Green Building Store
BRE Green Guide to Specification
LETI Design Guide
Superhomes.org.uk

7 / Materials & Finishes

OBJECTIVE

Construction materials frequently cause environmental damage during their production. For example, quarrying damages landscapes; wood can come from unsustainable sources; metals use significant amounts of energy in their production and PVC production results in atmospheric pollution, and even brick needs to be fired at high temperatures using fossil-fuels.

The ambition here is to reduce the use of embodied carbon caused through the use of new materials. Reclaimed materials, products made from recycled material, and adopting offsite construction principles cause less environmental damage than new products and can also reduce waste and land fill. Therefore, wherever possible, it is ideal to first reuse and refurbish your home, before looking to build new ('retro-first'). Where you do have new elements, you should look to reuse existing elements such as bricks, timber rafters, and conservatories, in an innovative way. Where you have the opportunity to, aim for embodied carbon target of below 300 kgCO₂e/m².

THINGS TO CONSIDER

Can any demolished elements (walls, roofs, staircases, etc), be reused in your new extension or home?

Speak to an architect to explore innovative ideas for reuse.

Are you prioritising low carbon healthy materials (i.e. low VOC emitting materials) and products made of natural materials (e.g. hemp, timber or wool)?

For example, when choosing insulation, using a wood fibre insulation might bring embodied carbon benefits over PIR (Polyisocyanurate) insulation options.

When building an extension, could you reduce the 'dead loads' where possible?

Building with lighter materials reduces the structural load and therefore material use of the building.

CASE STUDY



Cork House, Matthew Barnett Howland with Dido Milne and Oliver Wilton

The Cork House is a residential extension project which explores the use of low carbon materials. Solid structural cork is used for the walls and roof of this building, resulting in the building having exceptionally low whole life carbon.

USEFUL RESOURCES

The following are good sources of information on selecting and sourcing sustainable materials and finishes:

LETI Embodied Carbon Primer
BRE Green Guide to Specification

8 / Indoor Air Quality

OBJECTIVE

Ensuring good indoor air quality is important for both your health and safety (as air pollution causes more harm than smoking), and for the maintenance of your home. There are ways to improve ventilation within the home; either by promoting natural and 'passive' cross-ventilation (e.g. allowing air move through rooms and corridors via windows on all sides) or 'active' ventilation through installation of mechanical ventilation systems including MVHR (Mechanical Ventilation with Heat Recovery), which filters and warms outside polluted air before distributing this within the home. This is particularly useful with nearby activities which might affect outside air quality such as industrial parks or busy roads.

Additionally, planting trees of particular species have a role to play in helping reduce air pollution; through 'cleaning' the air by absorbing harmful airborne particles and gaseous pollutants. For example, the silver birch tree is more effective than the white willow tree is in capturing particles. It is also known that trees with large leaf areas can remove many times more particulate pollution than small ones.

THINGS TO CONSIDER

Where you live near an air polluted area, could you look to install an MVHR system?

Whilst natural ventilation is best to reduce energy consumption, MVHR units will ensure better air quality within your home.

Could you look to site the spaces you spend the most time in away from busy roads?

For example; when designing the layout of your new extension - think about locating your living room to the rear of a home, as this is one of the most occupied rooms of a house.

In your front or rear garden, could you look to plant tree species that help reduce poor air quality?

You can refer to the list of tree species listed by the Woodland Trust's Urban Air Quality guidance, to find out which species are best for improving air quality.

CASE STUDY



Lark Rise (Buckinghamshire), bere Architects

Lark Rise is an all-electric, two-bedroom guest house designed to Passivhaus standards, producing at least twice as much energy in a year as it requires, while maintaining a very high level of comfort all year round. Ventilation is provided through MVHR units.

USEFUL RESOURCES

The following are good sources of information on ensuring high indoor air quality in your home:

EFDC Air Pollution Mitigation Strategy
Woodland Trust Urban Air Quality
Superhomes.org.uk

9 / Water Management

OBJECTIVE

There are many simple measures to take at home to use less water. When designing new bathrooms, we can choose to use low flush WCs, have flow restrictors on taps and have low flow shower heads.

We can also reduce our reliance on mains water through the use of greywater recycling (the use of waste water from baths, showers and hand basins for toilet flushing, irrigation etc.) and rainwater harvesting (the collection of rainwater from roofs to use of toilet flushing, irrigation, the use of water butts etc.).

Consider also how you can manage surface water runoff due to rain sustainably. Covering driveways, gardens and patios with hard surfacing is increasingly popular, yet it prevents rainwater seeping into the ground, forcing the water to run off quickly into drains, or to pool on hard surfaces.

CASE STUDY



Example of domestic water management; water butts

A water butt is essentially a large container used to capture and store rainwater. When attached to a downpipe, the water butt collects the rainwater that lands on the roof of a building so it can be used later. It is this time of year, when rainfall has been scarce, that water butts become really useful.

THINGS TO CONSIDER

Have you considered water saving measures? The installation of relatively affordable and simple water saving appliances in your bathrooms can contribute significantly to more efficient water use in your home. These measures can include low flush WCs and flow restrictors on taps.

Could you use planting and permeable materials in your landscape to naturally drain rainwater?
For example, the use of water butts in gardens can help collect rainwater for use in the house.

USEFUL RESOURCES

The following are good sources of information on sustainable water management for your home:

Superhomes.org.uk
waterwise.org.uk

OBJECTIVE

Constructing buildings creates huge amounts of waste – over a third of all waste created in the UK. We can make a big difference by designing our buildings to use materials more effectively, using less material, making sure to recycle construction waste where possible and using recycled or renewable materials in the construction of our homes. We should also take care to recycle and compost as much of our household waste as possible.

It is therefore important to think of waste not only in terms of what material is used now, but also in designing for demolition. For example when using brickwork, lime mortars allows the bricks to be easily demolished in the future, so it can be reused in other parts of your house or sold to others.

You can also look to capture and harness waste heat from all sources around your home. Capturing heat that has been realised as a by-product of an existing activity can contribute to meeting energy demands. On a small scale, Exhaust Air Heat Pumps (EAHP) can be explored here; otherwise, exhaust air can be made available to other buildings via heat sharing networks.

THINGS TO CONSIDER

Could you take measures to reduce the waste that will be created as a result of your extension / refurbishment project?

It may be possible to recycle your construction waste. Alternatively, look to see if it is possible to use prefabricated building components during construction - which are manufactured off-site and are more efficient in terms of material waste.

Could you design your home so that the building elements are reusable in the future?

Speak to your Architect about making sure that this is a consideration in the early stages of the design.

Could you explore EAHP to contribute to your annual home heating needs?

As a series of ducts are required through the building to allow the flow of air to and from the EAHP, installation should happen during construction.

CASE STUDY



Bill Powell's SuperHome (Cambridgeshire)

This was a householder refurbishment project of an existing 1950's house. The owner implemented a series of energy saving measures, including the installation of an Exhaust Air Heat Pump, which led to an overall reduction by 68% of the home's carbon use.

USEFUL RESOURCES

The following are good sources of information on sustainable waste management for your home:

Superhomes.org.uk

SUBMISSION

This section includes the list of submission requirements, and the sustainability statement.

Checklist

01 / Do you have an architect / contractor that you will be working with, **who have experience in making sustainable buildings?**

Yes

No



For information on finding the right design team, refer to:

<https://www.greenregister.org.uk/>
<https://www.aecb.net/>
<https://www.climatechangeandyourhome.org.uk/>

02 / Are you working with a **historic building, listed building** or within a **conservation area** or **area of archeological potential?**

No

Yes



For additional information on work on existing historic buildings, refer to:

[Energy Efficiency and Historic Buildings](#)
[EFDC Built Heritage](#)
[Essex Historic Environment Records](#)

03 / Are you looking at **grant and/or incentive options** that may be available to you?

Yes

No



For information on funding and grants available to individuals, refer to:

[Eco Flex](#) (low income households)
[Domestic Renewable Heat Incentive](#)

04 / Have you incorporated **sustainable design principles** in your extension / refurbishment project?

No

Yes



Please tick the principles (following page) you have incorporated, and use the Sustainability Statement to give an example from the project that illustrates each relevant principle.

NB. This checklist forms part of the Council's Validation Checklist, and is a requirement for planning applications that involve work to an existing dwelling.

04 / (cont.)

Landscape-Led Design

Fabric-First Approach

Orientation & Form

Materials & Finishes

Energy Efficiency

Indoor Air Quality

Renewable Technologies

Water Management

Adaptable &
Future-Proof Design

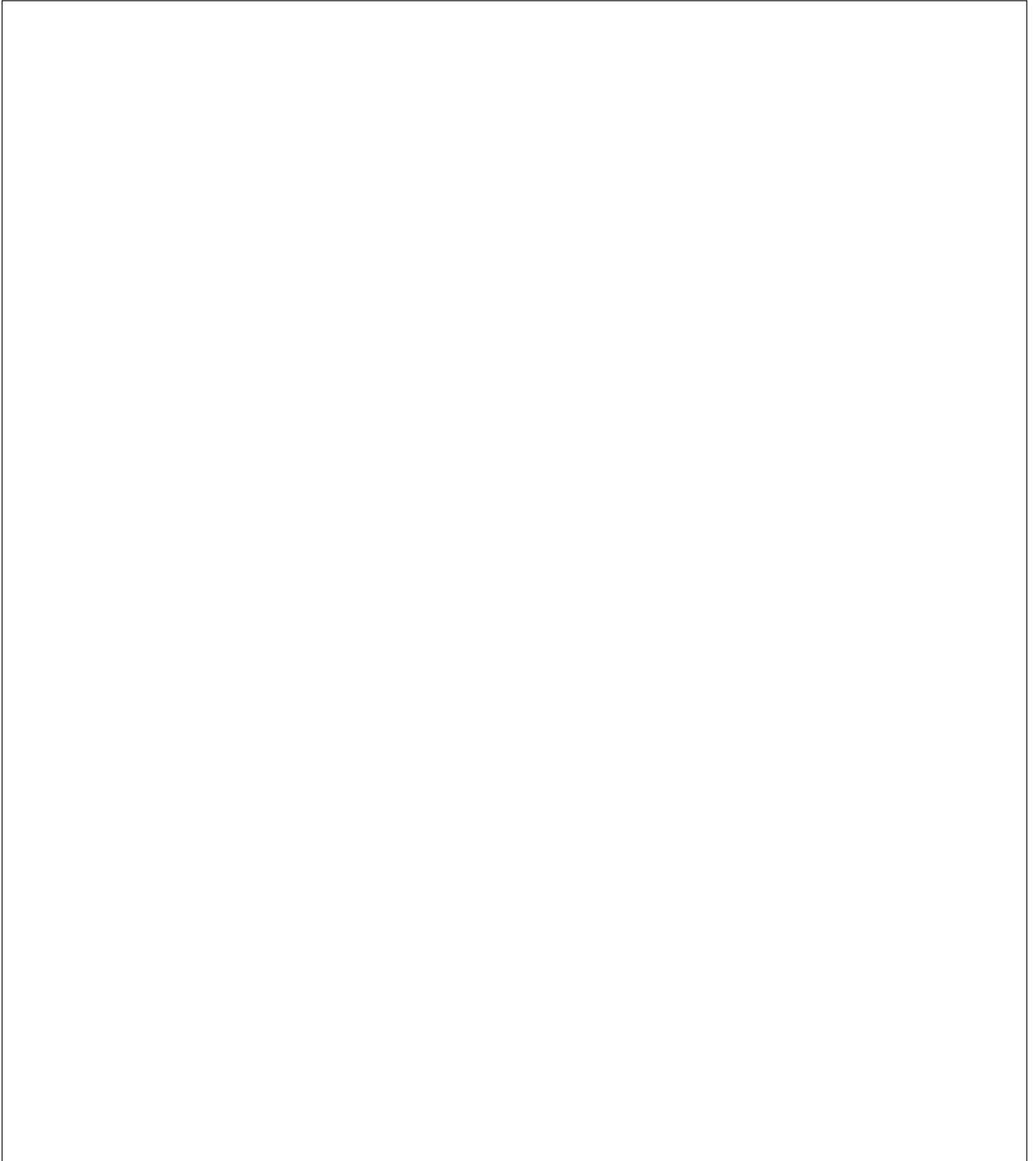
Waste Management

05 / Pick the following **building elements** that apply to your extension / refurbishment project, and provide specification details for each.

	Draught-proofing	
	Upgrading windows	
	New boiler	
	New lighting	
	Rainwater harvesting	
	Green / brown roof	
	Renewable energy technologies	
	Insulation	
	Other - please specify	

Sustainability Statement

Include any additional relevant information below.



NB. All submitted assessments / reports will be conditioned to the LPA at post completion / pre-occupation stage to ensure that all new developments are being completed to the specified design standards in order to close the performance gap and create truly sustainable communities.

APPENDIX

Appendix 1: Climate Emergency Declaration

EPPING FOREST DISTRICT COUNCIL

Declaration: Climate Emergency

Date of Declaration: 19th September 2019

Cllrs: S.Nevile + J.Phillip

Adopted Motion / Commitment:

1. Declare a 'Climate Emergency';
2. Pledge to do everything within the Council's power to make Epping Forest District Council area Carbon Neutral by 2030;
3. Call on Westminster to provide the powers and resources to make the 2030 target possible;
4. Work with other governments (both within the UK and internationally) to determine and implement best practice methods to limit Global Warming to less than 1.5°C;
5. Continue to work with partners across the district and region to deliver this new goal through all relevant strategies and plans;
6. In the special circumstances of this district, resolves to protect the Special Area of Conservation through the Local Plan and every other means;
7. Implement an Air Quality Strategy and bring forward Sustainability Guidance on planning; and
8. Engage with young people when considering the issue of climate change and appoint a 'Youth Ambassador' from the Epping Forest Youth Council."

Appendix 2: Glossary

Airtightness

Building airtightness is defined as the resistance to air leakage through unintentional points or areas in the building envelope. Heat can be lost through these gaps in the walls, floors and roofs of buildings creating draughts and so it is extremely important to make sure these are eliminated. This down to good detailing and good site workmanship.

Biodiversity

The variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable.

Carbon Footprint

The amount of carbon dioxide released into the atmosphere as a result of the particular individual, organisation or community. The carbon footprint of a development is counted over its lifetime i.e. the materials used and their sources, construction, lifetime use and demolition.

Circular Economy

The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended.

Cold Bridge

Occurs when there is a thermal break in the insulating materials between the inside and outside of a building e.g. a gap in the wall or roof insulation, allowing heat to escape.

Development

'Development' includes building operations (e.g. structural alterations, construction, rebuilding, most demolition); material changes of use of land and buildings; engineering operations (e.g. groundworks); mining operations; other operations normally carried out by a person operating a business as a builder; subdivision of a building (or any part of it) used as a dwelling house for the use as two or more separate dwelling houses. As defined by section 55 of the Town and Country Planning Act 1990.

Embodied Energy

The sum of the energy requirements associated, directly or indirectly, with the delivery of a good or service. This includes: the energy required to initially produce the building (the processing and the manufacture of the materials of the building as well as their transportation and assembly on site), the energy needed to refurbish and maintain the building over its lifetime, and the energy necessary to demolish and dispose of the building at the end of its life.

Fossil Fuel

Fossil fuel is a general term for buried combustible geologic deposits of organic materials, formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust over hundreds of millions of years. The burning of fossil fuels by humans is the largest source of emissions of carbon dioxide, which is one of the greenhouse gases that allows radiative forcing and contributes to global warming.

Green Infrastructure

Green infrastructure is a network of high quality and multifunctional green spaces, both urban and rural, including environmental features such as parks, public open spaces, playing fields, sports pitches, woodlands, and allotments, which are capable of delivering a wide range of environmental and quality of life benefits for local communities. The provision of green infrastructure can provide social, economic and environmental benefits close to where people live and work.

Local Plan

The plan for the future development of the local area, drawn up by the local planning authority in consultation with the community and stakeholders. Once adopted the Local Plan will legally form part of the Development Plan for the District, superseding the Replacement Local Plan (2006).

Appendix 2: Glossary (cont.)

National Planning Policy Framework

National Planning Policy Framework (NPPF) sets out the Government's planning policies for England, and provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflects the needs and priorities of their communities.

Operational Energy

Operational energy is the energy required during the entire service life of a structure such as lighting, heating, cooling, and ventilating systems; and operating building appliances.

Quality Review Panel

An independent panel of planning, architecture, urban design and construction experts set up by the Council to provide impartial expert advice to both applicants and local authorities on design issues in relation to important new development schemes and proposals for important public spaces including significant minor applications, major planning applications, pre-application development proposals, strategic masterplans and concept frameworks. The Quality Review Panel's feedback is a material consideration for local authorities and the planning inspectorate when determining planning applications. The purpose of the Quality Review Panel is to ensure that new development is of a high quality and contributes to place making.

Renewable Energy

Renewable energy is energy that is collected from renewable resources, which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.

Sustainable Drainage Systems

These are drainage systems designed to manage surface water and groundwater to sustainably reduce the potential impact of new and existing developments on flood risk. They can form part of a wider integrated water management approach.

Zero Carbon

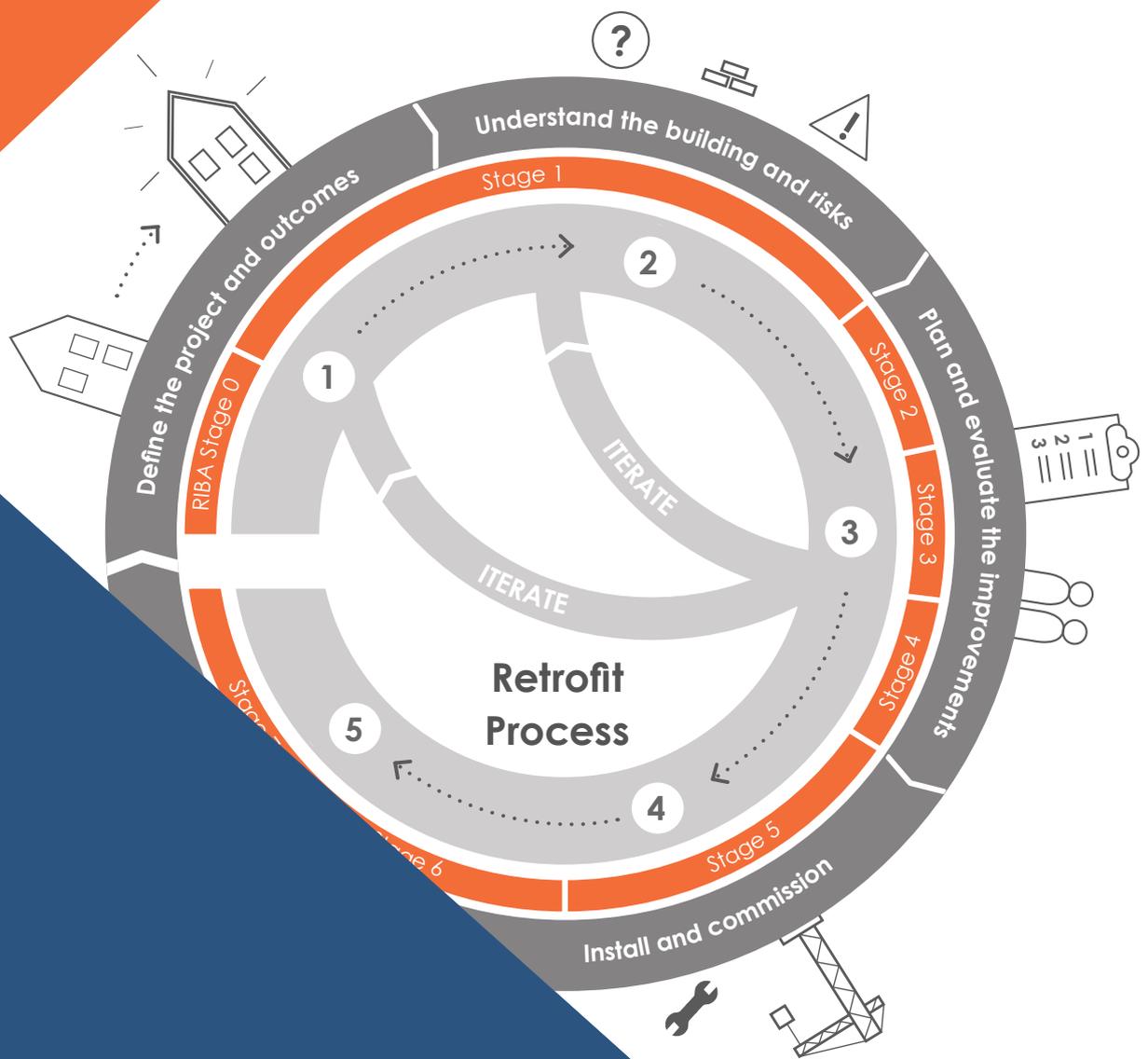
Causing or resulting in no net loss of carbon dioxide into the atmosphere. A zero carbon building is one with zero net energy consumption or zero net carbon emissions on an annual basis.

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Commenter	Commenting on	Respondent	Date received	Comment	Section	Saved email	EFDC Response
Statutory	Draft v3 (consultation version)	TfL	10/01/2022	Thank you for consulting Transport for London (TfL). I can confirm that we have no comments on the draft guidance.	General	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/TfL	No comment
Statutory	Draft v3 (consultation version)	Historic Environment Essex	13/01/2022	Thank you for consulting the Historic Environment advisors to Epping. Certain aspects of the proposed sustainable alterations/additions can have the potential to impact archaeological deposits or sites. It is recommended that similarly to the historic building section (02) the document would benefit from having a section on archaeological impacts which could be included within the submission checklist after 2 and could read: ‘Are you working within an area of archaeological potential?’ For information on archaeology and heritage, refer to: Essex Historic Environment Record (Historic Environment Records / Place Services) or Epping Forest Historic Environment Consultant	Checklist	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/Historic Environment Essex	The additional references on useful guidance / documentation on refurbishment and heritage assets is useful and will be incorporated in the final draft of the Sustainability Guidance.
Statutory	Draft v3 (consultation version)	Affinity Water	26/01/2022	Section 9 of the above document is welcomed, focusing on tools for water management within residential properties and extensions. Being within a water stressed area, it is essential that during refurbishments and extensions of residential properties, water efficient fixtures and fittings are considered and integrated into designs and retained thereafter. Incorporating measures such as rainwater harvesting and grey water recycling helps the environment by reducing pressure for abstractions. They also minimise potable water use by reducing the amount of potable water used for washing, cleaning and watering gardens. This in turn reduces the carbon emissions associated with treating this water to a standard suitable for drinking and will help in our efforts to get emissions down in the borough.	Design Principles	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/Affinity Water	No comment
Statutory	Draft v3 (consultation version)	Natural England	02/02/2022	Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development. Natural England does not consider that this Sustainability Guidance Volume 3: Extensions & Refurbishments Consultation poses any likely risk or opportunity in relation to our statutory purpose, and so does not wish to comment on this consultation. The lack of comment from Natural England should not be interpreted as a statement that there are no impacts on the natural environment. Other bodies and individuals may wish to make comments that might help the Local Planning Authority (LPA) to fully take account of any environmental risks and opportunities relating to this document.	General	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/Natural England	No comment
Member of Parish Council	Draft v3 (consultation version)	Clir Elizabeth Burn (Theydon Bos Parish Council)	03/02/2022	•A fellow councillor who is a builder mentioned: It's good to put it as a planning condition but when it's under permitted development rights it is not possible to do it unless it's in the building regulations. •Enforcement – not always enforceable •One of the councillors wanted to compliment on the way it is written and that it's very clear guidance to the man in the street thinking to do renovations but as councillors we were concerned about how much weight it could be afforded. Need to do a bit more than encouraging people to look at it. •Quails – would expect the council to follow its own guidance. Use the sites as something to publicise when they get underway to encourage them to incorporate this which in turn gives an example of something that the council is involved in. •The EFDC website is not the easiest to negotiate and it doesn't quite engage they way it used to. •Some years ago, on the old EFDC that did come out and the government was behind it was a leaflet on paving driveways. In our village we've seen the need to put more vehicles and most people's Theydon Bos have 2/3 cars. We've had yellow lines put down because of commuters and people began to pave over their front driveways, some of those are literally just paved. Our village design statement that we delivered to EFDC in 2012 talked about encouraging biodiversity in the front garden areas and we also talked about leaving areas of planting for run-off/drainage. Unfortunately, there was a loophole in the PDR although you are not supposed to put more than 5m2 of hardstanding in your garden and you don't see anyone knocking on your door if you do. The leaflet gave some ideas on planting and would like to see some illustrations in the guidance on things you could do. That sort of little encouragement makes a difference. •Rural Preservation Society & various Residents Associations who could be interested. Think about the groups to email about it and get these people involved in the workshops. Clir Neville would probably like to speak on this when it's adopted. These are the people need to take the message out there.	General, Design Principles	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/Public ORA	All comments noted and to be taken in to consideration for the next draft. Response to specific points below; - The Sustainability Guidance is regarded as a working tool for discussions and prompts during pre-app conversations, a next practice guide as well as an assessment tool. It refers to relevant Local Plan policies but is not in itself a policy document and does not set legal requirements. Each development will be assessed relative to its scale, contributions, merit etc. Once approved by Cabinet the guidance document will have major planning weight. It's purpose is to provide a stepping stone for where The Council expects policy to go over the next few years in relation to sustainability. - The suggestion to include information on ensuring biodiversity in paved areas of gardens is useful and will be incorporated in the 'landscaped-led design' section of the guidance.
Member of the Public	Draft v3 (consultation version)	Christine Fuchs-Khahar	03/02/2022	1) Some points that could be added to the section 'design principles': a) Landscape led design: use permeable grid paving stones that let grass grow between and let water soak into the ground to energy efficiency: think of replacing gas energy sources with boilers/boilers etc that will be compatible with switching to hydrogen, because hydrogen will replace gas in the not too distant future c) renewable technology: think of using batteries that store surplus energy from solar panels and other renewable energy sources - maybe instead of for each single dwelling for a whole street (battery manufacture being detrimental to the environment) d) fabric- first: think of installing triple glazed windows for insulation e) materials-finishes: think of using light colours for walls, roofs and even street surfaces 2) Incentives: a) When promoting incentives, most people, especially those not so interested and/or committed to environmental protection and sustainability, will be persuaded by the aspects of cost benefits, also building regulations that enforce environmental standards. These aspects need to be highlighted. b) Funding: of the three websites listed, one (Green Homes Grant) is closed to new applications, another (ecoFlex) is only available for people on low income, and a third (Domestic Renewable Heat Incentive) only applies to replacement with more sustainable heating facilities. Ergo, there is very little funding, if any, available.	Incentives, Design Principles	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/Christine Fuchs-Khahar	All comments noted and to be taken in to consideration for the next draft. Response to specific points below; - The suggestion to include information on ensuring biodiversity in paved areas of gardens is useful and will be incorporated in the 'landscaped-led design' section of the guidance. - Note about the rise of hydrogen boilers will be included - list of funding options will be reviewed to ensure all still relevant
Member of the Public	Draft v3 (consultation version)	Christine Fuchs-Khahar	03/02/2022	Questions: a) Will the guidance remain a mere guidance document, with advisory character, leading to optional implementation of its suggestions - or can its principles be enforced by EFDC? I.e., that the principles listed are made a condition for planning approval? b) How will this guidance be disseminated to homeowners? The guidance document is well designed and written clearly and should/could serve as information for homeowners. c) Is the checklist at the end of the document merely optional or will it actually be used as part of the planning process?	General	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/Christine Fuchs-Khahar	The Sustainability Guidance is regarded as a working tool for discussions and prompts during pre-app conversations, a next practice guide as well as an assessment tool. It refers to relevant Local Plan policies but is not in itself a policy document and does not set legal requirements. Each development will be assessed relative to its scale, contributions, merit etc. Once approved by Cabinet the guidance document will have major planning weight. It's purpose is to provide a stepping stone for where The Council expects policy to go over the next few years in relation to sustainability. - Once approved and endorsed by the EFDC Cabinet as a material planning consideration, the Checklist will become a requirement for every planning application of work to an existing dwelling
Statutory	Draft v3 (consultation version)	Epping Society	10/02/2022	As summarised by EFDC Officer: - The document's language should be more direct in terms of requirement and enforcement otherwise risks being dismissed by developers. - As an example, as noted on page 8 - the "Checklist should accompany a planning application". Will the application be refused or returned if it does not? Can Council not at the very least make the Checklist an essential requirement of an application? - The foot note on page 32 - "ensure published design standards". We read this hopefully, that there will be at least some requirement for building designs to move in the right direction; but we think that stakeholders might appreciate more detail here. - Epping Society are happy to support the aims of the document. The concepts and technologies included are generally accepted as those likely to move our community in the right sense environmentally and make homes more pleasant to live in. - Owners, architects, developers and builders should be expected to demonstrate that they have considered refurbishment, rather than demolition. - Solar orientation East-West (page 19). Will this be applied also to new buildings? - Not overshadowing neighbours. This is a problem frequently raised by residents looking at proposed extensions, garden rooms and new builds. The Epping Society is pleased to see it included here; is this evidence that it is to be given more credence in Planning Application considerations than in the recent past? - Materials – should include reference to fire safety? - Installing charging points for Electric vehicles. Given the crucial importance of this for air pollution, the forest, a number of EFDC policies and the Soundness of the Local Plan; some reference could have been made – for example, that where an extension is on a driveway or front garden, consideration should be given to installing such. - One technology, grey water systems, is very cheap to install in new build and much more expensive to retrofit. Ongoing and maintenance costs are trivial. Our part of the UK is facing increasing water supply stress, while several parts of the town of Epping already experience low pressure at times, and the developments under the Local Plan will exacerbate this. This might be one technology which the Council could consider making compulsory? - We would have hoped to see some "future-proofing" in the Guidance – as examples, there is an emerging emphasis on insulation, also new energy sources are evolving. One would have hoped to see opportunities left open to include as yet unforeseen technologies. A "keep under review and amend" paragraph might do be included?	General, Design Principles, Checklist	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/Epping Society	All comments noted and to be taken in to consideration for the next draft. Response to specific points below; - The Sustainability Guidance is regarded as a working tool for discussions and prompts during pre-app conversations, a next practice guide as well as an assessment tool. It refers to relevant Local Plan policies but is not in itself a policy document and does not set legal requirements. Each development will be assessed relative to its scale, contributions, merit etc. Once approved by Cabinet the guidance document will have major planning weight. It's purpose is to provide a stepping stone for where The Council expects policy to go over the next few years in relation to sustainability. - The emphasis on refurbishment where possible over demolition will be communicated in the guidance. - The "Review and Monitor" section within the guidance's introduction makes note of changing standards and the need to evolve guidelines, and also makes note of the commitment to review the update the document once every 3 years.
Statutory	Draft v3 (consultation version)	Historic England	18/02/2022	While references and links in the guidance and checklist to the relevant Historic England guidance publications on energy efficiency in older houses and historic buildings are welcomed, it may be helpful if these were referenced at the relevant sections within the guidance note rather than deferring them to the checklist. In developing the guidance note you may find the following further guidance to be helpful in understanding the special considerations for historic buildings. The Sustainable Traditional Buildings Alliance (STBA), in association with Historic England, has published practical guidance on retrofitting traditional buildings, based on current research and practice. 'Planning Responsible Retrofit of Traditional Buildings' can be accessed via: https://historicengland.org.uk/images-books/publications/planning-responsible-retrofit-of-traditional-buildings/	Design Principles	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/Historic England	Comments noted and reference to further guidance will be included in the next draft.
Statutory	Draft v3 (consultation version)	Canal River Trust	18/02/2022	Based on the information available we have the following general advice: but under 6m of the River Lea passes through the Epping Forest District Council area and the waterways have the potential to be used for heating and cooling. There may well also be other sources of thermal energy available to residents via boreholes and aquifers. Section 4 Renewable Energy should therefore for the sake of completeness include Water Source Heat Pumps (WSHPs), which are the most efficient type of heat pump and can use water from a variety of sources – such as rivers, lakes and boreholes. Single households and District Heat Networks can benefit from the use of WSHPs providing cost-effective energy solutions to occupants, that should be price stable, secure and sustainable.	Design Principles	Z:\Planning and Economic Dev/Policy and Conservation/Forward Planning/T. Local Plan Implementation/T.24 Sustainability Guidance/Volume 3 Consultation/Consultation Responses/Canal River Trust	Comments noted and reference to water source heat pumps+HS will be included in the next draft.

LETI Climate Emergency Retrofit Guide

How existing homes can be adapted to meet UK climate targets



With thanks to all who contributed to this guide:



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1. Alex Whitcroft
2. Amber Fahey
3. Andrew Leiper
4. Andrew Simmonds
5. Andy Stanton
6. Antonia Khayat
7. Antonietta Russo
8. Asif Din
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22. David Powis
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54. Petek Esme
55. Pippa Farmer
56. Rachel Levy
57. Richard Dudzicki
58. Robert Cohen
59. Rowan Riley
60. Ruxanda Palcu
61. Sal Wilson
62. Sapna Halai
63. Sara Edmonds
64. Sara Godhino
65. Sarah Price
66. Seb Laan Lomas
67. Stephen Edwards
68. Tara Gbolade
69. Tom Greenhill

70. Will South
71. Zachary Gill
72. Zoe Watson

- Ralph Carpenter
- Richard Groves
- Robert Prewitt
- Rudy Logue
- Stephen Shakeshaft
- Thomas Lowe
- Toby Cambray

About LETI

The London Energy Transformation Initiative (LETI) was established in 2017 to support the transition of the capital's built environment to net zero carbon, providing guidance that can be applied to the rest of the United Kingdom (UK).

We do this by:

- Publishing guidance to support the built environment industry to meet the climate emergency;
- Engaging with stakeholders to develop a robust and rapid energy reduction approach, producing effective solutions to the energy trilemma of security, sustainability and affordability;
- Working with local authorities to create practicable policy alterations to ensure the regulatory system is fit for purpose, placing verified performance at its core;
- Encouraging and enabling collaboration within a large, diverse group of built environment professionals; and
- Providing technical advice to support exemplar developments, enabling leaders who want to deliver net zero carbon buildings.

LETI is a network of over 1,000 built environment professionals who are working together to put London on the path to a zero carbon future. The voluntary group is made up of dedicated and passionate developers, engineers, housing association

professionals, architects, planners, academics, sustainability professionals, contractors, facilities managers and local authorities.

Over the last few years LETI has focused on providing guidance on defining what good looks like in the context of the climate emergency and LETI have published three key pieces of guidance: The Climate Emergency Design Guide; The Embodied Carbon Primer; and The Client Guide.

The LETI Climate Emergency Retrofit Guide was conceived to follow in the footsteps of the successful Climate Emergency Design Guide. Sharing knowledge on how to go about retrofit and setting targets. The information shared will inevitably be refined and evolve over time.

For more information on LETI, please see:

www.LETI.london



Supporting organisations

The following key organisations contributed to this guide by providing: key leadership team members; support on the guide; and advice as the guide progressed:



LETI would like to thank the European Climate Foundation who provided support for the archetype modelling that was required in this guide.



While every effort has been made to check the accuracy and quality of the information given in this publication, neither the Authors nor LETI accept any responsibility or liability for the subsequent use of this information, for any errors or omissions that it may contain, or for any misunderstandings arising from it. It will be necessary for users of the guidance given to exercise their own professional judgement when deciding whether to abide by or depart from it.

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Executive summary

Why retrofit?

There is currently a climate emergency caused by greenhouse gases being released into the atmosphere and we emit huge amounts of carbon dioxide by heating and using hot water in our homes. What may not be as obvious is that our existing homes are by far the worst polluters in the housing sector.

Of all the operational emissions that come from buildings in the UK, 69% come from energy use in the domestic stock which alone is responsible for 18% of our annual national emissions^{1,2}.

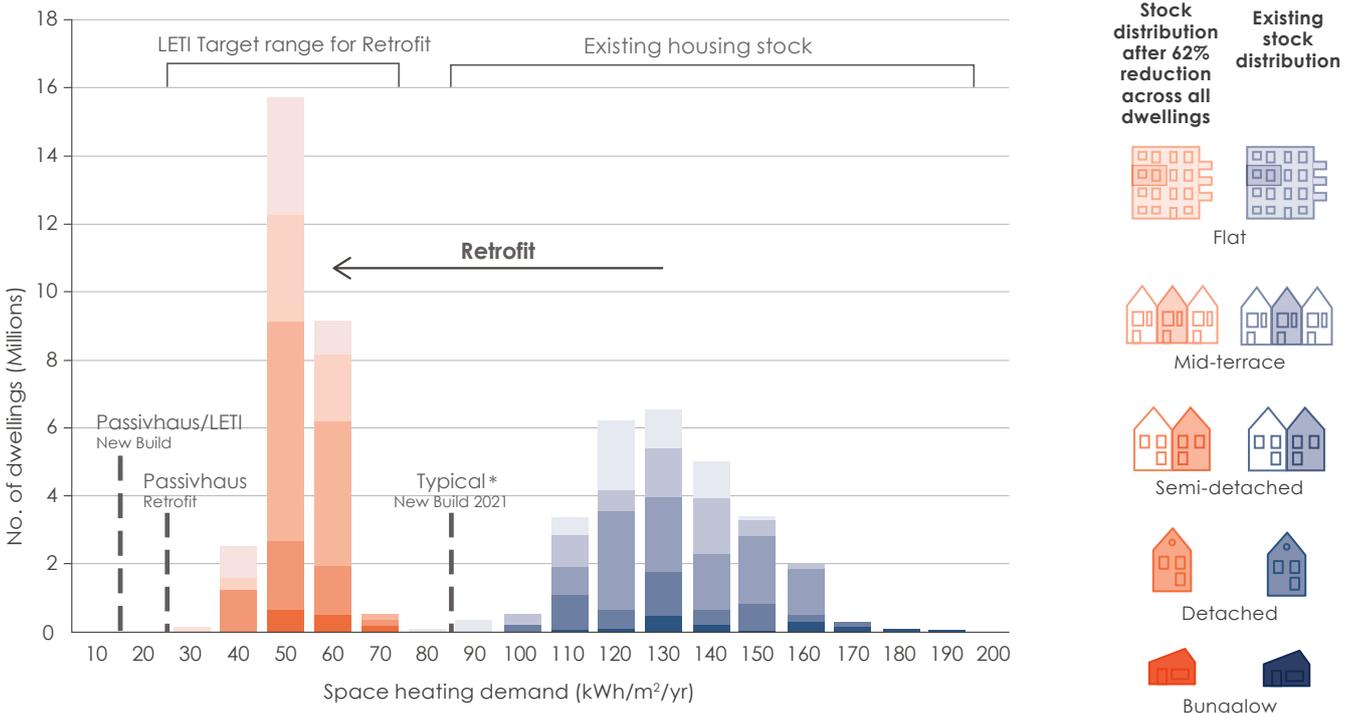
But retrofit isn't just about reducing carbon emissions. A best practice retrofit should reduce fuel bills and also improve health and wellbeing. Retrofit at scale would also generate significant employment opportunities and stimulate the economy.

How far should retrofit go?

The more we can reduce our demand for energy, the lower our emissions... but how much is enough?

The answer is different for different buildings, but in considering 'how much is enough?' We need to look holistically at the benefits of retrofit. This means considering: at what point health and wellbeing benefits are realised; the effect on fuel poverty; whole life costs; the costs to the nation (i.e. is it cheaper to generate more energy, or use less in the first place?) and the capacity of our electricity grid – now and in the future.

If we consider all these aspects, then it appears that a deep retrofit, with up to a 70% reduction in energy consumption, will have the most positive impact.



* Includes for an assumed performance gap

Figure 0.1 - Total number of UK dwellings broken down by their space heating demand, showing the transition required from existing levels of high demand to the LETI retrofit target range. Figure based on stock modelling carried out by LETI.

In contrast, a shallow retrofit with limited demand reduction could see neutral or even adverse effects.

LETI have produced a UK stock model to understand the scale of the challenge and also see what could realistically be achieved at a national level. If we consider that the space heating demand of a dwelling is a good indicator of the building's fabric efficiency, the modelling has shown us that a best practice level of retrofit could reduce our overall average space heating demand from 130 kWh/m²/year down to about 50 kWh/m²/year (Figure 0.1).

When fabric upgrades are combined with a heat pump, the potential reduction in average energy consumption is huge - around 75% - and approaches the levels that we could expect from even the most efficient new-build properties.

Retrofit – a risky business?

The UK has homes of many different types and ages which all require subtly different approaches to retrofit. All too often, poor retrofits can result in damage to the building fabric and a degradation in the internal living environment, with poor air quality and perhaps even damp and mould.

However, this should not be a barrier to retrofit, retrofit can be done well. With careful assessment and design, a best practice retrofit will protect the building fabric and, in most cases, significantly enhance the internal living environment.

To make sure you achieve a best practice retrofit, the impact of all the proposed retrofit measures needs to be carefully considered as a whole, with the building's fabric, ventilation and heating characteristics all designed to work in harmony with each other.

Choosing a heat source

This guide makes it clear that retrofit should focus on reducing the energy demand of a home. However, if we are looking specifically at how to reduce carbon emissions then the choice of heat source is also a critical part of the jigsaw.

Zero carbon energy will ultimately be delivered by the electricity grid and thus, at least in the short to medium term, we need to shift our buildings to produce their heating and hot water from a system that runs on electricity. In most cases this is going to be a heat pump of some form. We can't discount other technological solutions like low or zero carbon heat networks and hydrogen coming along, but most people agree that, for the vast majority of homes, heat pumps are the only viable option with the least uncertainty at this stage.

So, the key message is – if you do nothing else, make enough fabric improvements to switch to a heat pump and avoid putting in fossil-fuel systems at all costs.

LETI retrofit targets

LETI have set out best practice targets for retrofit, which we believe are achievable in the vast majority of UK dwellings. These targets are based on a combination of improved fabric efficiency and a heat pump to provide heating and hot water. We have also set out exemplar targets for buildings that can go further.

Space heating demand, hot water demand and Energy Use Intensity targets have been developed for when predictive energy modelling can be carried out. Fabric and system targets have been developed in tandem and these can be used when detailed energy modelling is not possible or financially feasible, for example on a small project.

Retrofit quick start guide

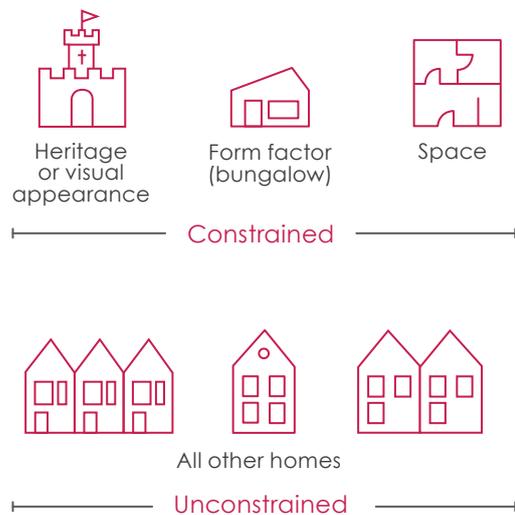
1 Use the six key principles for best practice retrofit

-  **Principle 1:** Reduce energy consumption
-  **Principle 2:** Prioritise occupant and building health
-  **Principle 3:** Have a whole building Retrofit Plan
-  **Principle 4:** Measure the performance
-  **Principle 5:** Think big!
-  **Principle 6:** Consider impact on embodied carbon

 **SIGNPOST** Chapter 2 - What is retrofit?

2 Tailor the retrofit to the property type

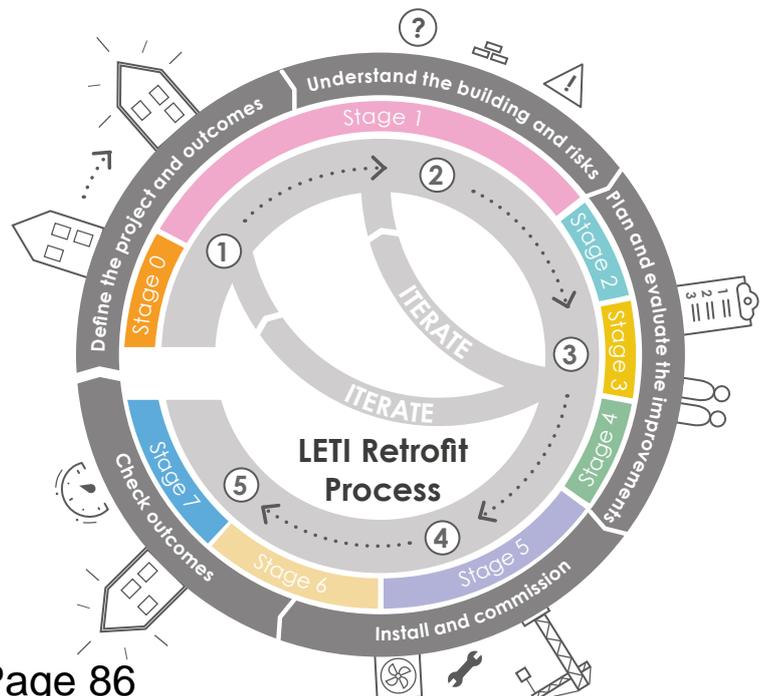
Determine whether the home is constrained or unconstrained:



3 Make a whole house Retrofit Plan and follow the LETI Retrofit Process

 **The whole house Retrofit Plan must:**

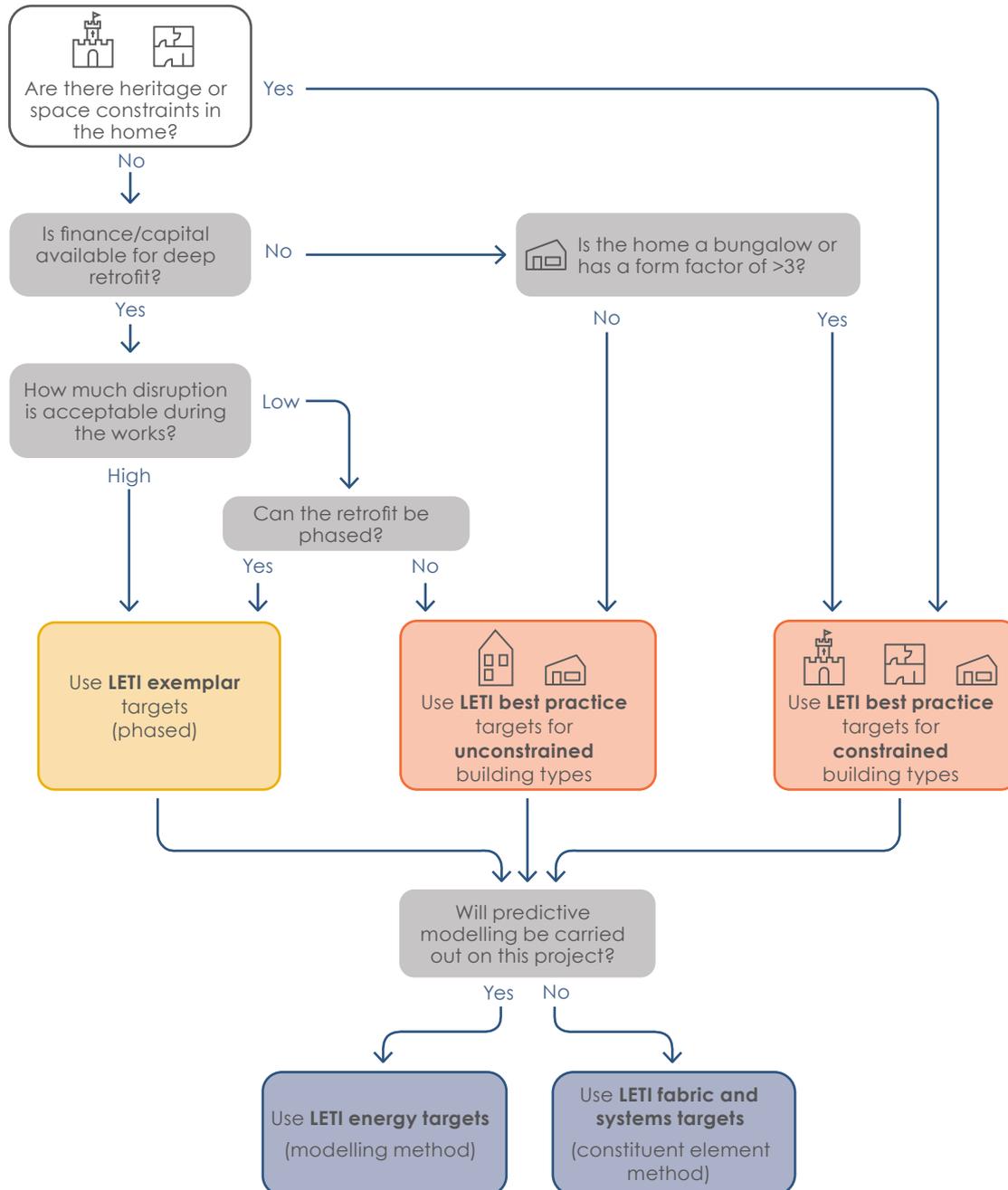
- Set out key building information, constraints, risks, and opportunities.
- Set out the key works proposed along with related strategies and details.
- Set out the sequence of work.
- Be appropriate in its level of detail and intervention for the project.
- Include a plan for monitoring and reporting energy consumption.
- Stay with the building.



 **SIGNPOST** Chapter 5 - How do we do it?

4 Use the flow chart to determine the appropriate LETI target and approach

The following flowchart sets out how to decide on the appropriate retrofit target for the project:



Notes:

→ If there are heritage or significant space constraints in the home, still try to reduce the space heating demand, hot water demand and Energy Use Intensity (EUI) as much as possible. Use the U-values recommended for the unconstrained retrofit wherever possible.

→ For any retrofit - independent quality assurance (QA) process is recommended for example for LETI exemplar use EnerPHit. Requirements for EnerPHit depend on the UK region, if following EnerPHit check the full requirements at the start of the project.

5a LETI retrofit energy targets (modelling method)

Our analysis demonstrated that what LETI considers to be a pragmatic, affordable and realistic level of retrofit matches closely with the AECB Retrofit standard in terms of both space heating demand and final EUI. LETI considers this to be a **best practice** retrofit.

► **SIGNPOST** Chapter 4 - LETI home retrofit targets - 4.2 Modelling method

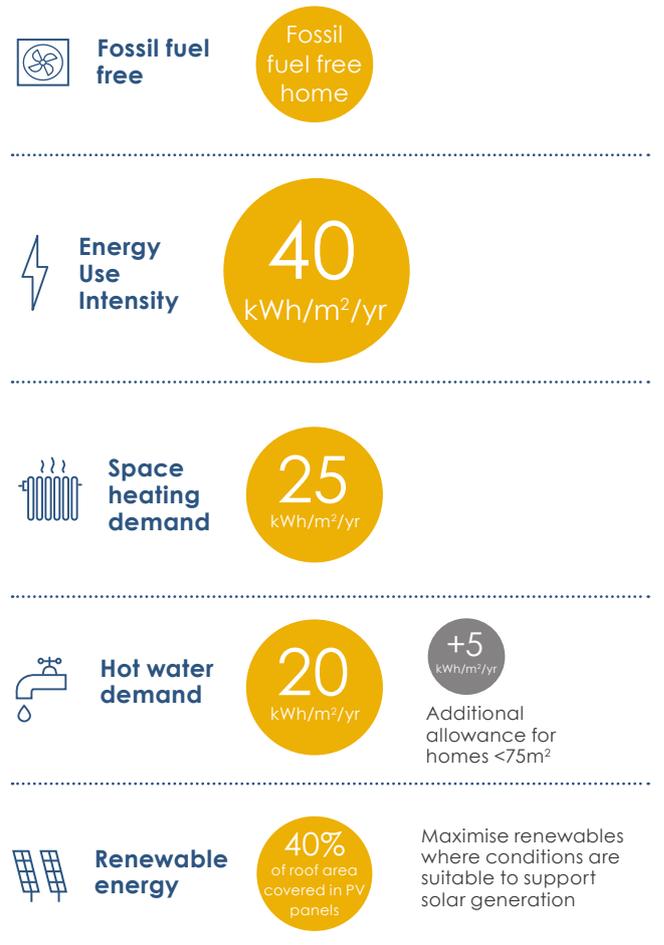
The more demanding Passivhaus EnerPhit retrofit standard achieves further reductions and is aligned with LETI's **exemplar** targets in terms of retrofit ambition.

Use of either energy target requires detailed energy modelling to be carried out.

LETI best practice retrofit



LETI exemplar retrofit



5b) LETI retrofit fabric and system targets (constituent element method)

This constituent method can be used where detailed energy modelling is not possible or financially feasible on a small project.

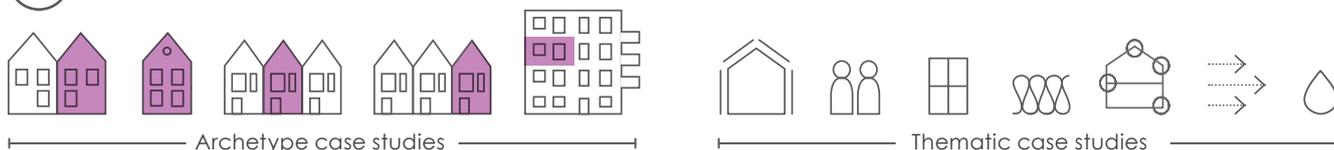
The fabric and system components of the retrofit works should achieve the target parameters set out below.

SIGNPOST Chapter 4 - LETI home retrofit targets
- 4.3 Constituent element method

Building element	Retrofit actions	LETI best practice		LETI exemplar	
		Constrained retrofit	Unconstrained retrofit (cool temperate climate)	All retrofit types	
 Walls	Cavity	External, cavity or Internal insulation	0.24 W/m ² .K	0.18 W/m ² .K	0.15 W/m ² .K
	Solid uninsulated	External or Internal insulation	0.32 W/m ² .K	0.18 W/m ² .K	0.15 W/m ² .K
	Timber frame	External or Internal insulation	0.21 W/m ² .K	0.18 W/m ² .K	0.15 W/m ² .K
 Roofs	Cold	Insulate	0.12 W/m ² .K	0.12 W/m ² .K	0.12 W/m ² .K
	Warm/flat	Insulate	0.22 W/m ² .K	0.12 W/m ² .K	0.12 W/m ² .K
 Floors	Suspended timber	Insulate between joists	0.20 W/m ² .K	0.18 W/m ² .K	0.15 W/m ² .K
	Solid uninsulated	Excavate and insulate below	0.80 W/m ² .K	0.15 W/m ² .K	0.15 W/m ² .K
 Windows and doors	Windows	Replace	1.30 W/m ² .K	1.00 W/m ² .K	0.80 W/m ² .K
	Doors	Replace	1.00 W/m ² .K	0.80 W/m ² .K	0.80 W/m ² .K
 General envelope	Thermal bridging	Mitigate where possible	0.10 W/m.K	0.10 W/m.K	0.08 W/m.K
	Airtightness	Draught proofing, sealing of chimneys and vents	3.0 ach@50Pa	2.0 ach@50Pa	1.0 ach@50Pa
 Systems	Systems and appliances	Fossil fuel free home	Fossil fuel free	Fossil fuel free	Fossil fuel free
	Ventilation type	Install and remove extract fans	MVHR*	MVHR	MVHR
	Lighting power	Replace lamps and fittings	50 lm/W	100 lm/W	100 lm/W
 Hot water	Hot water tank	Increase insulation or replace	1.5 W/K	1.5 W/K	1.5 W/K
	Primary pipework	Insulate all pipework	90% of pipework insulated	90% of pipework insulated	90% of pipework insulated
	Shower demands	Low flow fittings	16 litres/pers.day	16 litres/pers.day	16 litres/pers.day
	Other demands	Low flow fittings	9 litres/pers.day	9 litres/pers.day	9 litres/pers.day
 Renewables	Photovoltaic generation	Rooftop installation	0 % of roof area covered in PV panels	40 % of roof area covered in PV panels	40 % of roof area covered in PV panels

* If not possible use demand control dMEV or demand control CMEV

6 Case studies



1



Why retrofit?

1.1 Introduction

This document is aimed primarily at construction sector professionals - architects, designers, clients and contractors to help them understand the size and scope of the domestic retrofit challenge as well as set out some sensible parameters and practical guidance to achieve a successful retrofit project. Public and private sector sustainability professionals may also find it useful to help define the scope of what can be achieved in decarbonising our housing stock. Individual homeowners embarking on their own retrofits may also find this guide informative.

This guide sets out what a best practice and exemplar retrofit looks like. It suggests a combination of pragmatic, realistic and affordable measures which, when undertaken as a coordinated Retrofit Plan, will deliver a comfortable, healthy and efficient home with a greatly reduced carbon footprint that supports our national transition to net zero. It looks specifically at the UK's residential housing stock^{1,1}.

This document does not seek to define Net Zero retrofit, however LETI advocates the following hierarchical approach to be followed:

1. Reduce the space heating demand and Energy Use Intensity as far as is practicable for the building/situation.
2. Remove fossil fuel heat sources and replace with low carbon alternatives. LETI believes that the main option for this over at least the next decade will be heat pumps.
3. Generate renewable energy on site wherever feasible – but do not pursue this at the detriment of items 1 or 2 above.

The only way the UK will achieve a net zero balance is to match the proportion of national renewable energy generation that can be realistically allocated to buildings against the energy that buildings use. We know that this will only be possible if we significantly reduce demand, but we also need to be realistic and pragmatic about what can be achieved. LETI believes that reducing space heating demand and Energy Use Intensity in line with this guide will give us the best chance of achieving net zero.

A building meeting the targets set out in this guide is considered by LETI to be a net zero compliant retrofit, when the above hierarchy is followed and when there is no gas or oil boiler in the home.



Structure of this report

- **Chapters 1 to 3** set out the imperatives for retrofit, the current level of efficiency of our housing stock, and derive a level of retrofit that LETI is suggesting is appropriate and achievable.
- **Chapter 4** sets out the LETI home retrofit targets which is derived from the modelling in Chapter 3.
- **Chapter 5** describes how the LETI home retrofit targets from Chapter 4 can be achieved in practice.
- **Chapter 6** offers illustrative case studies.

In summary, if you are interested in the theory, read Chapters 1 to 3, whilst if you just want to focus on practice, then jump to Chapters 4 and 5. Throughout this report the SIGNPOSTS below are used to guide you to related sections in the document.

Theory

- ▶ **SIGNPOST** Chapter 1 - Why retrofit?
- ▶ **SIGNPOST** Chapter 2 - What is retrofit?
- ▶ **SIGNPOST** Chapter 3 - Where are we now and what can we achieve?

Practice

- ▶ **SIGNPOST** Chapter 4 - LETI home retrofit targets
- ▶ **SIGNPOST** Chapter 5 - How do we do it?
- ▶ **SIGNPOST** Chapter 6 - Case studies

Figure 1.1 - Structure of LETI Retrofit Guide

1.2 Retrofit and the climate emergency

The energy needed to run the UK's buildings accounts for 27% of our annual carbon emissions with 18% alone coming from our domestic housing stock^{1,2}, see Figure 1.2 below.

Our progress in decarbonising the grid has masked the fact that the energy our buildings use has changed very little over the past 10 years^{1,3}, see Figure 1.3. If we are to meet our national net zero trajectory, we will need to significantly reduce the energy demand from our buildings.

Our existing building stock is, by far, the biggest problem. 80% of the homes that will exist in 2050 have already been built^{1,4}. Furthermore, as our new-build standards are still not in-line with net zero, even the homes we are building now will need to be retrofitted before 2050. Retrofit is therefore critical in supporting our transition to net zero.

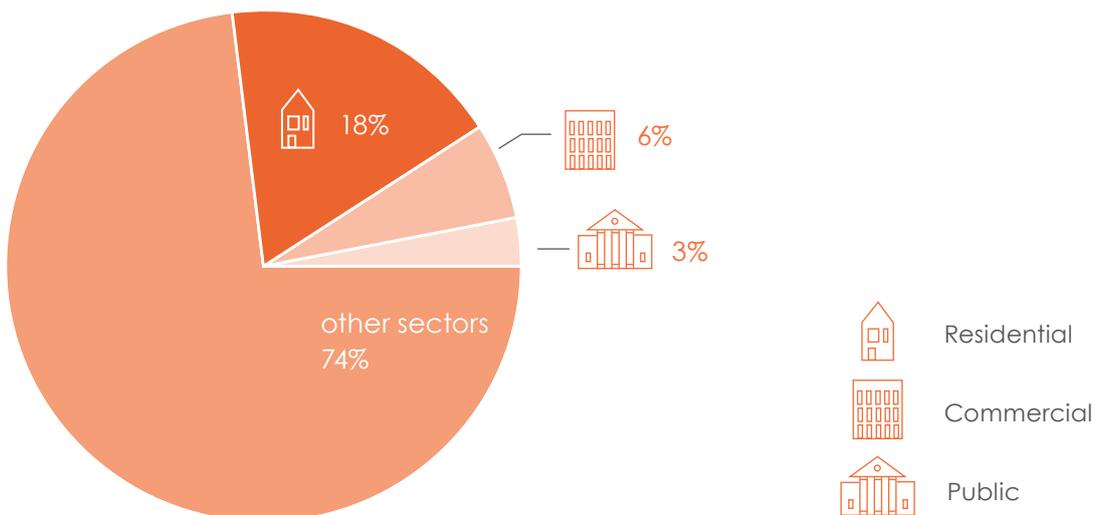


Figure 1.2 - United Kingdom buildings CO₂e emissions, 2017. Includes direct and indirect emissions. Source: UKCCC, Net Zero-Technical Report, May 2019. Note: 'other sectors' include power, industry and transport^{1,2}.

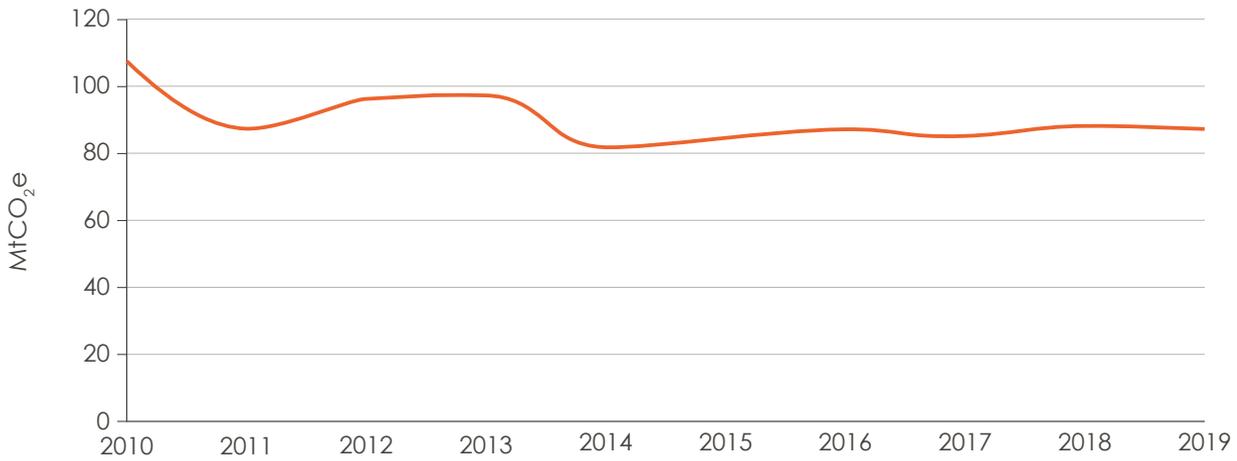


Figure 1.3 - Total annual emissions (direct and indirect) from UK buildings, 2010 to 2019, in MtCO₂e. Source: UKCCC, Progress Report to Parliament, June 2020

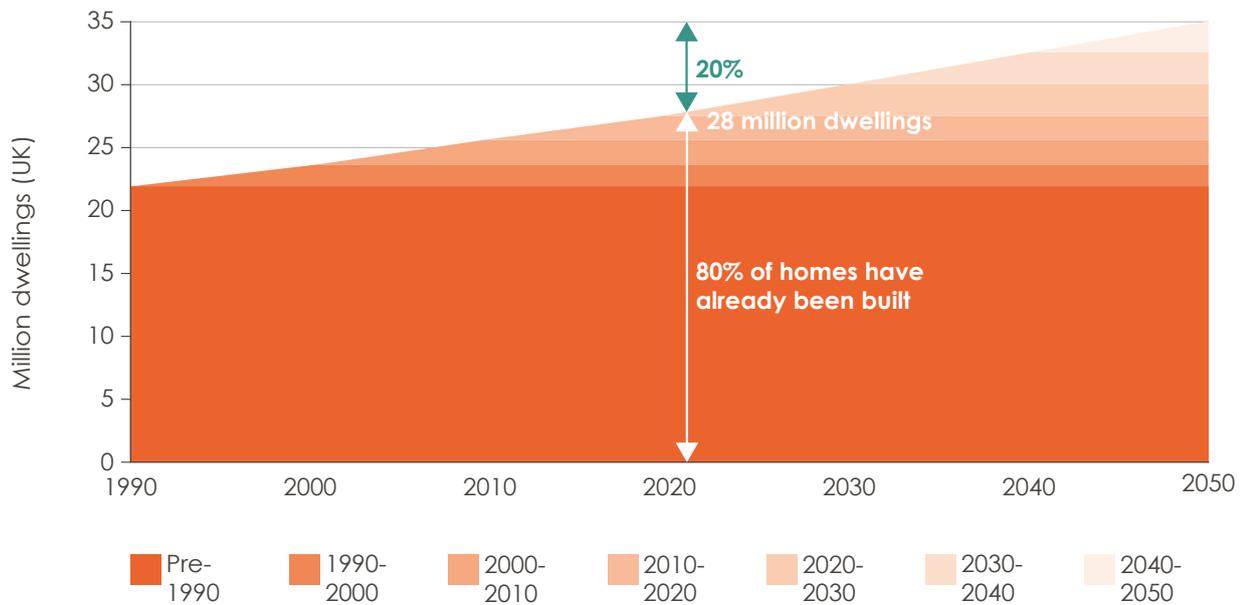


Figure 1.4 - Millions of dwellings built in the UK from pre-1990 to 2050. Note: demolition has been ignored in this table as the relatively small amount of domestic demolition is usually followed with replacement.

1.3 Retrofit and health

Many properties in the UK – and not just the old ones – already suffer from serious problems beyond energy inefficiency: uncomfortable draughts, leaking gutters, rising damp, cracked pointing, damp, mould, rot, poor ventilation, internal condensation.

The Housing Health and Safety Rating System (HHSRS) is a measure of poor housing used in England, Wales and Northern Ireland. Scotland uses the Scottish Housing Quality Standard (SHQS). The table below shows the proportion of dwellings that failed to meet their relevant national standards between 2015 and 2017^{1,5}.

England	Scotland	Northern Ireland	Wales
11%	40%	9%	18%

Figure 1.5 - Proportion of dwellings failing to meet relevant standards.

Within the HHSRS, there is an excess cold assessment which indicates that over 900,000 dwellings across the UK are likely to see internal temperatures which could adversely affect the health of the occupants^{1,6}. Public Health England suggest that up to 10,000 people a year die as a result of cold homes^{1,7}. Overall, the BRE estimate that the annual cost of poor housing is over £20bn^{1,3}.

	England	Wales	Northern Ireland	England, Wales and Northern Ireland
% poor condition (HHSRS Category 1)	11%	18%	9%	11%
Total cost of mitigation works per annum	£10,072m	£584m	£305m	£10,961m
Annual treatment cost to NHS per annum	£1,413m	£95m	£40m	£1,548m
Full annual health cost of poor housing per annum	£18,667m	£1,031m	£401m	£20,099m

Figure 1.6- Table reproduced from The Housing Stock of the United Kingdom Report, BRE Feb 2020.

1.4 Retrofit and fuel poverty

Whilst exact definitions of fuel poverty vary between nations, in general a household is considered to be in fuel poverty when they need to spend more than 10% of their disposable income on heating their home.

Over 11% of households in the UK, some 3.3M homes, are considered to be in fuel poverty^{1,8}.

There is a strong correlation between fuel poor households and people living in homes with poor energy efficiency ratings. For example, in England, 88% of all fuel poor households live in properties with a Band D EPC or below. These households have an average annual fuel bill of £1590 which would need to be reduced by £334 to take them out of fuel poverty^{1,9}.

A reduction of, say, 50% in heating demand for these households would result in a reduction of approximately £390 in their overall fuel bill - which would take millions of households out of fuel poverty^{1,10}.

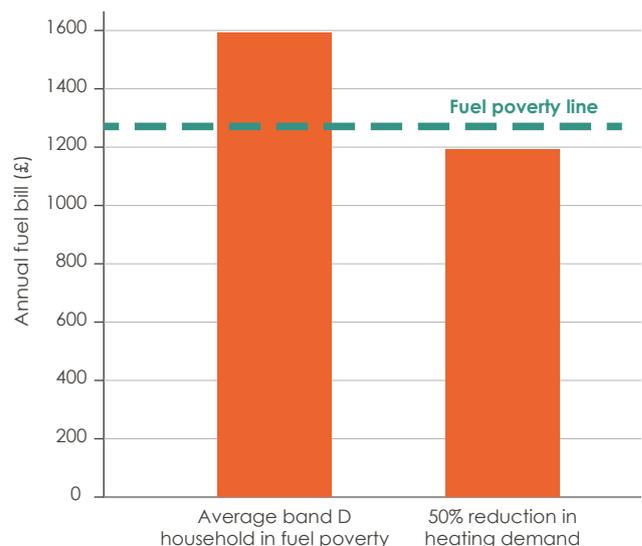


Figure 1.7 - Annual fuel bills of average band D household in fuel poverty and with 50% reduction in heating demand.



1.5 Retrofit and society

Retrofit also has broader societal implications. People who live in warm, comfortable homes are happier as well as being healthier. This means they are more productive at work, and are less likely to commit crime or engage in anti-social behaviour.

The Housing Associations' Charitable Trust (HACT) have developed a Social Value calculator which identifies the broader social value relating to improvements in housing. The calculator notes significant benefits from improvements in EPC bands, rectification of condensation/mould issues and rectification of damp^{1.11}.

More broadly, large scale retrofit projects can also be the stimulus for the regeneration and renewal of whole areas which will bring multiple long-lasting benefits.

A Social Return on Investment analysis for the Passivhaus retrofit Erneley Close, a large multi-residential development in Manchester, calculated the overall benefit to society to be in the region of £11.1M with only £407k of that relating to energy bill savings^{1.12}. These societal benefits included improved mental wellbeing, reduced anti-social behaviour, greater disposable incomes and a notable increase in the economic activity of the surrounding areas.

► **SIGNPOST** Chapter 6 - Case studies

1.6 Retrofit and employment

A large-scale programme of retrofit to significantly improve the performance of the UK's 28 million homes would see a huge increase in the amount of construction work in this sector. This would provide hundreds of thousands of additional jobs, support small builders and stimulate local economies across the country. The Construction Leadership Council have recently published a national retrofit strategy^{1.13} which suggests that a retrofit programme could result in 500,000 new jobs by 2030 alongside a £309bn boost to the economy.

1.7 The benefits of retrofit - summary

Retrofit's multiple benefits bring substantial financial advantages, but for too long we have considered only the simple pay-back on energy bills. Consequently we have struggled to make retrofit pay for itself, because retrofit tends to have a high capital cost, be time-consuming and disruptive. However, if one considers whole-life value and broader financial benefits to

both the individual and society, the business case for retrofit starts to look a lot stronger.

All numbers shown on this page are based on the average UK building stock.

▶ **SIGNPOST** Annex J - References and further information

Energy efficient



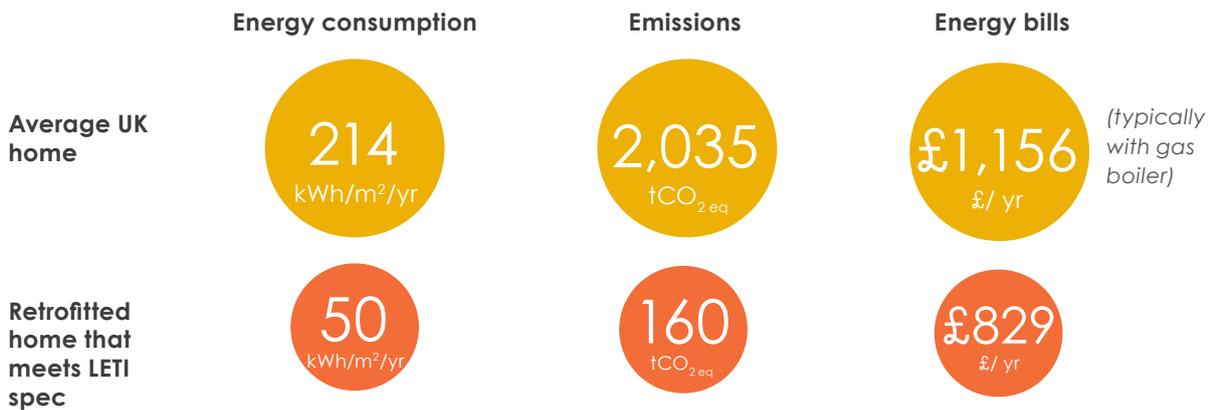
Best practice retrofit will reduce peak heat demand, enabling homes to shift to zero carbon electric heating.

Our peak gas demand for heating and hot water is currently 170GW on the coldest day. However, our electricity grid can only provide 60GW now and perhaps 95GW in 2050. We need to reduce demand significantly to achieve the shift to clean electricity.



Improving energy efficiency is key to reducing bills, especially as electricity is more expensive than gas.

Over **3.3M** UK households live in fuel poverty, that's **11%** of all homes.



Water efficient



Retrofit is an opportunity to reduce water consumption and the CO₂ emissions associated with supplying and heating water.

By 2030, the UK will suffer **annual water shortages** in many areas^{1,14}.

Average UK home

Water use



2030 RIBA climate challenge





Comfortable

Best practice retrofit can make warm homes more affordable, whilst addressing the risk of overheating.

Best practice retrofit can reduce noise ingress to healthy levels.



Over 28,000 excess winter deaths per year in the UK, of which perhaps up to 10,000 are due to cold homes. Annual cost of cold homes to the NHS around £0.85 bn.



More than 30% of EU population is exposed to levels exceeding 55 dB(A) at night. WHO guideline for maximum noise levels in bedrooms is 30 dB(A). Noise impacts on sleep and cardiovascular health.

Healthy

Best practice retrofit can reduce NO_x emissions from buildings and improve internal air quality by filtering incoming air and tackling damp.



28,000-36,000 UK deaths per year due to long-term exposure to gas boilers and hobs. Air pollution causes heart disease, stroke, respiratory disease and lung cancer.



1 in 5 UK children carry inhalers for asthma. Almost 1 million homes in the UK suffer from serious damp. Indoor mould and excess humidity contribute to asthma.

Resilient

Retrofit is an opportunity to mitigate flood risk to our homes, address overheating and become more resilient to storms and extreme cold weather.



Excess summer deaths are estimated to be around 2,000 per year currently and 5,000 per year by 2050. 20% of existing homes already suffer from overheating.



Number of homes at risk of flooding
1 in 6 - 2020
1 in 3 - 2050

Protecting assets

Best practice retrofit can protect our heritage and improve building capital.



23% of UK homes were built pre-1919 and there are millions of homes in the UK's 10,000 conservation areas.



80% of the homes that will exist in 2050 have already been built.

1.8 The financial benefits of retrofit



Figure 1.9 - Financial benefits of retrofit.

1.9 How far should retrofit go?

The question of what depth of retrofit is appropriate, or required, is complex. What we do know is that achieving a net zero building is challenging even for new-build. For retrofit, it is likely to be more so. But individual net zero buildings are not necessarily the goal... what we need to achieve is a net zero UK. This means that we need to balance the supply of renewable energy against the demand at a national level.

Whilst renewable energy in itself is almost infinite (sun, wind, tide), our capacity to harvest it is not. Each solar panel or wind turbine has a cost, both in financial and embodied carbon terms, depletes our finite supply of rare earth materials, and must be maintained and then replaced over time. We therefore have a limited

amount of renewable energy available even in the most optimistic of future scenarios.

All the UK's sectors (transport, industry, power and agriculture) also need to transition to use this renewable energy. Thus, if there is to be enough to go round, then we need to significantly reduce the demand from our 28 million homes whilst also maximising the opportunity to generate renewable energy from every site.

In trying to judge what level of retrofit might be appropriate, it is important that we look at retrofit holistically and consider these macro issues as well as the second order effects beyond the headline effect of reducing carbon emissions.



Figure 1.10 - How far should retrofit go.



Carbon emissions

If our primary, and perhaps sole, objective is to reduce and ultimately eliminate carbon emissions, then it is clear that we need to move to low (or zero) carbon sources of energy. With hydrogen for domestic heating looking unlikely anytime soon (see Chapter 2.3 Options for heating and hot water in homes for further detail), this leads us to the conclusion that electricity, coupled with heat pumps, is the most effective solution. Once a heat pump is providing heating and hot water for a building, its carbon emissions will reduce as the grid decarbonises. Ultimately, a low or zero carbon grid will mean almost zero emissions from that property. In fact, at that point, regardless of how much energy the property is using, it will still be zero carbon. This logic suggests that an extensive retrofit which significantly improves the building fabric (often called a 'deep retrofit') is actually not a prerequisite for net zero. This highlights the danger in looking at carbon in isolation rather than combined with energy consumption and demand. It also assumes that the UK is on track to support a net zero carbon grid with sufficient capacity to meet energy demand.

SIGNPOST Chapter 1 - Why retrofit?

SIGNPOST Chapter 2 - What is retrofit?



Grid capacity

As set out in section 1.9, our capacity to harvest renewable energy is not infinite and there is a financial and carbon and rare materials cost for all renewable technology. Hence there is a limit to how much renewable energy we will have in the future. Crucially, as renewable energy comes from naturally variable sources, there is also a limit to how much power we can use at any one time and there will also be a limit on how much storage we are able to provide. These are the three key capacity limitations: the amount of renewable energy we can generate, the maximum peak load we can meet and storage capacity available.

Peak load may be a critical constraint. It is estimated that the peak thermal load currently demanded by our homes and delivered by gas is 170GW¹⁻¹⁵. The current electrical grid capacity is around 60GW and even by 2050 is projected to only be 100GW¹⁻¹⁶. In 2050, all our sectors, particularly transport, will be drawing from this source of low carbon energy and thus the share that can realistically be allocated to our buildings will be a small fraction of that. Thus, demand reduction and management is going to be needed to enable us to stay within peak load limits.

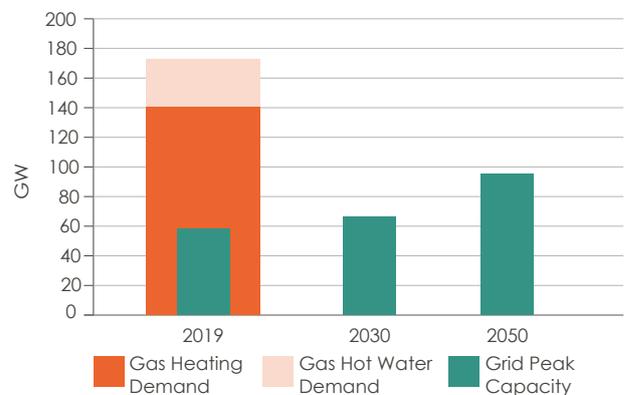


Figure 1.11 - Gas heating demand and gas hot water demand compared to electrical grid peak capacity.



Effective use of low-carbon electricity

Getting heat pumps to provide our heating and hot water is a priority (see Chapter 2.3 Options for heating and hot water in homes for further detail). However, in existing buildings, this presents several challenges. Heating systems designed to operate with gas boilers work at flow temperatures of around 70°C. Most heat pumps work most effectively at around 35°C or below. Some newer models are able to deliver higher temperatures with reasonable efficiencies - but still below traditional gas boiler temperatures. Making a building suitable for a heat pump is likely to involve some level of demand reduction - i.e. reducing heat loss, combined with measures such as increasing radiator sizes to enable greater heat distribution. The greater the reduction in demand, the more efficient the heat pump will become. If we don't reduce demand, then we could end up with cold homes which cost more to heat than they did with a gas boiler. Higher costs to achieve lower carbon emissions might be acceptable for some people, but for most, a retrofit would be expected to result in lower fuel bills.



Fuel poverty

Fuel poverty is a significant issue in the UK. Our efforts to achieve net zero shouldn't make this worse. Electricity is currently around four times more expensive than gas^{1,17}. Whilst switching to an electrical-only building will eliminate the gas standing charge, this still means that a seasonal coefficient of performance (SCOP) of around three will need to be achieved from a heat pump system to ensure running costs remain the same as for a gas boiler. This level of SCOP is currently typically only achieved using low flow temperatures which, again, implies lower heat demand. Furthermore, a lower heat demand also reduces fuel bills. Getting this wrong would not only push more people into fuel poverty, but would discourage any large-scale take up of heat pumps from the public in general.

▶ **SIGNPOST** Chapter 2 - What is retrofit?



Cost to the nation

Even if the capacity issues set out above are resolved, every MWh of energy demand that we do not reduce via retrofit will need to be generated from a renewable source. That energy source (e.g. a wind turbine) has a cost to design, finance, produce, store, deploy, distribute, manage, maintain and decommission as well as consuming our finite natural materials. This cost can be calculated per MWh generated over the lifetime of the source and is known as the levelised cost of energy (LCOE). In contrast, the cost of saving energy is the cost to design and implement the retrofit measure - which then delivers that saving for perhaps another 40 to 60 years.



Health and wellbeing

Poor quality homes can have a detrimental impact on our health. Many of our existing dwellings are too cold in winter, too hot in summer and suffer from poor indoor air quality. These issues impact our health and wellbeing, affecting in particular, the very young, elderly and those with respiratory conditions or compromised immune systems. However, these issues can be addressed with best practice retrofit. These issues also have real financial impact. The IEA and the OECD suggest health improvements might account for 75% of the overall value of improving the energy efficiency of buildings^{1,18}. Achieving warm homes and good indoor air quality is unlikely to be achieved by a small number of minor retrofit measures. In fact, a poorly executed retrofit can result in moisture and condensation issues which actually exacerbate health risks.

Overall, these arguments would suggest that achieving net zero, improving health and also the best value option is to retrofit more deeply.



Deep retrofit

- Reduced carbon emissions
- Reduced renewable energy demand
- Reduced peak load
- Less grid storage required
- Significantly lower energy bills
- Improved health and comfort
- Effective heat pumps



Shallow retrofit

- Reduced carbon emissions
- Large renewable demand
- Large peak demand
- More grid storage required
- Little change in energy bills
- Limited health benefits
- Sub-optimal heat pump performance

Figure 1.12 - Comparison of percentage of energy demand reductions and associated co-benefits from shallow and deep retrofits.



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2



What is retrofit?

2.1 Definition of retrofit

For the purpose of this document we use the term 'retrofit' to refer to "the upgrading of a building to enable it to respond to the imperative of climate change"^{2.1}. Retrofit may involve repair, renovation, refurbishment and/or restoration of the building. The aim is to both mitigate against climate change and ensure the building is well adapted for our changing climate.

Retrofit can be deep, achieving significant reductions in energy consumption, or shallow, achieving only minimal energy use reductions. Retrofit can also be good, successfully reducing energy consumption and carbon emissions, whilst improving health and comfort. However, retrofit can unfortunately be poor, failing to realise the anticipated energy, carbon and financial savings and increasing the risks of problems like damp, fire and overheating.

Best practice retrofit takes a whole building approach, where the consequence of every retrofit measure is fully understood and the building is considered as a whole. Best practice retrofit is fabric first, improving fabric energy efficiency before introducing low carbon technologies. Best practice retrofit can be carried out in one go, or phased according to a well considered Retrofit Plan.

By contrast, poor retrofit often involves single measures installed in a building in a piecemeal way leading to a host of unintended consequences. Poor retrofit is also unstructured, resulting in missed opportunities and abortive work.

"If done correctly, the change we are about to go through could save residents money whilst improving their safety, health and wellbeing; if done poorly and in an unmeasured way, the opposite will be true."
Unlock Net Zero^{2.2}



2.2 Avoiding the risks of retrofit

“Retrofit isn’t rocket science, but it is complicated.”
Rick Holland, Innovate UK

Unfortunately, there have been many instances of bad retrofit that not only fails to improve a building or achieve its aims, but exacerbates or creates new problems where none existed previously. No retrofit can be deemed successful-even if energy savings are achieved-if it results in an unhealthy, uncomfortable or unsafe environment for its occupants or an unhealthy building fabric prone to defects and decay.

Figure 2.1 illustrates the sorts of risks we face if we carry out poor, piecemeal, ill-considered, single-measure retrofit. It also notes how all these risks can be minimised if one takes a well planned, whole house approach set out in a whole house plan. This approach is championed by many including the AECB and Passivhaus Institute and is laid out in “PAS 2035:2019 Retrofitting dwellings for improved energy efficiency – Specification and guidance” and explained in greater detail in Chapter 5.

▶ **SIGNPOST** Chapter 5 - How do we do it?

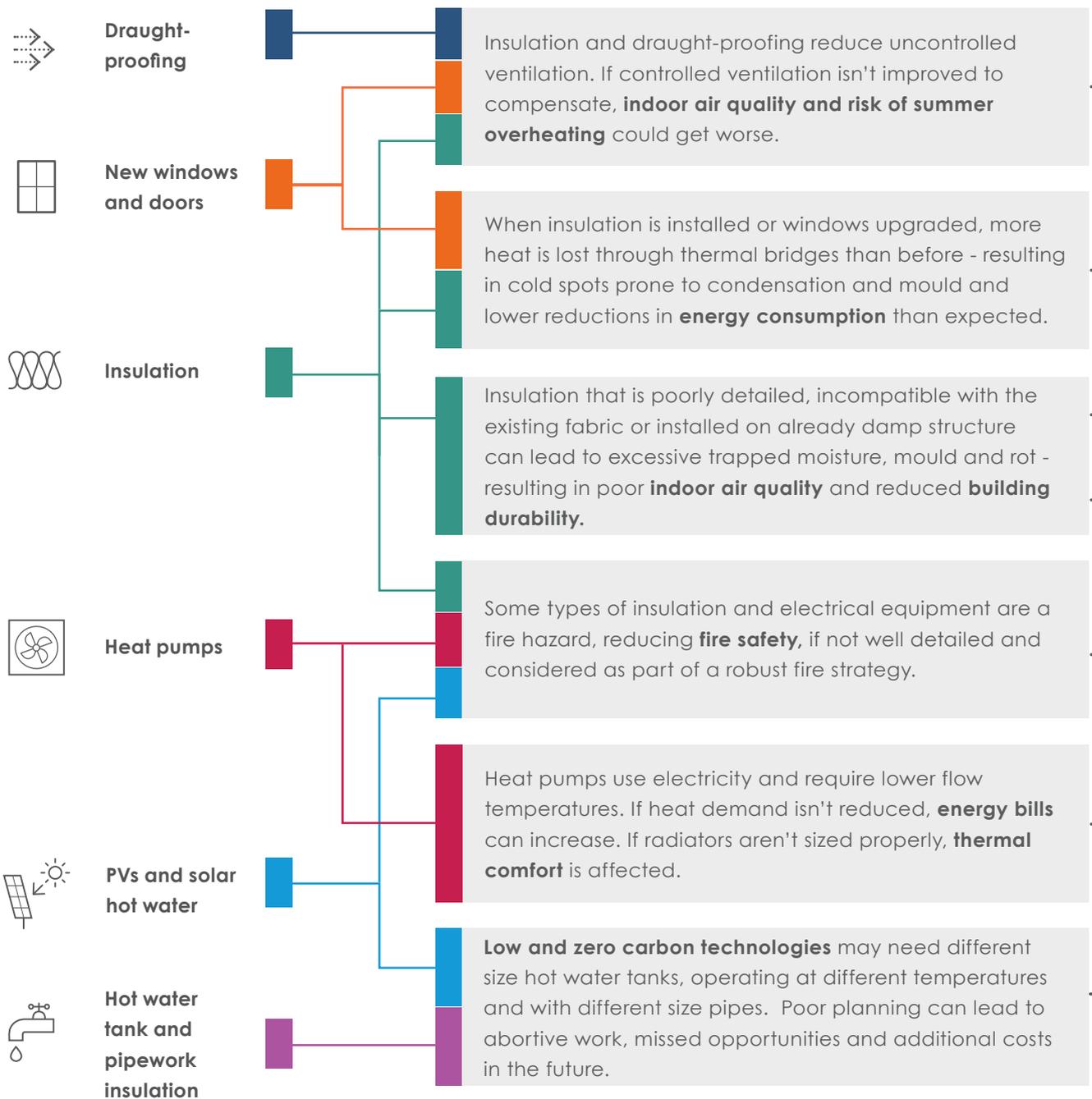
Annex H contains further information on moisture risks - including the imperative to maintain the existing moisture balance of a building, whether it’s generally ‘vapour-open’ or ‘vapour-closed’.

Refer to Annex D for further information on ventilation options.

▶ **SIGNPOST** Annex H - Moisture risks and how to avoid them

▶ **SIGNPOST** Annex D - Retrofit ventilation strategies

Single-measure retrofit... ... can lead to unintended consequences ...



... but these risks are minimised with a **whole house approach**.

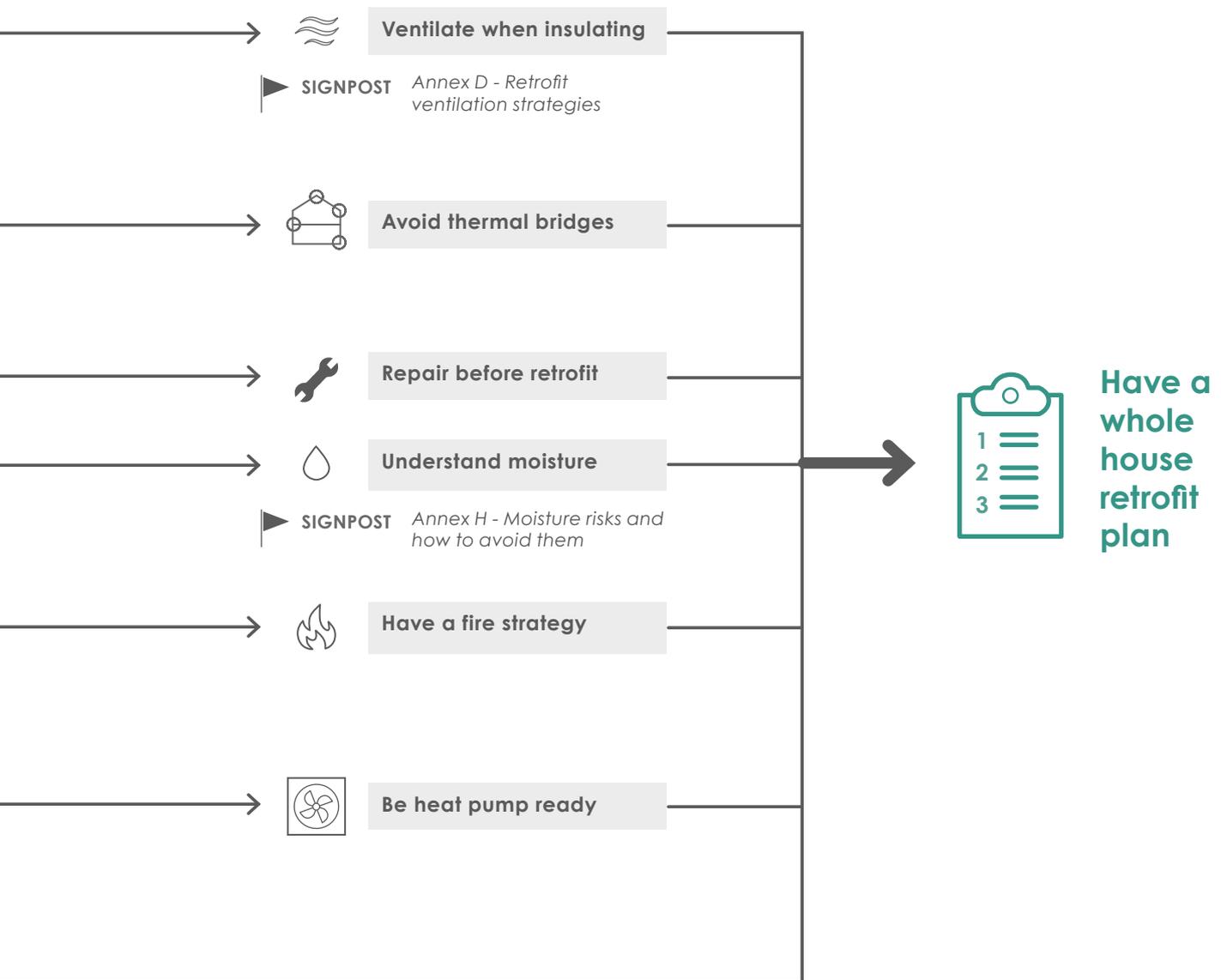


Figure 2.1 - Overcoming retrofitting risks - a whole house approach.

2.2 Avoiding the risks of retrofit (cont'd)

To summarise, best practice retrofit can bring multiple social, environmental and financial benefits. Many of these go hand in hand, allowing multiple needs to be achieved with one deed. However - with poor retrofit that is not thought through - some of these impacts become potential risks. These risks can be minimised and the benefits maximised by following six simple principles:



Principle 1: Reduce energy consumption. Minimising energy consumption can aid energy security, reduce bills and improve comfort as well as making national decarbonisation possible. This will ensure a host of benefits beyond reduced carbon emissions alone.



Principle 2: Prioritise occupant and building health. This is essential if we are to retrofit buildings that are fit for the long-term. To create healthy, durable and resilient buildings we must adapt for climate change and take a whole building approach.



Principle 3: Have a whole building Retrofit Plan. This will help you minimise risks and the performance gap, maximise opportunities and avoid disruptive, abortive work.

▶ **SIGNPOST** Chapter 5 - How do we do it?



Principle 4: Measure the performance. This will help you understand whether you've achieved what you set out to do, learn from the successes and mistakes, and build business cases for future projects.



Principle 5: Think big! We are facing a climate emergency and must be zero carbon by 2050. We cannot afford to do the bare minimum. Otherwise we'll have to re-retrofit buildings only a few years later. We need to plan strategically for 2050, whilst identifying what can be done today.



Principle 6 - Consider impact on embodied carbon. Embodied carbon of retrofit can be significant, and needs to be minimised, through eliminating new materials where not needed and using durable, low embodied carbon materials. It is important to understand however that measures that improve the thermal performance have the potential to increase the embodied carbon. This balance should be studied. For more guidance see section 2.3.

Figure 2.2 lists the potential benefits of best practice retrofit and illustrates how, if the above principles are followed, multiple needs are achieved with one deed.

Diagram key

Elements that best practice retrofit addresses	Potential benefits of best practice retrofit
<ul style="list-style-type: none"> ■ Focus on energy to reduce carbon emissions, peak loads and bills. 	Economic
<ul style="list-style-type: none"> ■ Prioritize building and occupant health to improve health and comfort, protect heritage and ensure long term durability. 	Environmental
<ul style="list-style-type: none"> ■ Have a plan to maximise all these benefits, minimise cost and disruption and the performance gap. 	Social

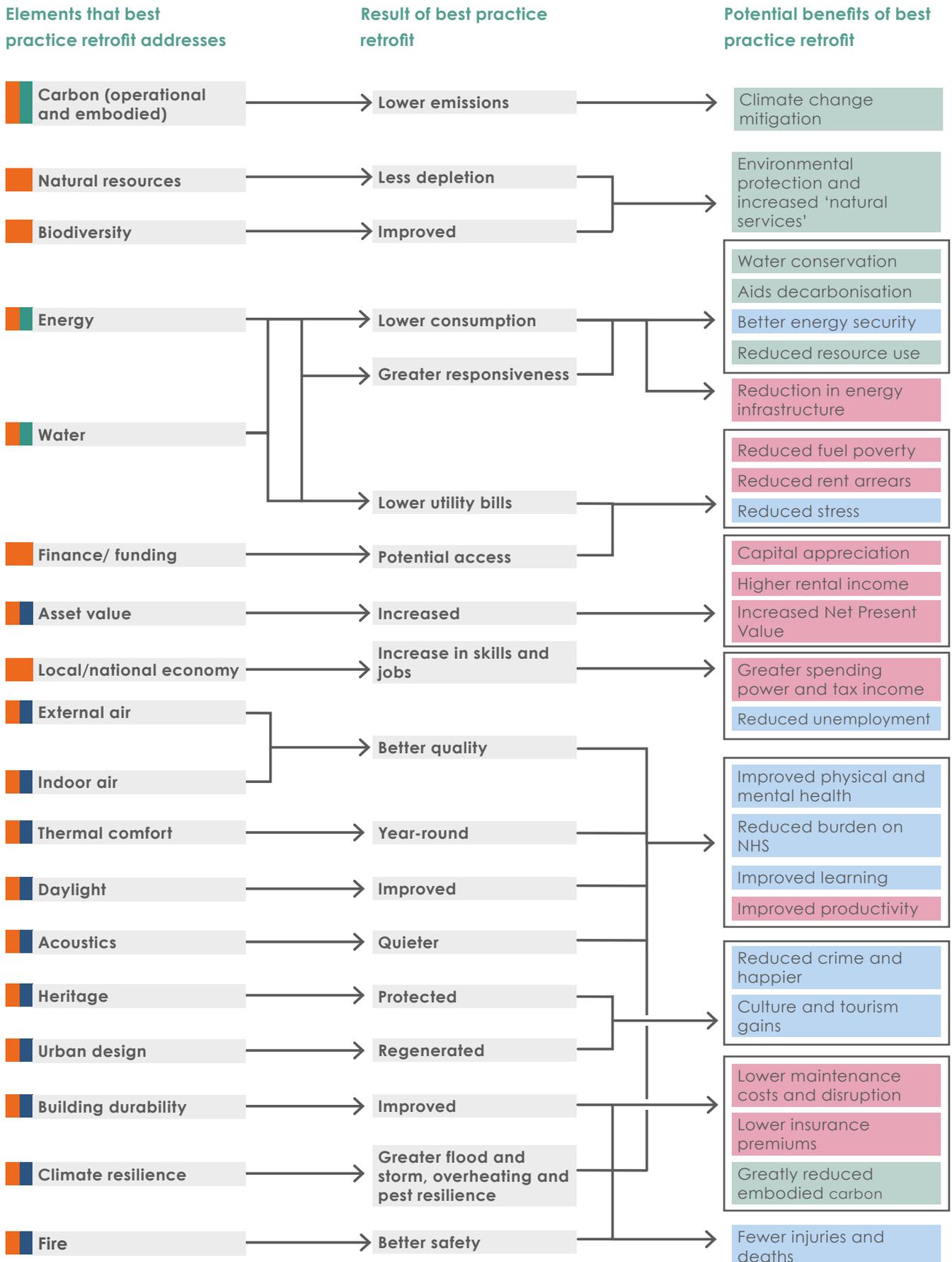


Figure 2.2 - The multiple benefits of best practice retrofit, filling many gaps with one deed.

2.3 Embodied carbon

When carrying out retrofit it is important to consider the embodied carbon impact. This page outlines some strategies that help to reduce the embodied

carbon impact of retrofit. For more information see the LETI Embodied Carbon Primer.

Retrofit best practice to reduce embodied carbon by element

	<p>Structure (sub and super structure)</p>	<ul style="list-style-type: none"> → If structural modifications are needed, seek the input of a retrofit-experienced structural engineer, ideally who is sympathetic to low-embodied carbon design. → Consider the likely loads and consider challenging safety factors to limit introduction of unnecessary additional structure. → Seek to limit the introduction of heavy elements wherever possible to limit the need for additional structure or strengthening. → Specify maximum embodied carbon targets by structural element/material. Targets can be achieved through low carbon concrete mix design, low carbon materials and using recycled/re-purposed materials. The impact to procurement must be considered early in the project programme.
	<p>Envelope (facade and roof)</p>	<ul style="list-style-type: none"> → Consider the embodied carbon of the entire retrofit solution for facade/roof systems during early design stages and compare carbon impacts of different options. → Remember that it is the hidden parts (for example metal secondary framing) of a build up that often contain the most embodied carbon. Where metals are used, seek to be as efficient in use as possible and incorporate recycled content, and ensure metals can be removed and recycled at end of life. → For new windows, consider timber frames to minimise embodied carbon impacts. Design windows to be efficient in terms of glazing to frame ratio. → Where possible specify natural insulation materials.
	<p>Mechanical, Electrical and Plumbing (MEP)</p>	<ul style="list-style-type: none"> → The fabric improvement measures, required for the LETI best practice and LETI exemplar retrofit specification, reduce the amount of heating equipment required, thus reducing the embodied carbon impact of new services. → For any new MEP systems, seek to limit lengths of ductwork and be as efficient as possible in the layout. Typically, fewer and simpler systems will reduce embodied carbon. → Avoid over-provision of plant - a detailed load assessment must be undertaken. → Consider maintenance and access requirements, maintained equipment will last longer. → Design for deconstruction and recycling as MEP is typically replaced 2-3 times during the lifespan of a building. → Specify refrigerants with low Global Warming Potential (i.e. <10) and ensure refrigerant leakage is as low as possible and carefully considered in the whole life carbon analysis.
	<p>Finishes and Furniture Fixtures and equipment (FF&E)</p>	<ul style="list-style-type: none"> → Consider eliminating materials where not needed e.g. by exposing services. → Utilise self-finishing internal surfaces like timber. → Consider the cleaning and maintenance regime to be undertaken. → Carefully compare products based on EPD data, recycled material and also avoidance of harmful chemicals like formaldehydes and VOCs. → Consider the replacement cycle and specify for longevity and end of life. → Choose products that do not rely on adhesives so fabrics or finishes can be replaced. → Be wary of trends that are likely to date and require early replacement.

Figure 2.3 - Retrofit best practice to reduce embodied carbon by element

Retrofit principles to reduce embodied carbon

	<p>Build light</p>	<ul style="list-style-type: none"> → Look for opportunities to re-use and re-purpose existing materials and systems where possible. Consider the full life carbon benefit of replacing with new. Ensure that the required logistics (e.g. storage on site) can be made available. → Seek to simplify the design - simple designs usually means less embodied carbon.
	<p>Build wise</p>	<ul style="list-style-type: none"> → Carry out a material efficiency review - are all materials proposed necessary? Can some layers of the building serve a dual purpose? → Prioritise materials that are reused or reclaimed and that are durable. If not available, seek to use materials with high recycled content and naturally renewable building materials. → Ensure longevity of material and systems specifications, particularly in consideration of a changing climate to limit future re-retrofits. → Review material efficiency options like designing to standard building sizes or for a repeating module to limit offcuts and waste wherever possible. → Consider locally sourced material options, reducing transport to site. At smaller scales of construction, transport emissions can be significant as part of the total whole life impact of the works, particularly if sourcing a product with only marginal embodied/operational carbon savings. → Consider approaching unconventional suppliers or sources for lower embodied materials or re-purposed materials, e.g. local reclamation yards, specialised material stockists
	<p>Build low carbon</p>	<ul style="list-style-type: none"> → Reduce the use of high embodied carbon materials. → Identify 'Big ticket Items' and focus on the big wins first (e.g. new MEP, insulation, cladding, any new structural elements) → Consider natural and renewable materials - for retrofit, consider natural insulation although bear in mind the required build-up thicknesses for meeting U-value targets in early design stages - the earlier natural materials are accommodated for the better. → Seek EPDs for new elements being introduced and compare the impacts between products in accordance with BS EN 15804 (2019).
	<p>Build for the future</p>	<ul style="list-style-type: none"> → Ensure future uses and end of life are considered and adaptability is designed in. → Consider maintenance & access requirements - well-maintained equipment and products will last longer. → Consider soft spots in the structure (for flexibility in the future e.g. adding in risers). → Consider future-proofed risers and plant space. → Mechanically fix systems rather than adhesive fix so they can be demounted and re-used or recycled, supporting a circular economy. → Explore methods of creating longevity for materials without additional coatings, as they can reduce the recyclability of the material. → Create material passports for elements of the building to improve the ability of disassembled elements to be reused - including data on best practice for products/ materials recycling and end of life strategy at time of construction.
	<p>Build collaboratively</p>	<ul style="list-style-type: none"> → Solutions must involve the whole design team and the client. → Use 'rules of thumb' data to drive decision making in meetings, especially in the early stages of design. → For larger projects engage design team and contractor for smarter BIM-driven ordering and procurement to limit over-ordering and limit wastage in construction. This can also limit need for remedial works on site with higher carbon materials.

Figure 2.4 - Retrofit principles to reduce embodied carbon

2.4 Options for heating and hot water in homes

As we look towards a net zero future, it is clear that the ways in which we heat and provide hot water for our homes will need to change. Currently, over 85% of UK homes have gas boilers^{2,3}. These gas boilers emit around 240g of CO₂ for every kWh of energy that they deliver to the home^{2,4}. The average UK home uses 12.5MWh/year for heating and hot water which results in 2.6 tonnes of CO₂ being emitted annually^{2,5}.

Our electricity grid also uses gas to produce much of our electrical energy. The process of generation and distribution of electricity incurs losses and thus, historically, more CO₂ has been emitted for every kWh of electrical energy generated by gas than for a kWh of gas used for heating. However, as more renewable energy sources have been introduced, the carbon intensity of our electricity has reduced dramatically.

The yearly average is now around 140gCO₂/kWh and is forecast to reduce to almost zero by 2035^{2,6}. In contrast, our gas boilers will continue to emit at the same rate until they are decommissioned^{2,7}.

This decarbonisation of the electricity grid has a critical influence on the aims of retrofit. A deep retrofit which leaves a gas boiler in place will, over the lifetime of that gas boiler, probably emit more carbon than a shallow retrofit^{2,8} of the same property which includes a switch to electrical heating and hot water. Whilst there are many other benefits of deep retrofit, see Section 1.7, from a decarbonisation perspective alone, our priority must be to enable a low carbon heat source.

▶ **SIGNPOST** Chapter 1 - Why Retrofit?

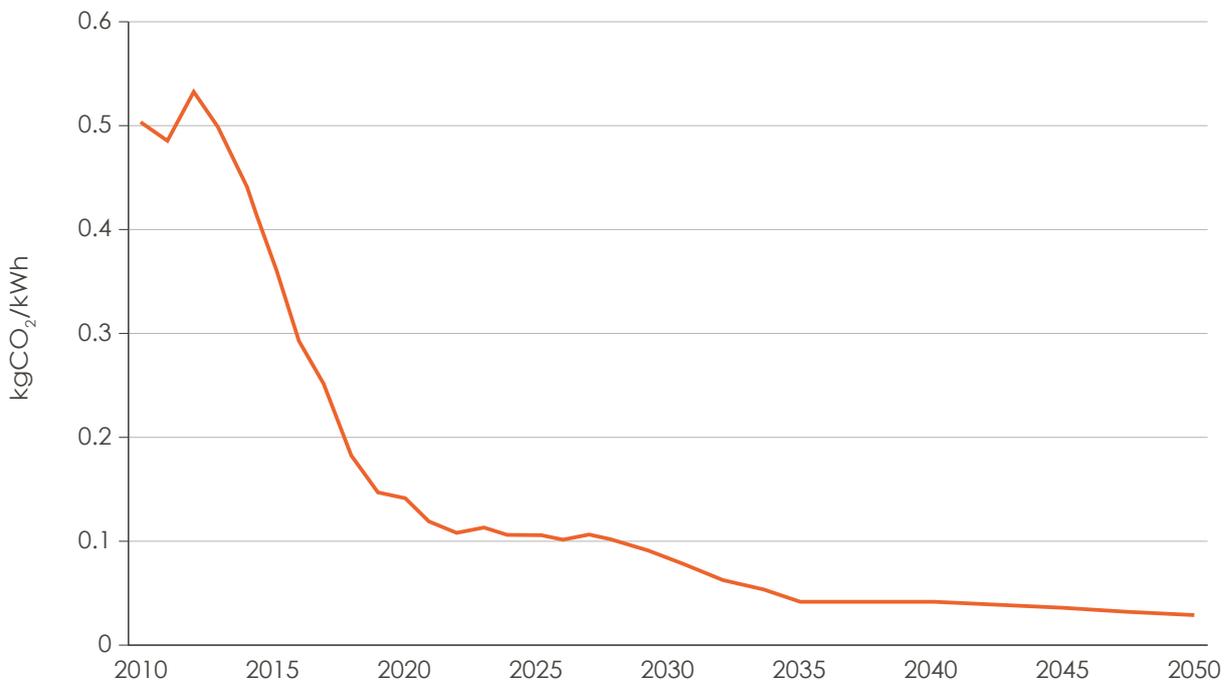


Figure 2.5 - Decarbonisation of the electricity grid.

Options for heating our homes in the future are summarised below:

<div style="writing-mode: vertical-rl; transform: rotate(180deg);">Most encouraged</div>		<p>Air and ground source heat pumps</p>	<p>To be encouraged. Heat pumps use electricity from the gradually decarbonising grid, combined with the passive relative warmth of the ground or air, to produce heat. They are a proven and reliable technology but generally produce lower temperature water than gas boilers and thus the heat demand of the building, and the size/capacity of the heat emitters (e.g. radiators) must be carefully matched to ensure that the heat pump can deliver sufficient energy. Heat pumps will also need a hot water tank to provide hot water as they cannot match the instantaneous power provided by a gas combi boiler. Thus, there will be a requirement for additional space in smaller dwellings. Typically they produce 2 or 3 times as much heat energy than the electrical energy they use (this ratio is called Coefficient of Performance (COP). This is a useful rule of thumb for ensuring that we don't overload the grid and have sufficient renewable energy for all sectors to achieve net zero.</p>
		<p>District heating networks</p>	<p>This type of distributed heating and hot water system is popular in some parts of the UK. However, many networks are powered by gas (e.g. boilers and combined heat and power (CHP)) and thus need a transition plan to move away from fossil fuels. If heat pumps are used as an alternative generation plant, the lower temperature of the hot water generated may present an issue and losses will need to be carefully modelled. It is also worth noting that networks can be expensive and/or unreliable in addition to suffering from significant distribution losses. Ambient loop systems have lower losses and greater efficiencies and should be considered where large-scale retrofit is taking place, for example as part of neighbourhood regeneration plans.</p>
		<p>Direct electric</p>	<p>Direct electric heating systems use electric energy without any supporting mechanisms such as heat pumps e.g. an electric panel heater. Electric heating and hot water systems can be attractive due to their simplicity and typically lower capital cost when compared to a wet system. However, the building will be significantly more expensive to run compared to either a boiler or heat pump. Direct electric also results in higher peak loads and so is not desirable at scale, for the grid system. The use of storage heaters can help to mitigate both these factors, but, in general direct electric should only be considered where heat pumps are not feasible and where the heat demand is very low.</p>
		<p>Hydrogen</p>	<p>There is a perception that hydrogen may offer a relatively painless option to transition away from gas without having to improve the fabric performance of our homes. However, there are many unknowns and uncertainties about this route. At this point, it would appear that hydrogen is unlikely to be a cheap and easy option for domestic heating and it should be discounted for any retrofits taking place in the short and medium term. LETI have produced a detailed analysis of the potential role of hydrogen and buildings which expands on this further^{2,9}.</p>
		<p>Biomass</p>	<p>To be avoided. Wood burning stoves and boilers may seem like an attractive low-carbon option. However, even sustainable timber takes time to grow and also needs to be transported - so there is, at best, a short-term carbon penalty as soon as the biomass is combusted. Furthermore, there is also an adverse impact on air quality.</p>
		<p>Gas and oil boilers</p>	<p>To be avoided/removed as soon as possible. Where the heat demand of the building during colder periods is too great to be met by a heat pump alone at this point in time, a hybrid system of boiler and heat pump can be considered - but only if there is a transition plan to improve the building fabric to a point where the boiler is no longer required.</p>
<div style="writing-mode: vertical-rl; transform: rotate(180deg);">Least encouraged</div>			

Figure 2.6 - Options for heating our homes in the future.

2.5 Metrics and Energy Performance Certificates

Energy Performance Certificates (EPCs) are the national method for presenting the predicted energy efficiency of a dwelling. However, they actually provide a cost index indicating how much it would cost to run the building under assumed occupancy levels and fixed heating patterns. As the grid has decarbonised, the link between running costs and carbon emissions has weakened as electricity remains significantly more expensive than gas. Thus, lower energy costs do not necessarily mean a more efficient building with lower carbon emissions. For example, achieving an EPC A or B could be achieved by a fabric inefficient building with gas heating and a large PV array rather than a very efficient building using a heat pump. SAP is used to calculate EPC ratings, however, in its current form SAP does not accurately predict the energy use of homes. LETI therefore consider that EPCs are not a good indicator of the actual energy performance of buildings.

So what metrics should we be using? To understand how a building is consuming energy, we actually need to look at several metrics. In most existing homes, heating will typically be the largest energy demand. After that, hot water and then appliances/lighting. The energy needed for heating, known as the space heating demand (SHD) is an excellent proxy for the fabric efficiency of the building – i.e. how well (or badly) that building retains heat. Space heating demand is therefore a key metric if we are interested in fabric performance.

Whilst retrofit will tend to focus on the fabric of the building, there are also measures we can take as part of a retrofit to reduce our hot water demand. Thus, this is also a metric which we would wish to monitor.

Our heating and hot water requires some form of heat source (e.g. gas boiler or heat pump^{2.10,2.11,2.12})

which will have its own specific efficiency. This means that the amount of energy delivered to (consumed by) the building will be different from the amount of energy actually required for heating and hot water - the demand. This means that we also need a metric which looks at the delivered energy to ensure that the heat source is efficient.

Finally, whilst a retrofit can't do much to control appliances, we do need to ensure that the overall amount of energy consumed by a building is not excessive and is commensurate with a net zero future. Adding together the energy delivered for heating, hot water, ventilation and appliances and lighting gives us the overall Energy Use Intensity (EUI) of the building.

How these various metrics relate is illustrated in Figure 2.7 for a house which uses a heat pump for heating and hot water. As the heat pump delivers more energy than it draws from the electricity grid, the EUI for heating and hot water is less than the original demand. For the appliance loads, the EUI is the same as the demand.

All these metrics are forms of energy and are expressed per m² of the building's internal area to allow us to compare different sized buildings. We also assess these energy uses over the course of a year, again to allow like-for-like comparison. Thus, the unit for all of them is kWh/m²/year.

Annex A contains a more detailed explanation of demand versus delivered energy and why energy metrics are preferable to carbon metrics.

▶ **SIGNPOST** Chapter 3 - Where are we now and what can we achieve?

▶ **SIGNPOST** Annex A - How do our homes produce carbon?

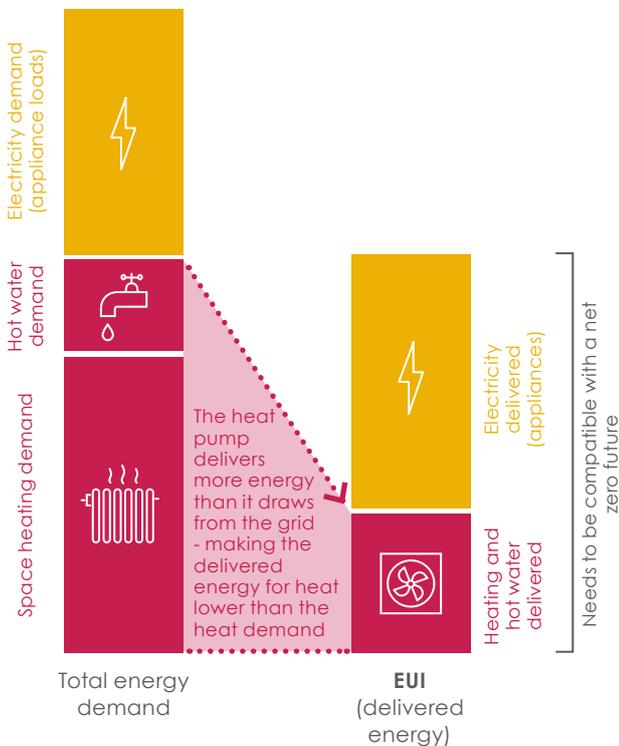


Figure 2.7 - Energy demand versus energy consumed/delivered

Summary of key metrics:



Space heating demand (SHD). The amount of energy needed over the course of a year to heat the building to a comfortable temperature. This is a direct proxy for the fabric performance.



Hot water demand (HWD). The amount of energy needed over the course of the year to provide hot water for use by the occupants.



EPC Energy Efficiency Rating (EER). A cost-based index which indicates the relative cost of energy for a home. A high (good) EPC score does not necessarily indicate a building with high levels of energy efficiency.

Energy Use Intensity (EUI) is the delivered energy (sometimes called energy consumption) per m² that is required by the building over the course of a year.

LETI believes that setting an EUI requirement for buildings is fundamental to meeting our climate change targets. It is a good indicator for building performance as the metric is solely dependent on how the building performs in-use; rather than carbon emissions, which also reflect the carbon intensity of the grid.

EUI is a metric that can be estimated at the design stage and very easily monitored in-use as energy bills are based on kWh of energy used by the building. This metric can be used to compare buildings of a similar type, to understand how well the building performs in-use. It includes all of the energy consumed in the building, such as regulated energy (heating, hot water, cooling, ventilation, and lighting) and unregulated energy (plug loads and equipment e.g. kitchen white goods, ICT/AV equipment). It does not include PV generation or the charging of electric vehicles. The EUI is not the sum of space heating and hot water demand. The actual energy used by the building for these purposes will be reduced by the coefficient of performance of the heat pump (consumption).

EUI can be expressed in GIA (Gross Internal Area), NLA (Net Lettable Area) or TFA (Treated Floor Area). In this document the EUIs are expressed in TFA unless specified. Delivered energy is used interchangeably with EUI in this document.

EUI should replace carbon emission reductions as the primary metric used in policy, regulations, and design decisions.

2.6 Floor areas

The energy calculations in this guide have been undertaken using the Passivhaus Planning Package (PHPP) which uses the Treated Floor Area (TFA) convention when considering the internal floor area of a building. TFA is effectively the 'liveable area' of a building and excludes internal walls and areas with little or no headroom (e.g. under stairs). Full details can be found in the PHPP user guide. TFA must be measured accurately from drawings for energy calculations, but as a rough rule-of-thumb for comparison purposes, can be considered to be approximately 90% of a building's Gross Internal Area (GIA).

Throughout this guide the area specific energy figures – i.e. kWh/m²/year, use TFA as the floor area.



Figure 2.8 - Illustrative difference between GIA and TFA floor area measurements



2.5 References and footnotes

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2.2 - Unlock Net Zero, Aico Feature - Achieving Net Zero with Data and Collaboration [Online] Available from: <https://www.unlocknetzero.co.uk/partner-content/aico-feature---achieving-net-zero-with-data-and-collaboration>

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2.4 - Bre Group, The Government's Standard Assessment Procedure for Energy Rating of Dwellings [Online] Available from: <https://www.bregroup.com/wp-content/uploads/2019/10/SAP-10.1-01-10-2019.pdf>

2.5 - National Grid, Future Energy Scenarios 2020 [Online] Available from: <https://www.nationalgrideso.com/document/173821/download>

2.6 - The Government, Energy consumption in the UK 2020 [Online] Available from: <https://www.gov.uk/government/statistics/energy-consumption-in-the-uk-2020>

2.7 - A note on hydrogen: Hydrogen may at some point in the future be injected into the gas grid and contribute to decarbonising it to some extent, but this is currently very uncertain and is not expected for at least one decade, except possibly in small trial zones such as the "hydrogen villages. Although its also important to note that even if Hydrogen becomes viable at some point after 2030, we still need 600,000 heat pump installs annually by 2030, as otherwise we will have exceeded all our carbon budgets. See also ref. 2.9.

2.8 - If we assume a shallow retrofit reduces demand by 30% and a deep by 70%, using cumulative carbon emissions from HMT Green Book, a deep retrofit with a gas boiler will emit 1.6kgCO₂/kWh whereas a shallow retrofit with heat pump will emit 0.5kgCO₂/kWh between 2021 and 2050

2.9 - London Energy Transformation Initiative, Hydrogen: A decarbonisation route for heat in buildings? [Online] Available from: www.leti.london/hydrogen

2.10 - HVDH domestic heating guide, 2021, for individual homes installations

2.11 - MCS certification scheme, including how to find an installer and Domestic Heat Pumps - A Best Practice guide. [Online] Available from: <https://mcscertified.com/wp-content/uploads/2020/07/Heat-Pump-Guide.pdf>

2.12 - CIBSE AM16, 2021 - Heat pump installations for multi-unit residential buildings

3



Where are
we now and
what can we
achieve?

3.1 Great Britain housing stock

If we are to achieve retrofit at scale, we first need to understand the scope and nature of the problem.

When people discuss the difficulties of retrofit, we often hear assertions such as “But what about all those Victorian Terraces?”. So, how many Victorian Terraces do we actually have? Figure 3.1 sets out the distribution of our housing stock, divided up by age, form/shape and original wall type. It shows us that the UK mainland currently has around 28M dwellings and whilst the UK has some of the oldest housing stock in Europe, in fact only 3.3M dwellings were built before 1900 and the majority (18.4M) were built after 1950.

Whilst many relatively modern homes have insulated cavity walls, many still have either solid uninsulated walls or uninsulated cavities. Double glazing is now very common, but there still remain a significant number of buildings which also have an element of single glazing. Also, much of that double glazing is now aging, performs very poorly and needs replacing.

Many of our buildings will have constraints on their external appearance which will affect the type of retrofit measures which we can use and also the level to which they can be applied. Whilst the proportion of listed buildings is very small, around 10% of our homes are in conservation areas and, overall, English Heritage estimate that up to 25% of our housing stock will have heritage features which would constrain retrofits. It is likely that this is most prevalent in our older building stock, with all pre-1919 stock exhibiting heritage features and then a diminishing number in more modern buildings.

However, heritage features are not the only constraint. Many non-heritage buildings that make up attractive street-frontages will also have external architectural features which owners will be reluctant to cover with insulation. Furthermore, over 11% of our buildings have an internal floor area of less than 60m², so in these buildings we may not have the freedom to reduce internal areas with significant thicknesses of insulation or to install a thermal store, as required to make a heat pump viable.

All this indicates that the number of ‘space constrained’ or ‘appearance constrained’ retrofits that we will need to take into account will be a significant proportion of the overall housing stock. However, these buildings are by no means a lost cause. There is still scope to achieve best practice levels of retrofit even in heritage constrained areas. In fact, these areas of our towns and cities could even provide opportunities for more efficient retrofits at scale. For example, in Conservation Areas, specific neighbourhood and typology guidance can be applied over larger areas. This neighbourhood level Retrofit Planning guidance would facilitate quicker retrofit implementation as it does away with repeat work of preliminary investigation on similar properties. It can even facilitate cheaper group or entire terrace multiple retrofit as there is more planning control available in Conservation Areas.

We should also ensure we don't become fixated on the difficult cases. Even if heritage constraints apply to 25% of our housing stock, 75% of our stock is therefore suitable for most retrofit measures and offers significant opportunity to reduce energy demand. Put simply, we should not hide behind the constraints of some of our building stock as an excuse not to retrofit.



Volume of UK mainland housing stock in millions

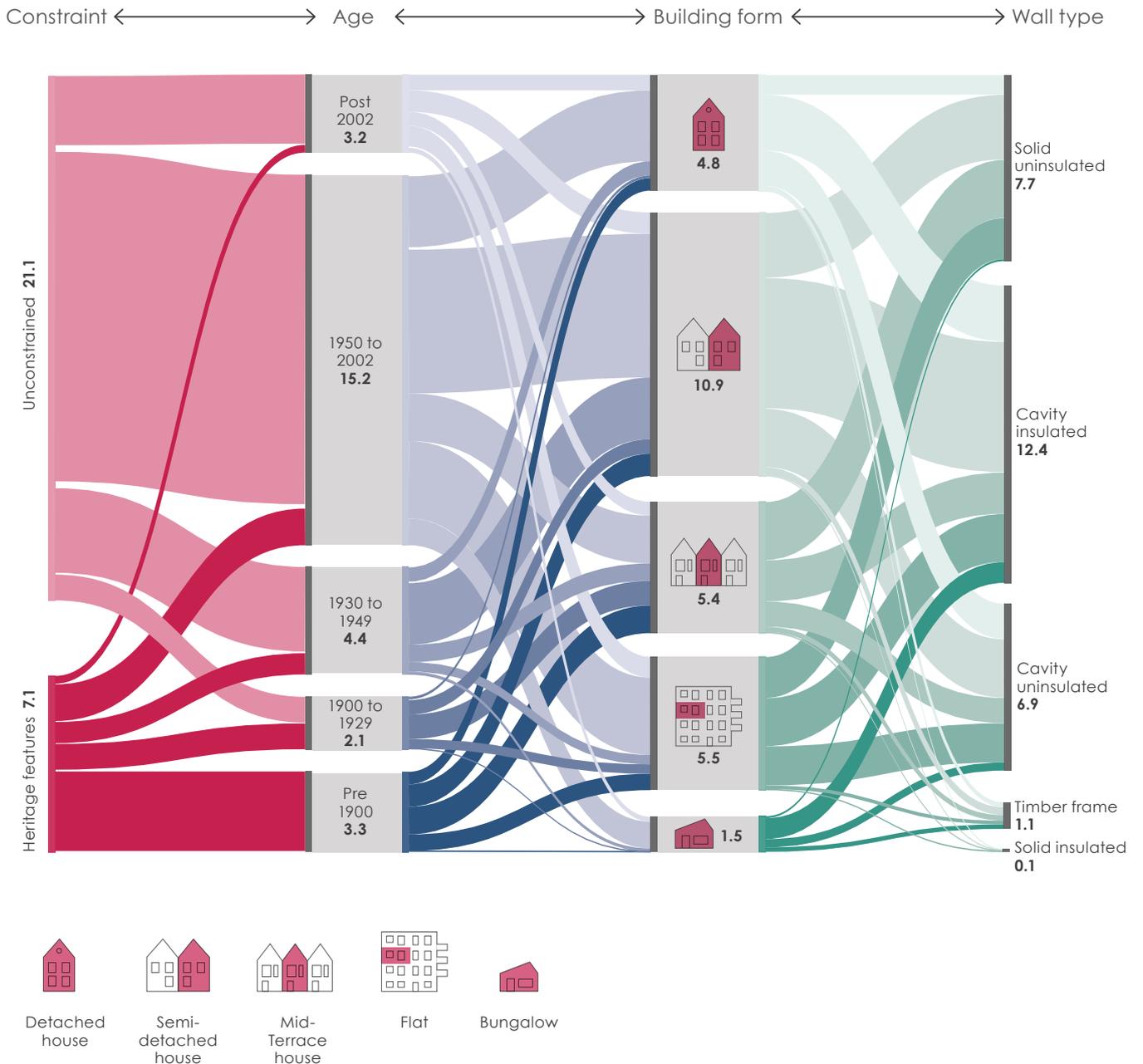


Figure 3.1 - UK mainland housing stock, by volume (millions of dwellings). Extrapolated data for 2018 (28 million dwellings).

How well do our existing dwellings perform?

Before considering by how much we might improve the performance of our homes, it is worth understanding where we are starting from. Unfortunately, this is far from clear as we have little national data which accurately describes our homes and how they perform.

The first step is therefore to build an accurate picture of our housing stock - a stock model. LETI has developed a detailed stock model representing the nation's 28 million dwellings which has been used to look at baseline energy demand and then to examine how this demand changes as we apply different levels of retrofit. Full details of how the stock model was constructed and calibrated against measured energy use are provided at Annex E.

Figure 3.3 shows a breakdown of the baseline energy demand for heating and hot water and shows a slight shift away from the stock numbers themselves, demonstrating that the largest proportion of energy use is in our post 1950s buildings with semi detached and cavity uninsulated dwellings taking nearly a third of all energy use.

The stock model was used to demonstrate how our existing domestic energy use is spread across the different dwelling forms and also how this compares to new-build energy standards. Figure 3.2 shows that, overall, we currently have an average domestic Energy Use Intensity (EUI) of 214kWh/m²/year (includes regulated and unregulated energy) compared to a target of 60kWh/m²/year for a new-build dwelling built to the forthcoming 2021 English Part L standards and to just 35kWh/m²/year for a building that meets LETI targets.

► **SIGNPOST** Annex E - Stock modelling method and assumptions

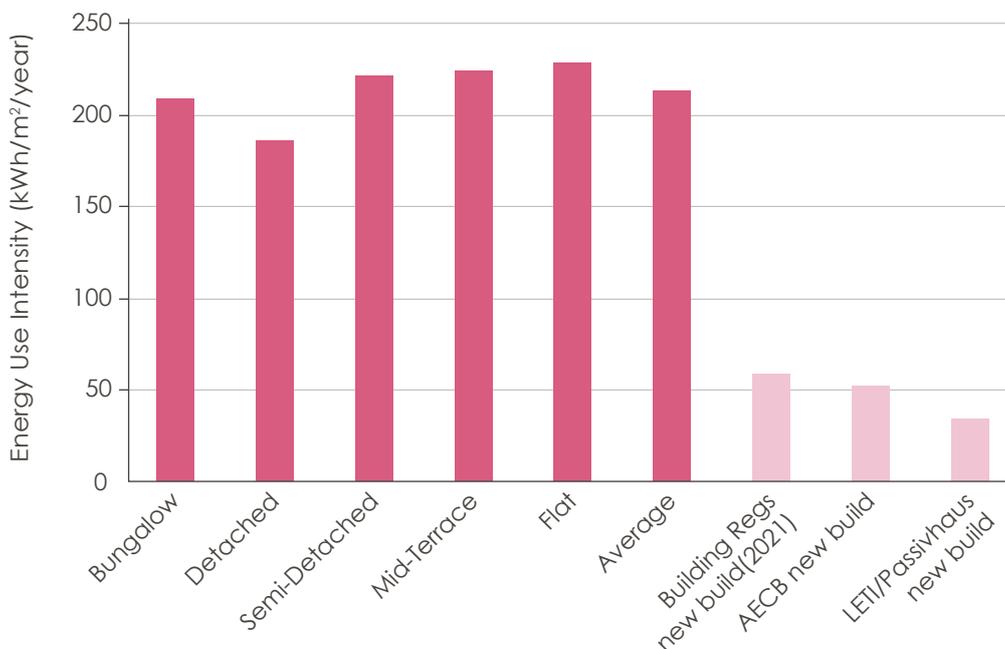


Figure 3.2 - As modelled Energy Use Intensity for existing dwellings by form factor and new build standards. See also discussion on page 50.



Annual heating and hot water demand in TWh/year

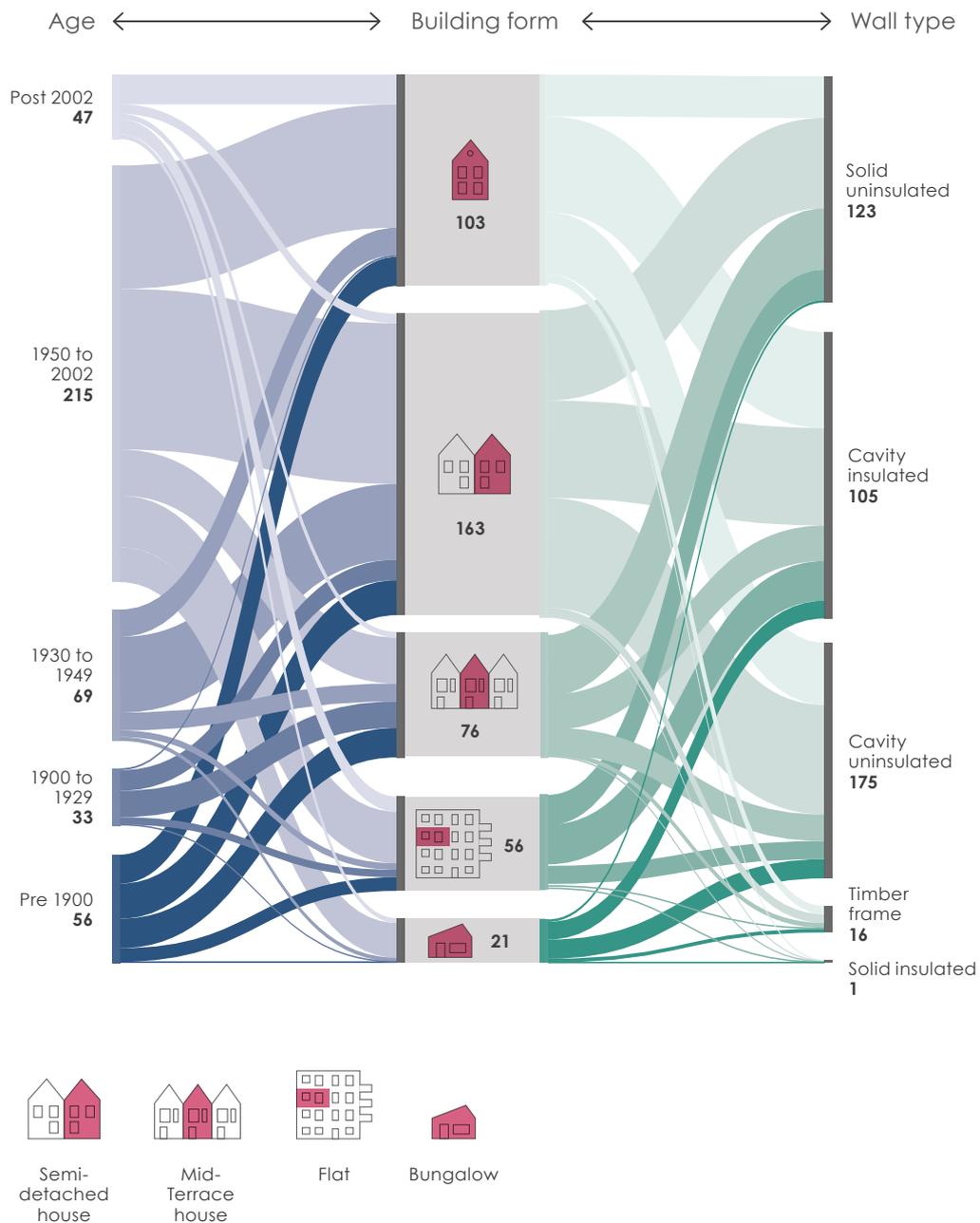


Figure 3.3 - Modelled baseline annual heating and hot water demand (TWh/year) by dwelling age, form and wall type (28million dwellings)

How well do our existing dwellings perform? (cont'd)

The significant drop in EUI between existing and new build is due in large part to the fact that the new-build standards have been modelled to have thermal energy delivered via a heat pump, whereas, for the existing stock, the default is assumed to be a gas boiler. However, there is also a significant difference in fabric efficiency between our existing dwellings and new build standards. The relationship between energy demand and energy delivered at the meter (EUI) where a heat pump is used is illustrated in Figure 3.4 and explained in more detail in Annex A.

SIGNPOST Annex A - How do our homes produce carbon?

A dwelling's space heating demand is a good proxy for its fabric efficiency and ventilation performance. It is therefore more revealing to look at the space heating demand derived from this modelling in more detail, we can see the distribution of efficiency across the entire housing stock. This is shown in Figure 3.5 below. It demonstrates a mean demand of around

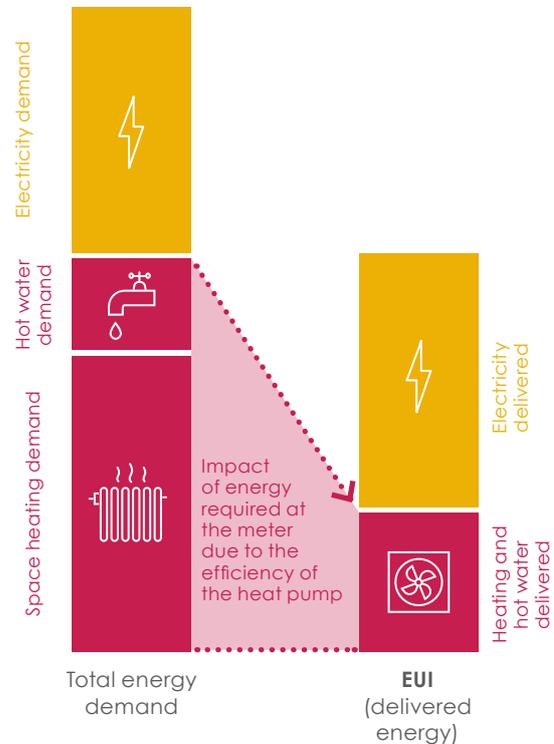


Figure 3.4 - Relationship between energy demand and EUI when using a heat pump.

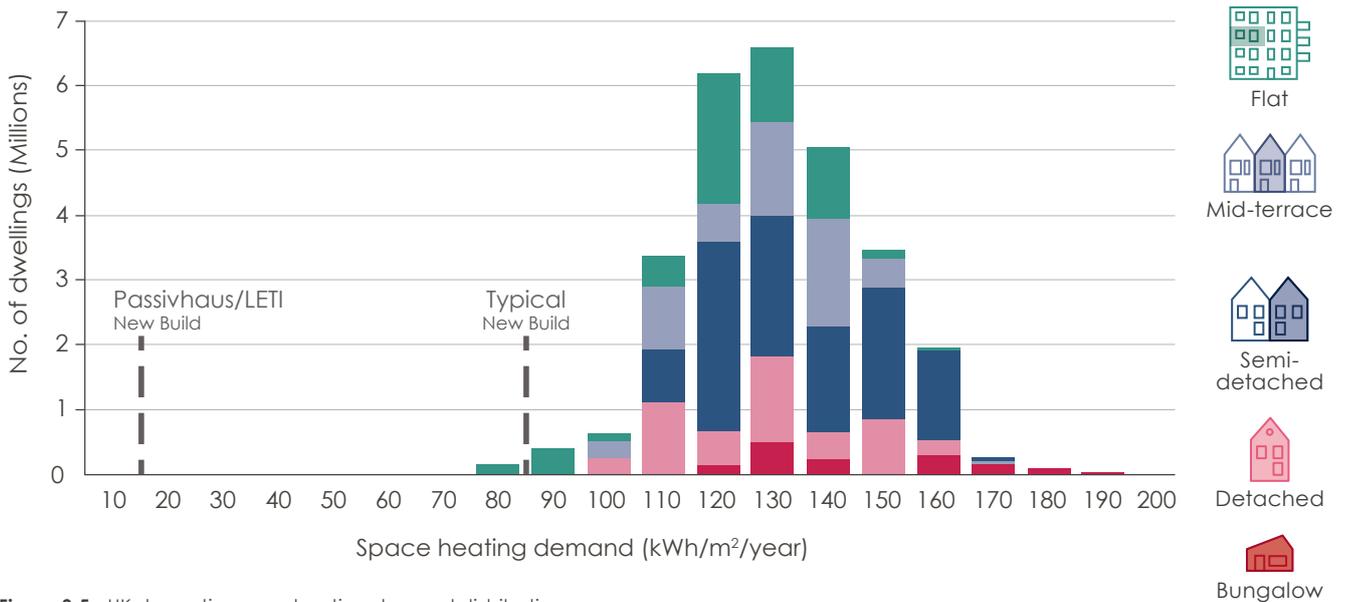


Figure 3.5 - UK domestic space heating demand distribution.



130 kWh/m²/year with a fairly typical normal distribution. As would be expected, the more compact buildings (e.g. flats) tend to have lower space heating demands.

Of note, a new build building regulations compliant dwelling (including the performance gap) is estimated to perform at 85 kWh/m²/year^{3.1} and a new build Passivhaus at 15 kWh/m²/year. This is a significant difference and indicates the inefficiency of our existing housing stock compared to exemplar levels of performance.

Good levels of fabric performance - known typically as a 'fabric first' approach, not only reduce energy demand at source, but also offer increased levels of comfort and improved health by providing thermal comfort in both summer and winter as well as greatly improved indoor air quality. In contrast, achieving reductions in demand just by fitting heat pumps and solar PV alone will not result in these co-benefits.

Our main sources of energy

It is also important to understand how our energy is currently delivered. The majority of our existing housing stock (84%) uses natural gas to provide heating and hot water with the remainder mostly using electricity and a small fraction relying on oil and biomass. Overall, the domestic sector uses around 480 TWh of energy annually (29% of the country's total energy consumption) with the majority of that energy going towards heating and hot water^{3.2}. Clearly, if we are to take advantage of a decarbonised electricity grid, we have to move away from fossil fuel heating and hot water.

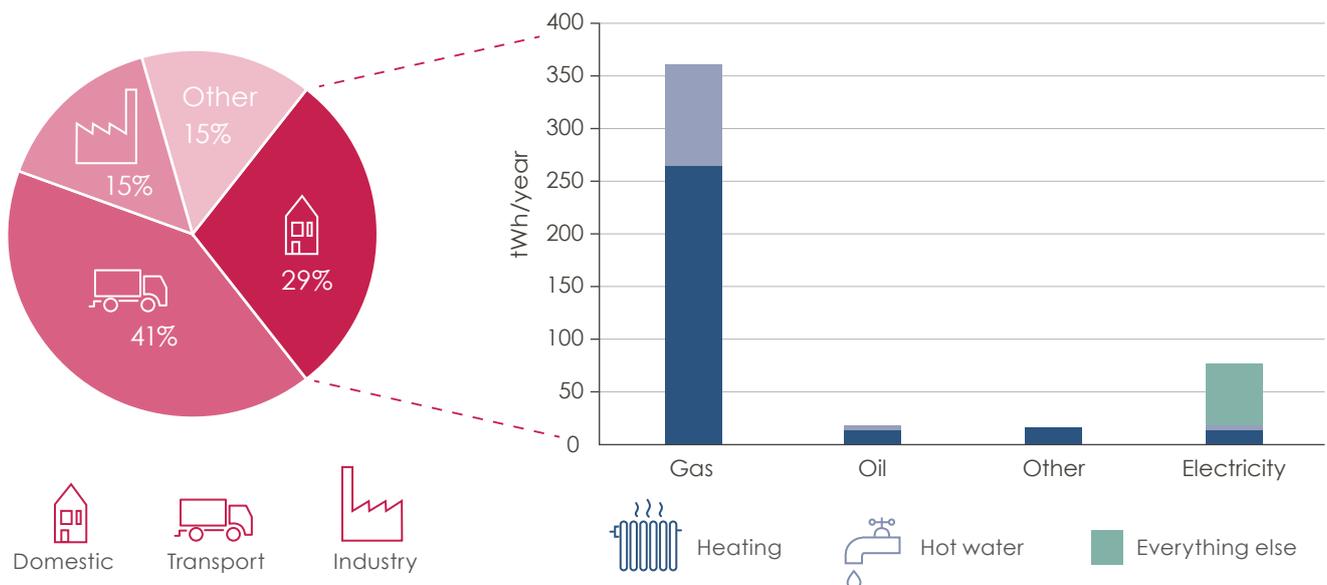


Figure 3.6 - UK sector consumption and domestic energy use breakdown (2018)^{3.3}.

3.2 Effect of different levels of retrofit

What can be done?

In determining the potential 'best practice' result for a retrofit (i.e. how far could we go with a property), age is not necessarily the main driving factor. LETI's analysis suggests that two principal factors largely govern the building's final heating demand. They are the building's form factor and whether there are any constraints on retrofit activity.

Form factor

The form factor is a ratio of the building's external heat loss area to its internal usable floor area. The less efficient the building's shape, the higher the form factor, and the more energy required for heating. Form factors will range from around 4 for detached single storey dwellings to 1 to 1.5 for multi-storey buildings arranged as flats.

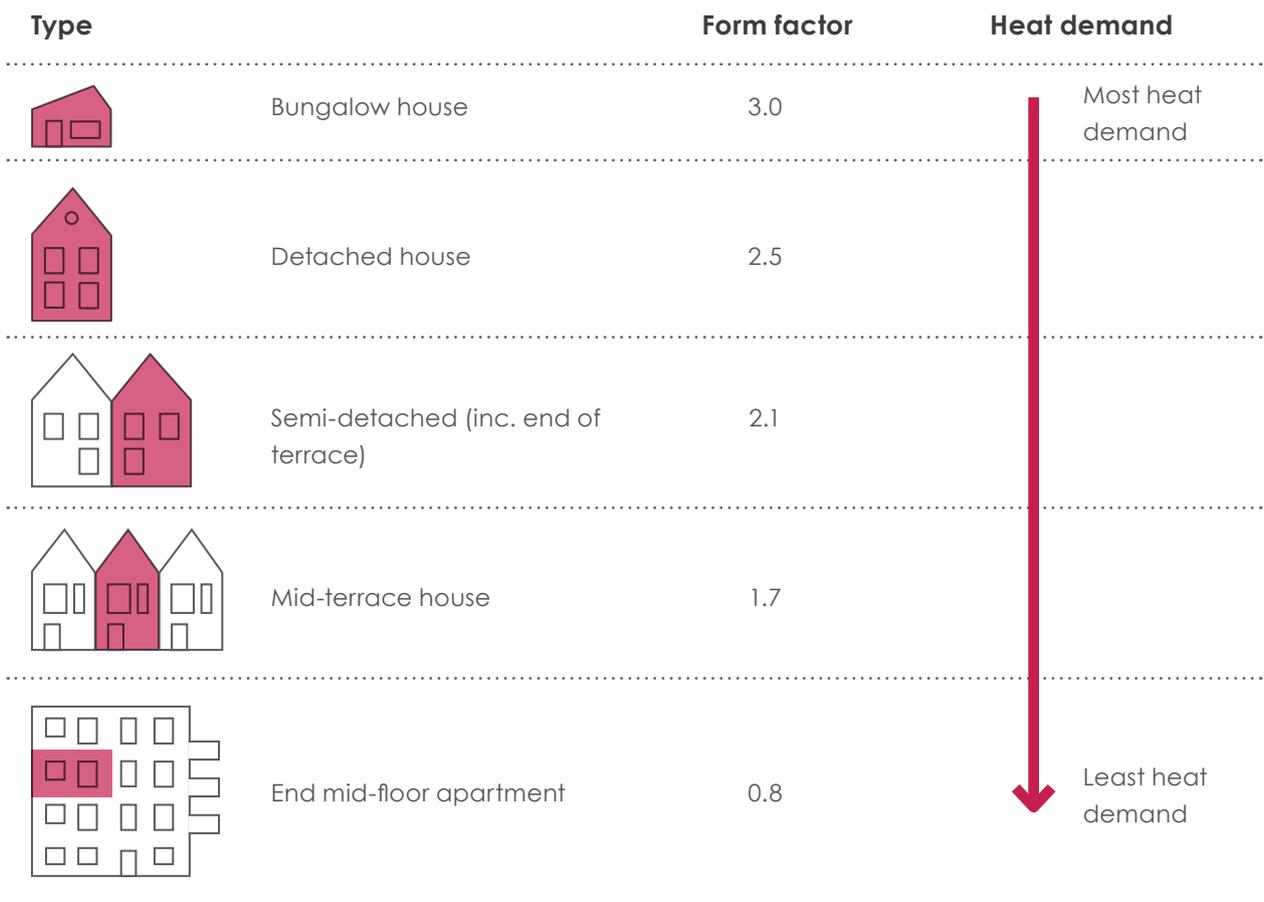


Figure 3.7 - The effect of lower (improved) form factors.



Constraints

As discussed earlier, heritage features and internal space could all limit the extent of the retrofit that can be achieved - i.e. some retrofits will be constrained. Constraints are typically: general external appearance, internal space, or access to areas/rooms. This is illustrated in Figure 3.8 and has the effect that the level of insulation improvement and perhaps improved glazing are limited when compared to an unconstrained retrofit. Furthermore, in a space-constrained retrofit, there may be limited options for additional equipment such as a MVHR, hot water tank or thermal store. External space is also required for some types of air source heat pumps.

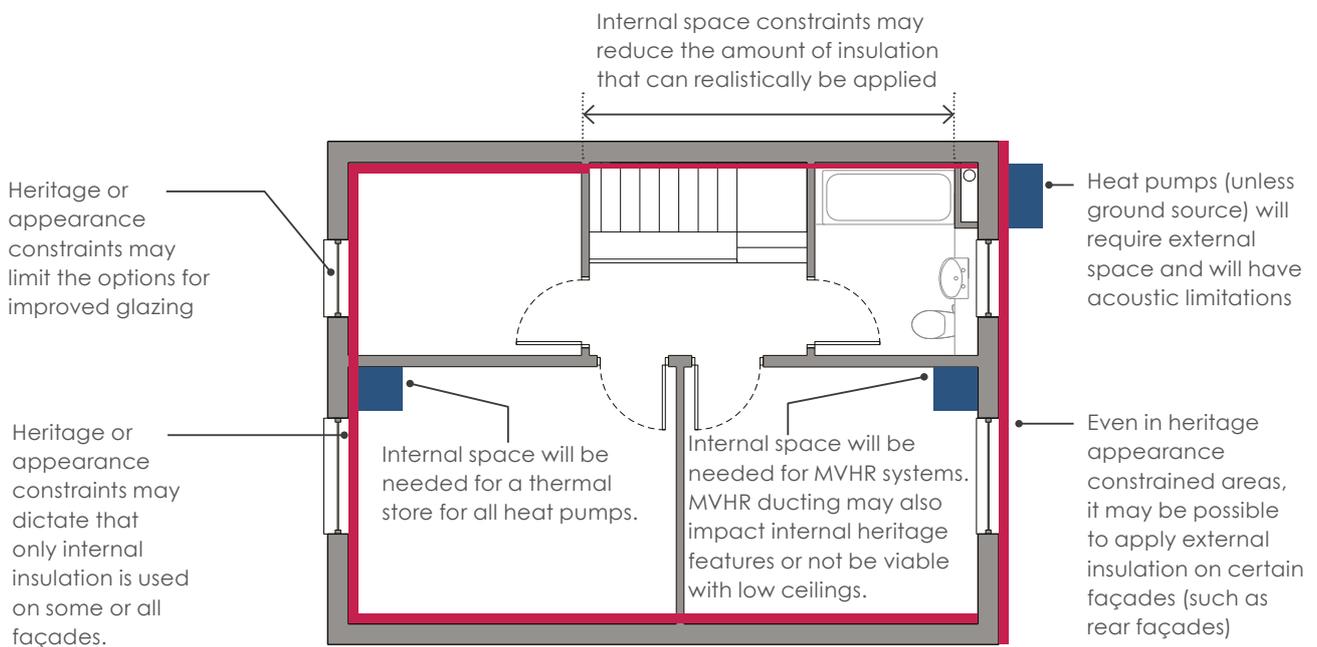


Figure 3.8 - Constraints on retrofit scope.

Modelled retrofit cases

To illustrate these principles, LETI has modelled a series of retrofit cases using the stock model:

	Retrofit Case	Description
Improved performance	1. Baseline	Un-renovated, as original
	2. Do minimum	Meet the Building Regulations backstop criteria for retrofit. Common retrofit measures which do not result in significant interventions into the building fabric
	3. LETI best practice constrained	LETI retrofit situations where the depth of retrofit is constrained by external appearances and/or internal space
	4. LETI best practice unconstrained	LETI retrofit with pragmatic and realistic element U-values and airtightness, achievable in the vast majority of unconstrained dwellings (see Annex E for an explanation of how these values have been derived)
	5. LETI exemplar	The best retrofit that we could hope to achieve

Figure 3.9 - Modelled retrofit cases

SIGNPOST Annex F - Modelling parameters

The specific parameters associated with each retrofit case are detailed at annex F. In sum, the efficiency measures modelled are:

- External and Internal Wall Insulation (as appropriate)
- Improved/increased roof insulation
- Improved/increased floor insulation
- Improved glazing (up to triple)
- Improved thermal performance of doors
- Reduced permeability/Increased airtightness
- Reduced thermal bridging
- Improved ventilation (including Mechanical Ventilation with Heat Recovery)
- Improved hot water tank insulation
- Improved hot water distribution pipe insulation
- Reduced hot water demand (lower flow fittings)

SIGNPOST Annex K - Definitions

It is important to note that various combinations of these measures are modelled as a coherent group of measures, rather than the sum of separately modelled measures. This means that the interaction between the measures are properly considered.

Modelled space heating demand

The results of these scenario models demonstrate that, as expected, the worst performing archetypes initially are those with poorer form factors with a spread of space heating demand between 120 and 130 kWh/m²/year. When improved to best practice the performance comes down to between 18 and 30 kWh/m²/year representing a consistent reduction of between 82 and 86% for all archetypes. Of note is that detached dwellings tend to have a lower space heating demand per m² which is due to the fact that they have the largest internal areas - not that they actually have an overall lower demand. The data also shows, perhaps surprisingly, that form factor is reasonably good for all archetypes other than bungalows and that there is a high degree of consistency in terms of the space heating demand achievable across the different wall constructions and property ages. For the LETI Unconstrained case, the improved space heating demands range between 36 and 46 kWh/m²/year representing a reduction of around 73%.

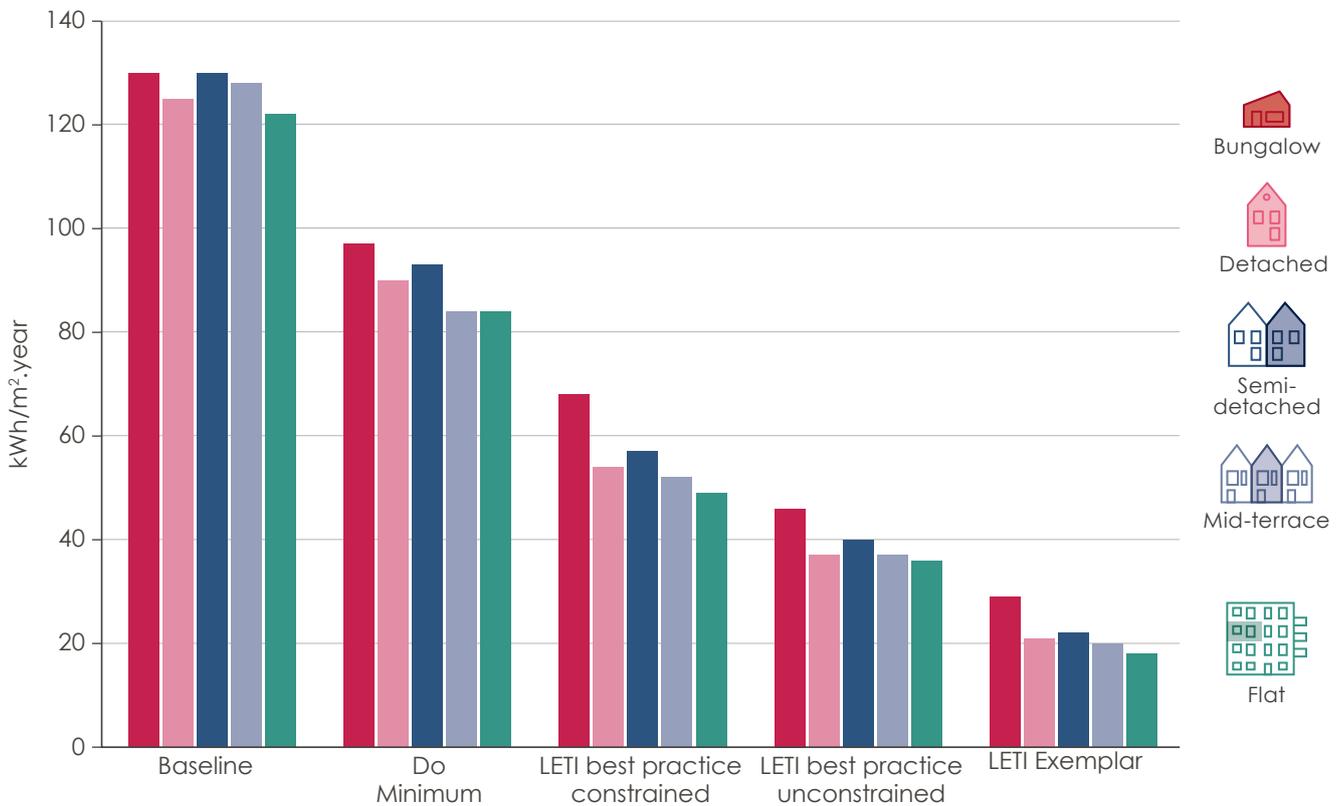


Figure 3.10 - Effect of varying retrofit scenarios on space heating demand (the energy needed to heat the space, independent of type of heat source used), by building form.

		Space heating kWh/m ² /year				
		1. Baselines	2. Do minimum	3. LETI best practice constrained	4. LETI best practice unconstrained	5. LETI exemplar
Bungalow		130	97	68	46	29
Detached		125	90	54	37	21
Semi-detached		130	93	57	37	20
Mid-Terrace		128	84	52	37	20
Flat		122	84	49	36	18

Figure 3.11 - Change in space heating demand by retrofit case and by building form

Modelled hot water demand

As well as reducing space heating demand by improving the fabric, retrofit provides the opportunity to significantly reduce hot water demand. The associated parameters are shown in Annex F, but can be summarised as either reducing losses (improved insulation, shorter pipe runs, fewer dead legs, lower storage temperatures) or reducing demand (more efficient fittings and Waste Water Heat Recovery). The AECB Water Standard^{3.3} provides some excellent guidance on this topic.

Hot water reductions are not subject to the same constraints as fabric improvements and are also not strongly linked to form factor. Thus, the potential reductions are far more consistent across all archetypes and scenarios, but the grouping is not as close. This is because the demand for hot water is heavily related to occupancy and the occupancy levels are more dense in the smaller archetypes, thus resulting in a higher hot water demand per m² of internal floor area. Overall, a consistent reduction of around 58% is seen from the baseline case.

SIGNPOST Annex F - Modelling parameters

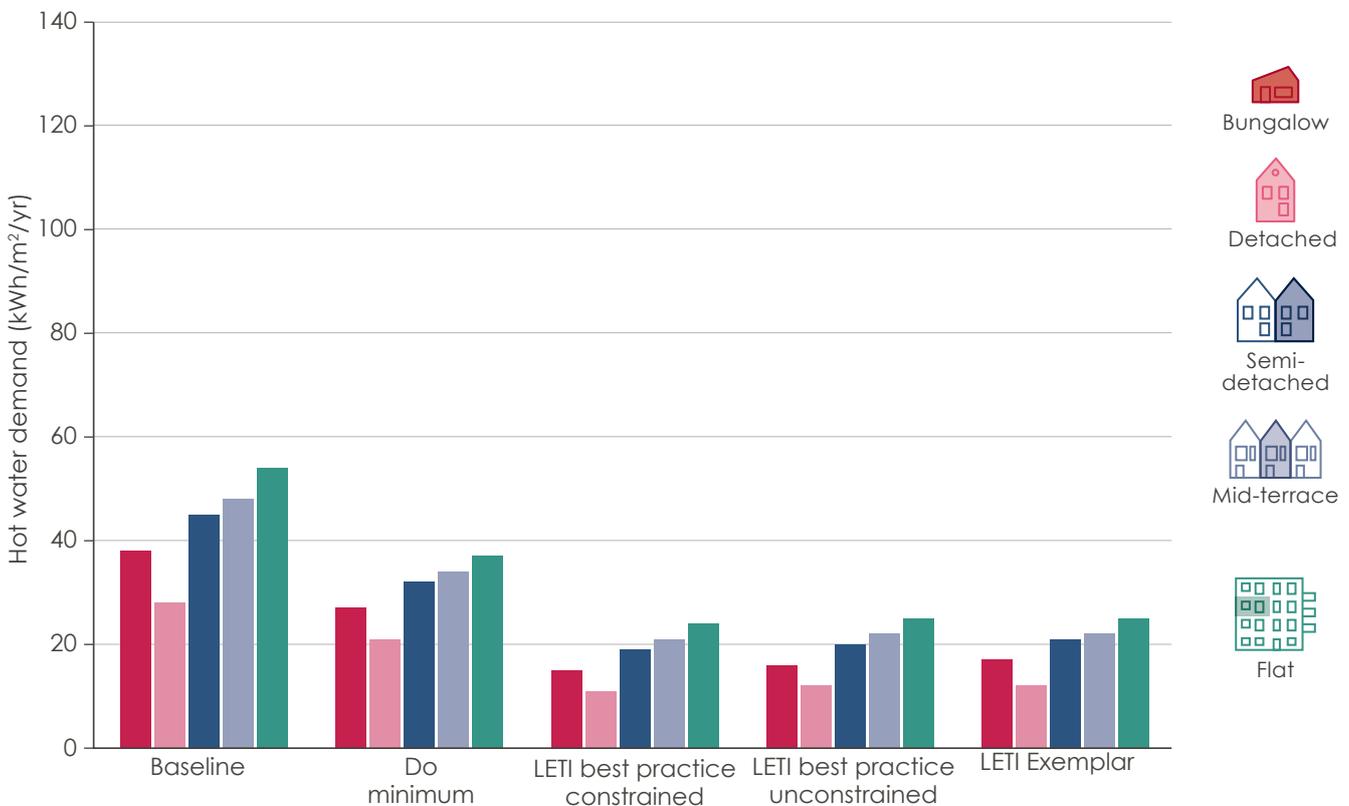


Figure 3.12 - Effect of varying retrofit scenarios on hot water demand, by building form.



SIGNPOST Annex A - How do our homes produce carbon?

Overall space heating and hot water reduction

This analysis demonstrates that the overall scope of what is achievable in retrofitting our existing building stock is a reduction in space heating demand (SHD) of between 37% and 85% coupled with a reduction in hot water demand of between 29% and 58%.

It should be noted that these are energy reductions not carbon reductions. Translating these results into carbon reductions will be dependent on the form of heat source used and also the carbon factors applied in the calculation. See annex A for further details.

		1. Baselines	2. Do min.	3. LETI best practice cons.	4. LETI best practice unc.	5. LETI exemplar
Average SHD reduction		0%	30%	56%	69%	83%
Average DHW reduction		0%	29%	58%	58%	58%

Figure 3.13 - Percentage reduction in space heating demand and hot water demand by retrofit case.

Energy savings by dwelling type

Applying these results across the stock model, we can map the potential for energy saving to different dwelling types - i.e. how much energy could be saved by a best practice retrofit in each case. This is

shown in Figure 3.14 below. This shows that the largest opportunities for improving the energy consumption lie in post 1950 detached and semi-detached dwellings and, interestingly, insulated cavity walls as these can be further insulated to achieve higher levels of performance.

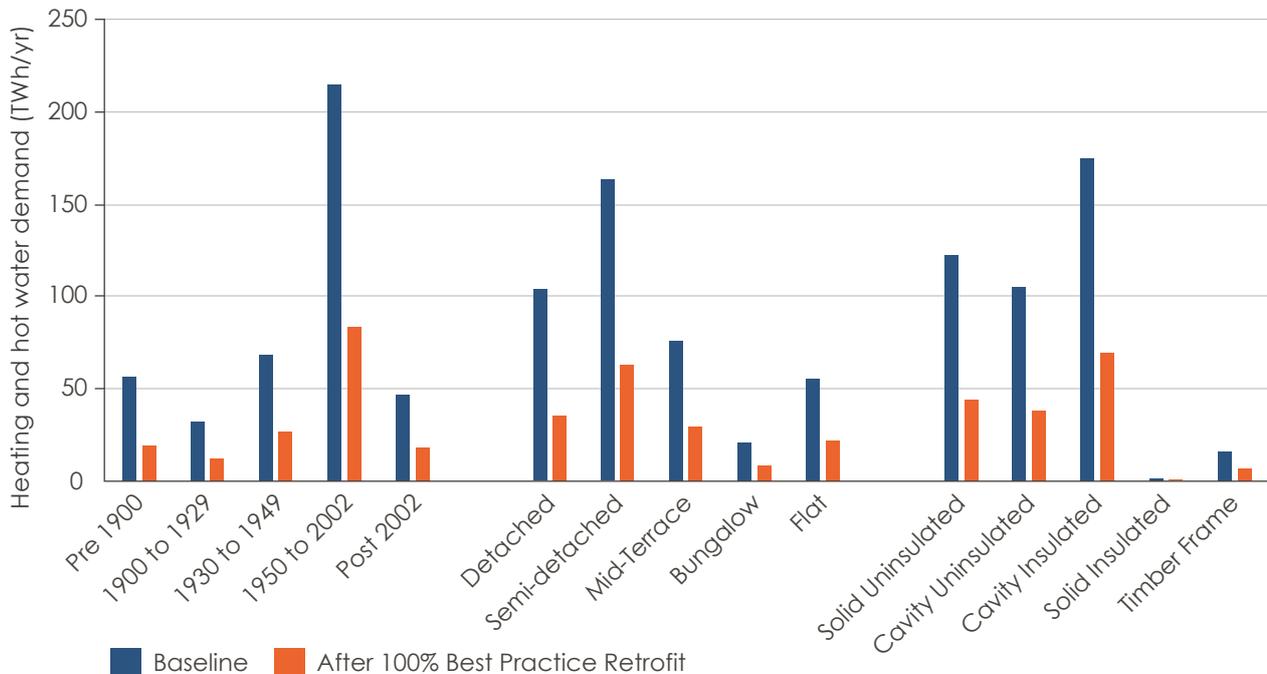


Figure 3.14 - Change in heating and hot water demand from baseline (2018) to 100% Best Practice retrofit by dwelling age, form and wall type.

Comparisons and impacts

Finally, the stock model can also be used to compare the overall average Space Heating Demand (as a proxy for fabric efficiency) and equivalent Energy Use Intensity (EUI) figures for each retrofit case as well as

for a range of other new build and retrofit standards, see Figure 3.15 below. We can also look at the impact of applying an average 62%^{3,4} reduction in space heating demand on the space heating demand distribution of the UK's housing stock, see Figure 3.16.

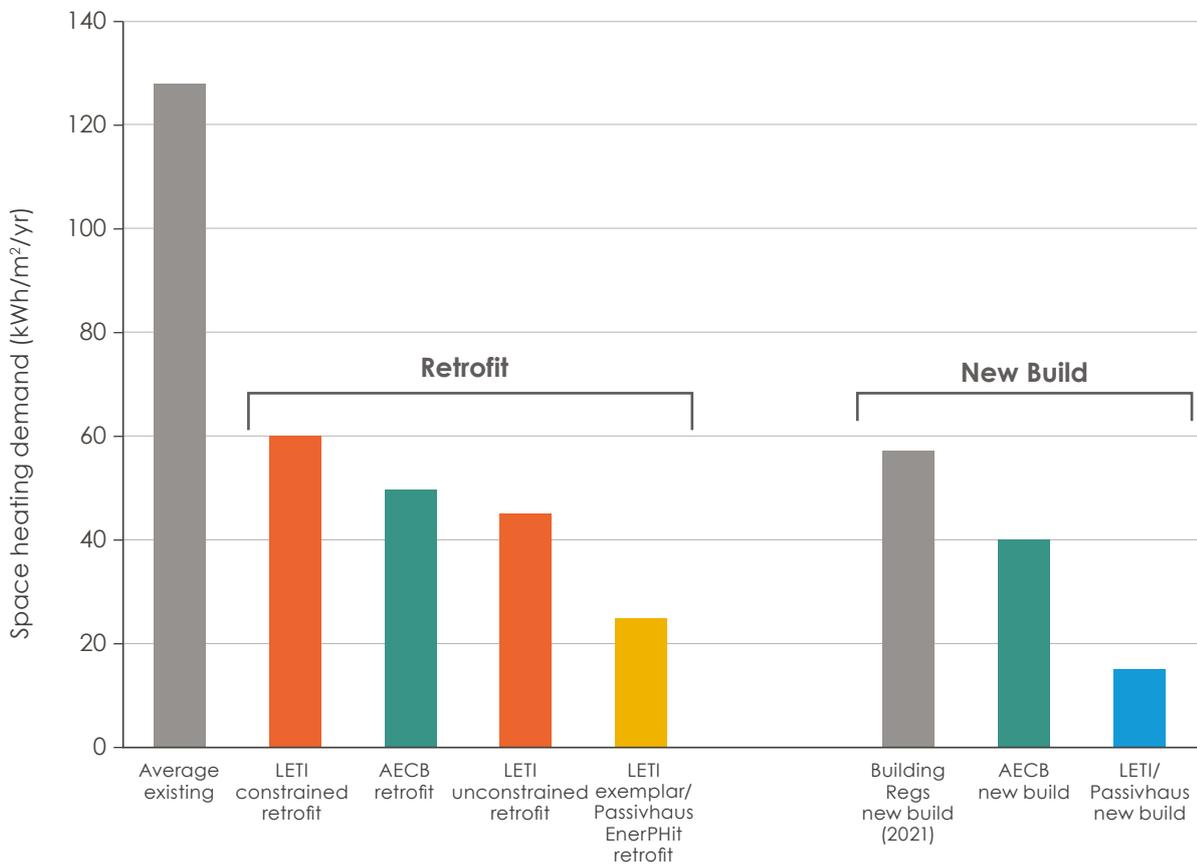
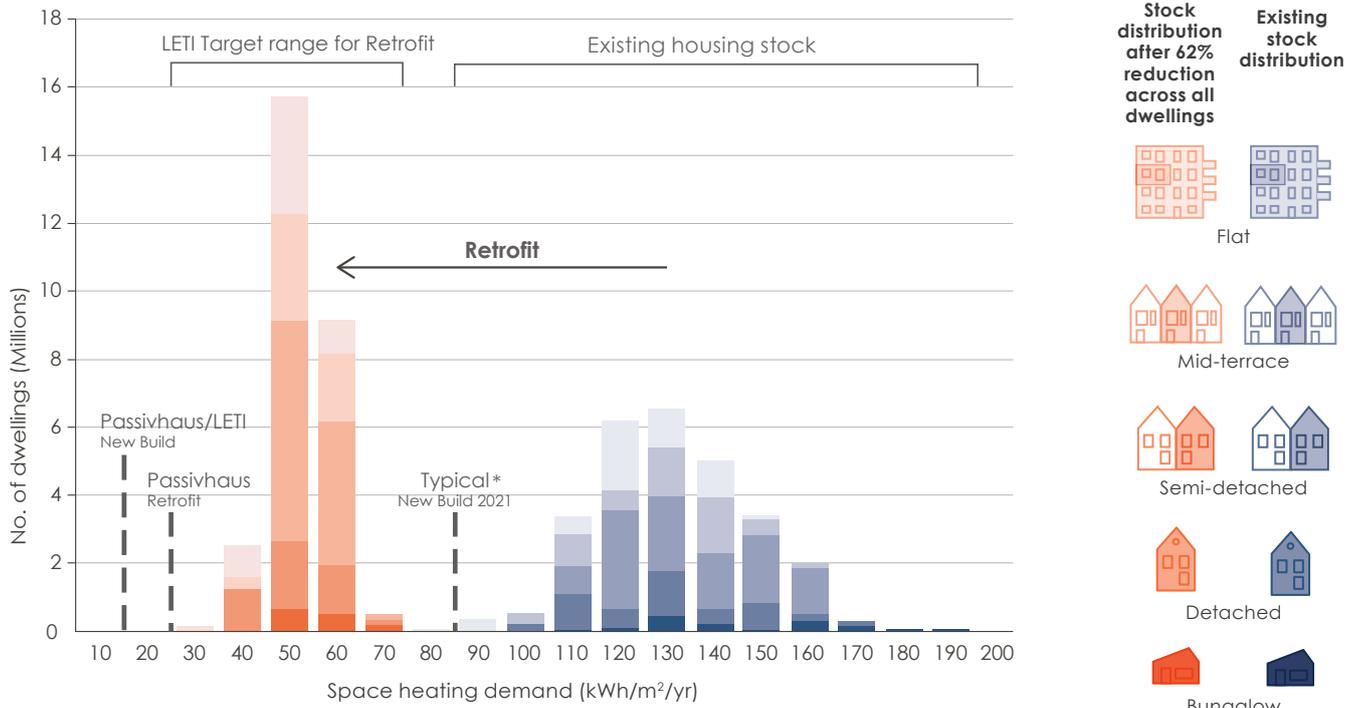


Figure 3.15 - Space heating demand comparison ^{3,5} (LETI retrofit cases highlighted in orange).



* Includes for an assumed performance gap

Figure 3.16 - Total number of UK dwellings broken down by their space heating demand, showing the transition required from existing levels of high demand to the LETI retrofit target range. Figure based on stock modelling carried out by LETI.

Comparisons and impacts (cont'd)

Notes:

- All EUIs are modelled using heat pumps for heating and hot water, except for the Average Existing which assumes a gas boiler
 - Figures are in kWh/m²/year and include both regulated and unregulated energy consumption
- The analysis shows that there is a significant opportunity

to reduce heating and hot water demand. However, once these have been reduced, unregulated^{3,6} energy becomes hugely significant. Whilst not necessarily an issue for retrofit (as this is not necessarily driven by the building fabric), it does highlight that this offers further opportunities for reductions.

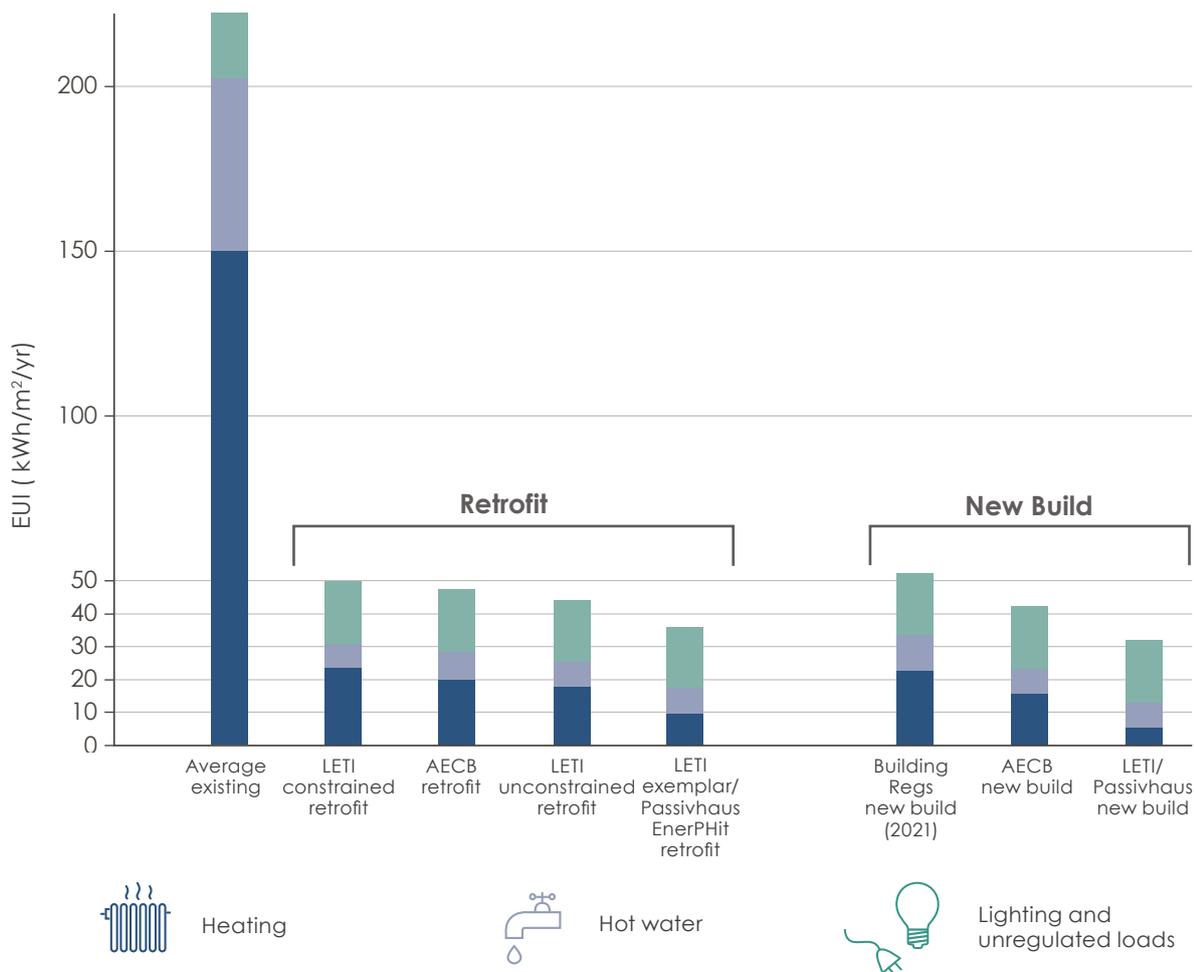


Figure 3.17 - EUI Comparison



3.3 What has the stock model told us?

The stock modelling set out above has illustrated the scope of what is possible when trying to reduce energy consumption across the UK housing stock. These results can be used to derive retrofit targets and also model the overall impact at a national scale.

of 50 kWh/m²/year, having a target of up to 60 kWh/m²/year would encompass the vast majority of all buildings, regardless of their form, age or construction type. The LETI best practice target is set at 50 kWh/m²/year with an additional 10 kWh/m²/year for constrained homes.

Setting targets

The post retrofit space heating demand distribution shown in Fig 3.18 shows that, if every home was retrofitted to best practice standard, whilst the average home would have a space heating demand

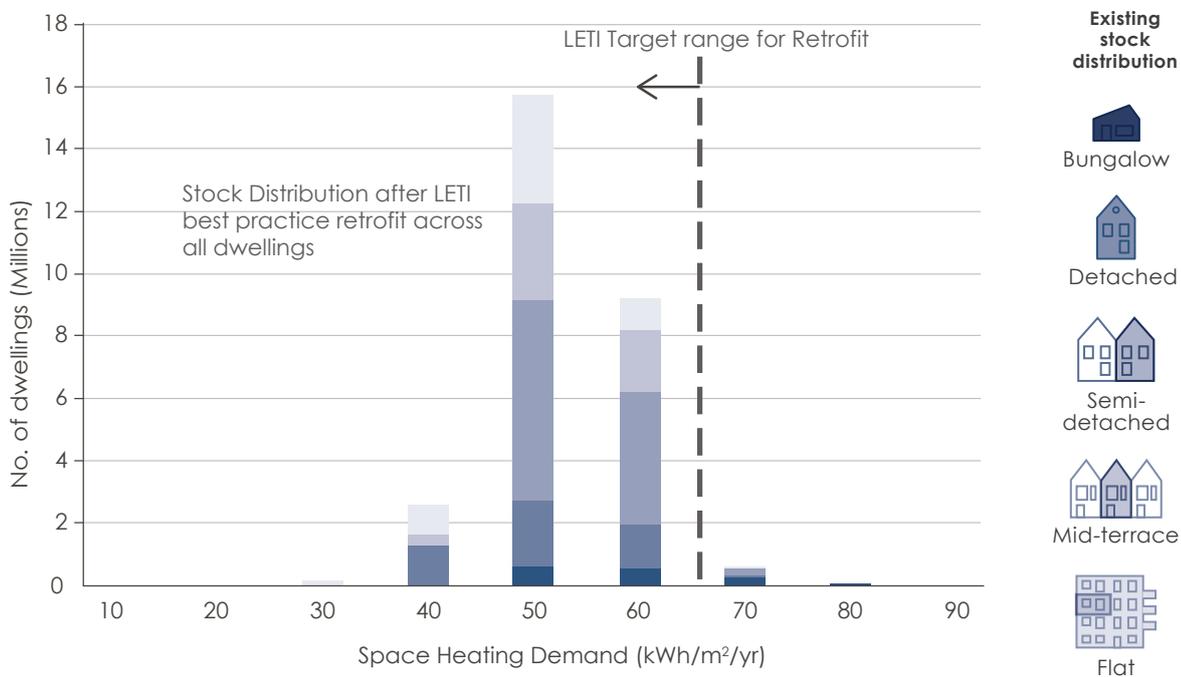


Figure 3.18 - UK Space heating demand distribution after 100% Best Practice Retrofit showing LETI's target range encompassing the vast majority of buildings.

The potential impact of retrofit at a national level

The stock model also allows us to see the overall effect on UK domestic energy consumption, and emissions, depending on the depth and reach of a national retrofit programme. To demonstrate this, three scenarios have been modelled with varying combinations of different depth of retrofits from a 2019 baseline property condition (see figure 3.19).

Each of these scenarios has then been used to illustrate the change in the overall annual energy consumption and associated annual carbon emissions reductions from the UK's domestic housing stock in 2019 to 2040 when the electricity grid carbon intensity has fallen to 41gCO₂e/kWh. For each scenario, it has been assumed that 85% of homes will have their heating and hot water provided by heat pumps or heat networks (with a similar SCOP) and the remaining 15% of homes heated by direct electricity.

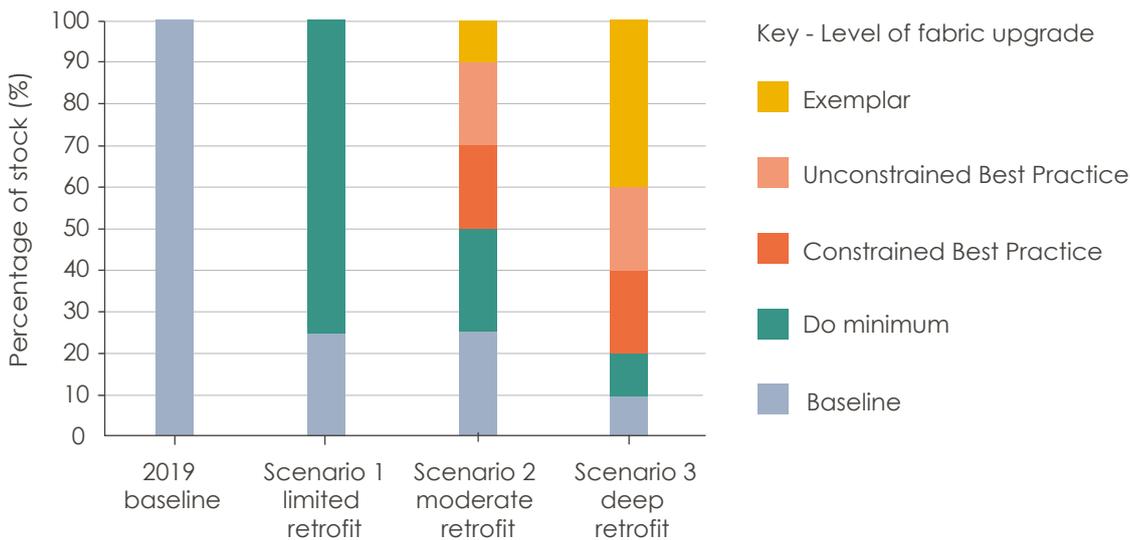


Figure 3.19 - Scenario percentage mix with varying combinations of depth of retrofit



Figure 3.20 shows that in scenario 1 replacing 85% of housing stock gas boilers with heat pumps or networks combined with a limited level of retrofit reduces the energy consumption significantly. The energy consumption more than halves and the carbon emissions drop by 91%. These results highlight the huge combined impact of moving our heating and hot water to heat pumps overlaid on grid decarbonisation. However, the scale of the impact of this transition alone masks the positive effect and necessity for a nation-wide deep retrofit programme as demonstrated by scenario 2 and 3.

As the national level of retrofit increases from scenarios 1 to 3, the energy consumption continues to drop further. The carbon emissions drop less significantly and therefore it is important to focus on the relative energy consumption to understand the full benefit of

higher levels of national retrofit. Moving from a limited level of retrofit in scenario 1 to a good level of retrofit across the country in scenario 3 would reduce our demand for renewable energy by 60 tWh. Is that a lot? Well, it's the equivalent of covering around 280,000 football pitches with solar panels, or more than the entire surface area of Greater London. Furthermore, to put this into context against where we are now, in 2020 we generated just 11.3 tWh from solar energy and even our highest renewable generator, wind, produced only 54.6 tWh^{3.7}. So, whilst it is theoretically possible to provide the generation capacity and associated infrastructure improvements necessary to deliver that additional 60 tWh, it is far more resource efficient, and far better for people's health, wellbeing and finances, to deliver that 60 tWh as a reduction in the heating and hot water demand of our homes through deep retrofit.

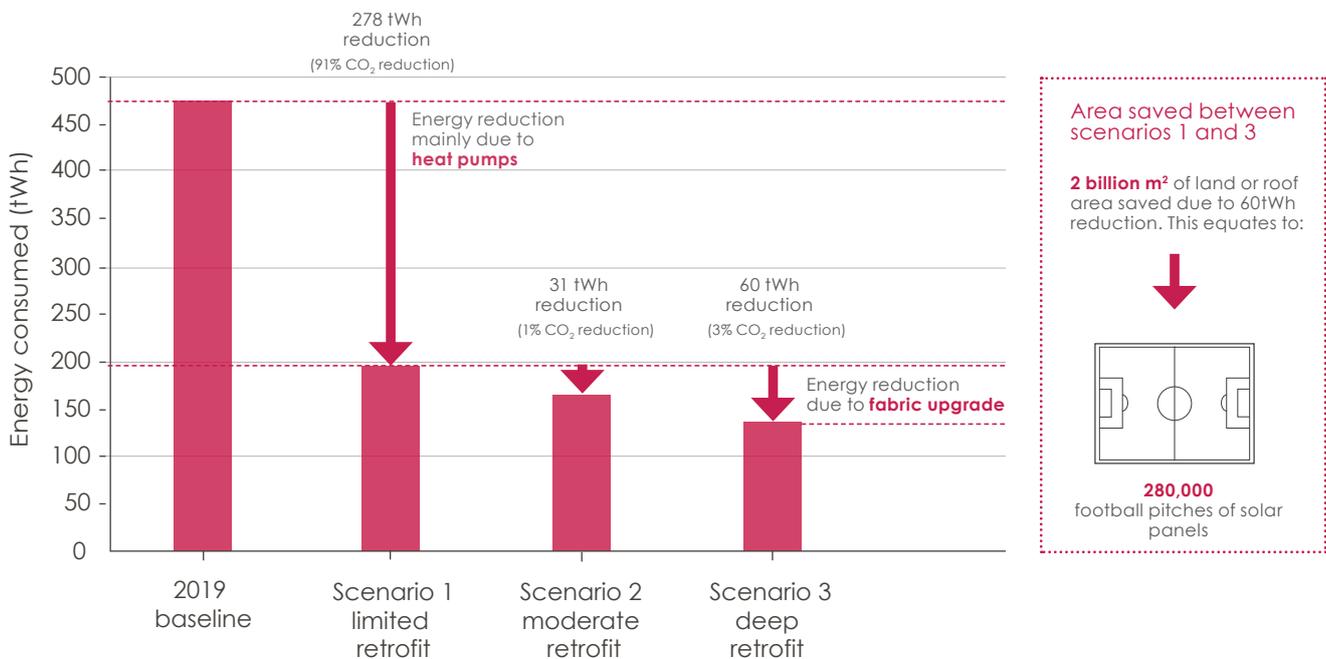


Figure 3.20 - Scenario comparison of energy consumed

3.4 References and footnotes

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3.3 - The Government, Energy Consumption in the UK [Online] Available from: www.gov.uk/government/statistics/energy-consumption-in-the-uk

3.4 - Assumes 50% unconstrained (69% SHD reduction) and 50% constrained (56% reduction) - see Figure 3.13

3.5 - See Definitions for a summary of the standards shown in this chart

3.6 - Unregulated energy is the energy used by appliances and any other devices in the home not related to the fixed building services that are intended to provide heating, hot water, ventilation or lighting.

3.7 - See <https://cleantechnica.com/2021/01/11/solar-wind-power-growth-in-uk-from-2012-2020-charts/>



4



LETI home retrofit targets

4.1 LETI home retrofit targets

The analysis in Chapter 3 has demonstrated the reductions in heating and hot water demand achievable across a range of building forms. This allows us to set out LETI best practice home retrofit targets that outlines LETI's proposed minimum targets for domestic retrofit. This chapter also sets out a higher performing LETI exemplar targets.

The suggested LETI targets for retrofit can be achieved either by the **modelling method**, or by the **constituent element method** and provides allowances for situations where external appearance or limited internal space result in a constrained retrofit.

It is recommended to use the modelling method approach which sets energy targets wherever possible, as the EUI can be easily measured post-retrofit to understand if the target is met in-use. The constituent element method approach provides fabric and system targets to give guidance where energy modelling is not viable.

4.2 Modelling method

For the modelling method, the retrofitted building should meet the best practice targets for: fossil fuels; space heating; hot water; overall Energy Use Intensity (EUI); and renewable energy as shown in Figure 4.1.

LETI recommends that predictive modelling be undertaken using the Passivhaus PHPP software to calculate these values. It is understood that in some cases this may be impractical, perhaps because of financial/time constraints or availability of modellers. If this is the case, SAP modelling can be used, however, RdSAP is not acceptable. If SAP modelling is used the building fabric U-values must not be worse than if the LETI constituent element route were taken.

SAP does not provide a reliable calculation of unregulated energy use, therefore, PHPP or CIBSE TM54 methodology should be used for this element to calculate overall EUI.

The target EUI is based on heating and hot water being provided by a heat source with a seasonal coefficient of performance (SCOP) equivalent to a well designed ASHP system. Thus, a poorly designed heat pump, operating at higher flow temperatures, a gas boiler, or a direct electric system is unlikely to meet the target without significant compensating improvements in space heating and hot water demand. This is illustrated in Figure 4.2.

► **SIGNPOST** Chapter 2 - What is retrofit? - 2.5
Metrics and Energy Performance
Certificates



	LETI best practice	LETI exemplar
 Fossil fuel free	Fossil fuel free home	Fossil fuel free home
 Space heating demand	50 kWh/m ² /yr +10 kWh/m ² /yr Additional allowance for constrained retrofit	25 kWh/m ² /yr
 Hot water demand	20 kWh/m ² /yr +5 kWh/m ² /yr Additional allowance for homes <75m ²	20 kWh/m ² /yr +5 kWh/m ² /yr Additional allowance for homes <75m ²
 Energy Use Intensity	50 kWh/m ² /yr +10 kWh/m ² /yr Additional allowance for constrained retrofit	40 kWh/m ² /yr
 Renewable energy	40% of roof area covered in PV panels 0% Constrained retrofits may not be able to accommodate PV Maximise renewables where conditions are suitable to support solar generation – i.e. unshaded roofs (flat/pitched south, east, or west facing)	40% of roof area covered in PV panels Maximise renewables where conditions are suitable to support solar generation – i.e. unshaded roofs (flat/pitched south, east, or west facing)

Figure 4.1 - LETI retrofit energy targets.
Figures given in kWh/m²/year (treated floor area or 90% of gross internal floor area)

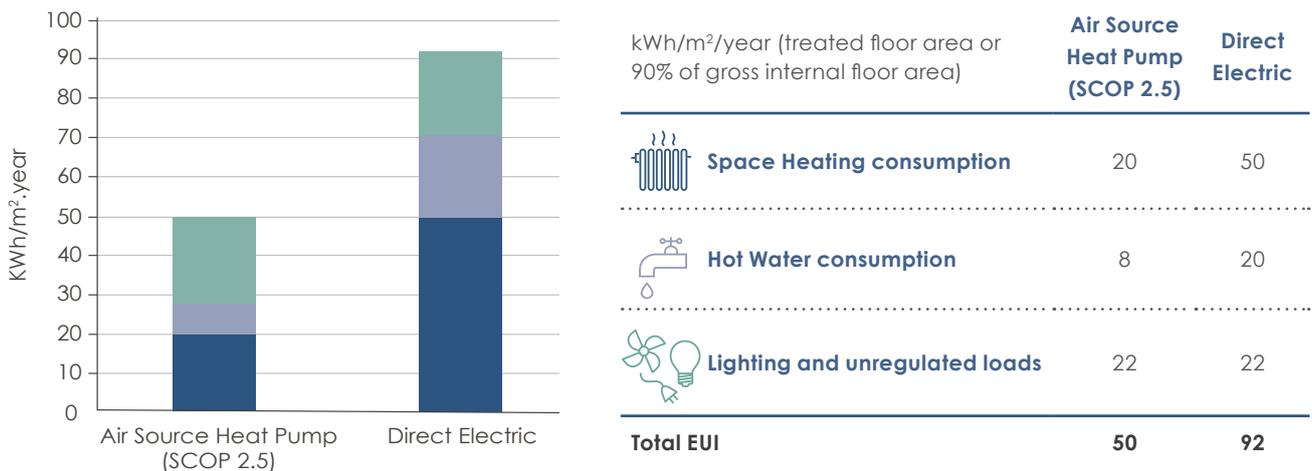


Figure 4.2 - Graph and table showing comparison of EUI for an air source heat pump versus direct electric for the same dwelling

4.3 Constituent element method

For the constituent element method, the various components of the retrofit works should achieve the target parameters set out in Figure 4.3. This method can be used where detailed energy modelling is not possible or financially feasible on a small project. The

values shown have been derived from the LETI Stock Model and equate with the overall energy targets for space heating demand, hot water and EUI set out in the modelling method.

Building element	Retrofit actions	LETI best practice			LETI exemplar
		Constrained retrofit	Unconstrained retrofit (Cool Temperate Climate)	Unconstrained retrofit (Cold Climate)	All retrofit types
Walls					
Cavity	External, cavity or Internal insulation ¹	0.24 W/m ² .K	0.18 W/m ² .K	0.12 W/m ² .K	0.15 W/m ² .K
Solid Uninsulated	External or Internal insulation ¹	0.32 W/m ² .K	0.18 W/m ² .K	0.12 W/m ² .K	0.15 W/m ² .K
Timber Frame	External or Internal insulation ¹	0.21 W/m ² .K	0.18 W/m ² .K	0.12 W/m ² .K	0.15 W/m ² .K
Roofs					
Cold	Insulate	0.12 W/m ² .K	0.12 W/m ² .K	0.10 W/m ² .K	0.12 W/m ² .K
Warm / Flat	Insulate	0.22 W/m ² .K	0.12 W/m ² .K	0.12 W/m ² .K	0.12 W/m ² .K
Floors					
Suspended Timber	Insulate between joists	0.20 W/m ² .K	0.18 W/m ² .K	0.12 W/m ² .K	0.15 W/m ² .K
Solid Uninsulated	Excavate and insulate below	0.80 W/m ² .K	0.15 W/m ² .K	0.10 W/m ² .K	0.15 W/m ² .K
Windows and doors					
Windows	Improve/replace	1.30 W/m ² .K	1.00 W/m ² .K	0.80 W/m ² .K	0.80 W/m ² .K
Doors	Replace	1.00 W/m ² .K	0.80 W/m ² .K	0.80 W/m ² .K	0.80 W/m ² .K
General envelope					
Thermal Bridging	Mitigate where possible	0.10 W/m.K	0.10 W/m.K	0.10 W/m.K	0.08 W/m.K
Airtightness	Draught-proofing, sealing of chimneys and vents	3.0 ach@50Pa	2.0 ach@50Pa	2.0 ach@50Pa	1.0 ach@50Pa

1 - Where internal wall insulation is used, there could be a significant risk of interstitial condensation. To minimise this risk, the post-retrofit U-value should be no better (lower) than those shown for constrained retrofits above. Furthermore, in areas where insulation can not fully cover the original wall, the approaching insulation should be tapered or reduced. See Annexes C and H for more information.



Note:

- In determining whether to use the cool temperate climate or cold climate fabric and system targets, designers should take into account the local climate. As a rough guide, we would suggest that cold climate U-values are used in Scotland and northern areas of England.
- Annexes C and H provide further detail on how to enact some of these actions in practice.

- ▶ **SIGNPOST** Annex C: Illustrative insulation strategies
- ▶ **SIGNPOST** Annex D: Retrofit ventilation strategies
- ▶ **SIGNPOST** Annex H: Moisture risks and how to avoid them

Building element	Retrofit actions	LETI best practice			LETI exemplar
		Constrained retrofit	Unconstrained retrofit (Cool Temperate Climate)	Unconstrained retrofit (Cold Climate)	All retrofit types
Systems					
Systems and appliances	Fossil fuel free home	Fossil fuel free	Fossil fuel free	Fossil fuel free	Fossil fuel free
Ventilation Type	Install upgraded ventilation system	MVHR ²	MVHR	MVHR	MVHR
Lighting Power	Replace lamps and fittings	50 lm/W	100 lm/W	100 lm/W	100 lm/W
Hot water					
Hot Water Tank	Increase or replace insulation	1.5 w/K	1.5 w/K	1.5 w/K	1.5 w/K
Primary Pipework	Insulate all pipework	90% of pipework insulated	90% of pipework insulated	90% of pipework insulated	90% of pipework insulated
Shower Demands	Low flow fittings	16 litres/pers.day	16 litres/pers.day	16 litres/pers.day	16 litres/pers.day
Other Demands	Low flow fittings	9 litres/pers.day	9 litres/pers.day	9 litres/pers.day	9 litres/pers.day
Renewables					
Photovoltaic Generation ³	Rooftop installation	0 % of roof area covered in PV panels	40 % of roof area covered in PV panels ⁴	40 % of roof area covered in PV panels ⁴	40 % of roof area covered in PV panels ⁴

2 - If not possible use demand control dMEV or demand control cMEV. Refer to Annex D.

3 - Our modelling has assumed that the vast majority of homes will be fitted with a heat pump. A heat pump will realise more hot water from a PV system than a solar thermal system, given the same amount of solar radiation (due to the effect of the heat pump's COP). Furthermore, once the hot water tank has reached its target temperature, the solar thermal panels are doing nothing. In contrast, PV can power other things and also feed back into the grid (if you do not need the power). Thus, we have focused on PV. If, however, a heat pump is not installed and roof mounted panels are considered, solar thermal is a more efficient way of generating hot water and can typically provide up to 50% of a home's hot water demand.

4 - Maximise renewables where conditions are suitable to support solar generation – i.e. unshaded roofs (flat/pitched south, east, or west facing)

Figure 4.3 - LETI retrofit fabric and systems targets

4.4 Using retrofit standards and guidance

Our analysis has demonstrated that what LETI considers to be a pragmatic, affordable and realistic level of retrofit matches closely with the AECB Retrofit standard in terms of both space heating demand and final EUI. LETI considers this to be a **best practice** retrofit. The more demanding Passivhaus EnerPhit retrofit standard achieves further reductions and is aligned with LETI's **exemplar** targets in terms of retrofit ambition.

As we are unlikely to be able to achieve a consistent level of retrofit across all our housing stock, we will need some retrofits to be in this exemplar category, both to achieve the required reduction in demand across the country, but also to drive innovation and demonstrate what can be achieved.

This document sets out guidance intended to show what a best practice retrofit looks like and how it should be undertaken. It is not a retrofit standard in itself. A key element of any construction project is robust quality assurance to ensure that the final building performs as it was designed. For this reason, LETI strongly recommends that a recognised retrofit standard and quality assurance process is used alongside the LETI guidance.

The following flowchart sets out how to decide on the appropriate retrofit target for your particular project. It should be read in conjunction with the table opposite which summarises the various retrofit standards and schemes available.

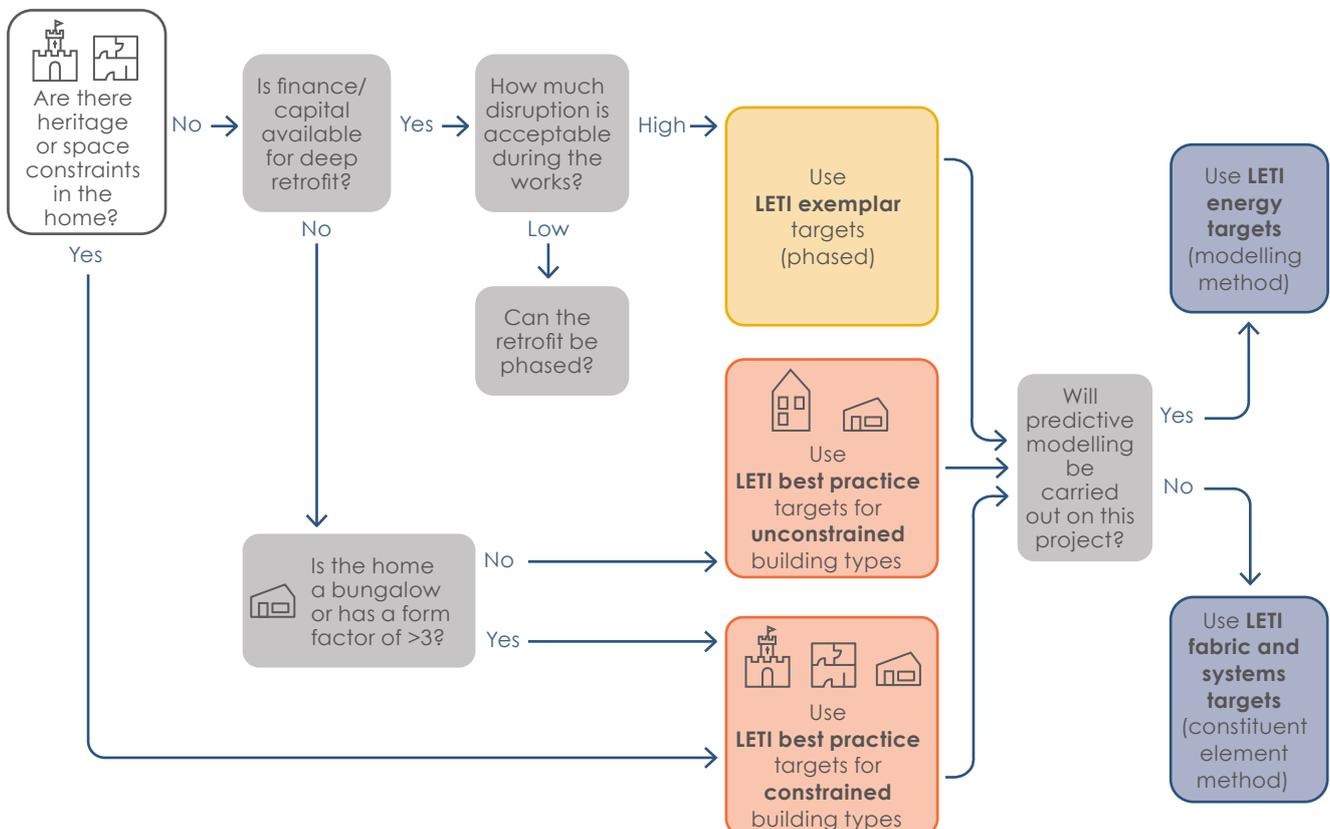


Figure 4.4 - Flowchart to assist target decision making



Name/ Reference	Description	Space Heating Demand	EUI kWh/m ² / year	Compliance method	When to use
Retrofit Guidance					
 Department for Business, Energy & Industrial Strategy bsi.	Best Practice Guidance and a Quality Assurance process for retrofit	N/A	N/A	Employment of suitably qualified Retrofit Designer and Retrofit Coordinator to manage the Retrofit Process.	Any level of retrofit. Mandatory for government procured schemes from 2021. Should be used, at minimum, for large scale and/or high-risk retrofit where there are significant levels of intervention to the building fabric and ventilation.
	LETI best practice guidance for safe and effective retrofit	50 kWh/m ² /yr (up to 60 when constrained)	50 kWh/m ² /yr (up to 60 when constrained)	Demonstrated either by modelling or the constituent element method. No certification or QA scheme offered.	Use the LETI flowchart in Figure 4.4 to determine when to use: LETI best practice constrained and unconstrained targets; LETI exemplar targets; and whether to use the energy targets (modelling method) or fabric and system targets (constituent element method).
	LETI exemplar guidance	25 kWh/m ² /yr	40 kWh/m ² /yr		
	Independent Construction Standard for retrofit	20-25 kWh/ m ² /yr	EUI equivalent likely to be 35-45 kWh/ m ² /yr. (EnerPHit standard uses primary energy targets)	Demonstrated by PHPP modelling. Integrity of modelling and quality of construction independently verified by PH Certifier. Various routes to compliance inc. space heat demand and component approach, and a step-by-step option for both.	Exemplar levels of retrofit are being targeted, modelling in PHPP can be undertaken and quality assurance is to be achieved through an independent QA process. The range of routes to compliance make this widely applicable in the UK, this can be used to meet LETI exemplar targets and for projects following the PAS 2035 methodology.
	Methodology based on fitting external panels, replacing windows/ doors, installing ventilation.	40* kWh/ m ² /yr	No EUI target, but scaled targets for hot water and appliance load.	Home owner or landlord enters into a contract which guarantees levels of performance specified. Thus compliance is by in-use assessment.	Good levels of retrofit are being targeted and the nature of the building itself lends itself to external cladding.
	Independent rating scheme for retrofit operated by the National Energy Foundation. 1-5 star performance benchmarks	5 star = 30-50* kWh/ m ² /yr 4 star = <50* 3 star = <60* 1-2 star = <90*	N/A	Two stage assessment process by a qualified SuperHomes assessor. 1) Design stage - 'predicted' rating based on retrofit plan and SAP calculation. 2) Evaluation stage - 'verified rating' based on 12 months performance monitoring data.	Any level of retrofit irrespective of house type and retrofit approach. Rating level is awarded based on actual measured performance meaning assessment can commence at evaluation phase. Methodology is consistent with PAS 2035 provisions.
	Independent Construction Standard for retrofit	50 kWh/m ² /yr (with possible exemption up to 100)	No EUI target, but likely to be 50-70 kWh/m ² /yr	AECB Retrofit standard: Published set of accompanying criteria. Modelled using PHPP and addresses other retrofit risks including moisture. Requires Retrofit or Passivhaus expert.	Good level of retrofit is being targeted, PHPP modelling can be undertaken and a recognised certification is required. The required level of quality assurance will be achieved with some additional QA processes.

Figure 4.5 - Retrofit standards and when to use them

* These figures are in GIA whereas the rest of the figures on this table are in TFA

4.5 Typical house archetype examples

So far, we have looked at the big picture to derive LETI's targets for retrofit. But what does this mean in practice? The rest of this chapter sets out a series of typical house archetypes based on average data for each building type from the stock model. We start with an existing pre-retrofit building and then show what happens when the LETI targets are applied. In some cases, we have used the 'constrained' retrofit values, whilst others show the effect of an 'unconstrained' retrofit.

In all cases, we show the pre and post-retrofit space heating demand and Energy Use Intensity as a primary measure of the impact of the retrofit. We also show the overall reduction in actual energy use for each archetype. To make the examples a bit more real, we've provided some signposts to actual case-study retrofits which are similar to the illustrative archetypes.

Retrofit improvements - the package of retrofit measures that have been undertaken to get to the post-retrofit state.

Post-retrofit energy - The total amount of energy needed over the course of a year by the building with a typical occupancy once it has been retrofitted.

Pre-retrofit energy - The total amount of energy needed over the course of a year by the building with a typical occupancy in its pre-retrofit condition.

Key

- LETI best practice unconstrained with no additional allowance
- LETI best practice constrained with additional allowance
- Additional allowance for homes under 75m²
- LETI exemplar

Delivered - the amount of energy required by the building, this is sometimes called energy consumption, it includes the effect/efficiency of the heat source. This includes the benefit of fabric and systems. Delivered energy is independent of PV generation.

Demand
Space heating demand - the heat energy that the heat pump or boiler generates to heat the home, this figure includes systems losses. The better the building fabric the lower the space heating demand. Space heating demand is independent of the type/efficiency of heat source.

Hot water demand - the heat energy that the heat pump or boiler generates to heat domestic hot water, this figure includes systems losses. Hot water demand is independent of the type/efficiency of heat source.

Total energy demand - The space heating demand; hot water demand; and the electricity required for lights, ventilation and plug loads. Energy demand is independent of the type/efficiency of heat source.

Energy Use Intensity (EUI) - the delivered energy (sometimes called energy consumption) per m² that is required by the building over the course of a year. In this document the floor area (m²) is the 'treated floor area' unless otherwise stated. This includes regulated (heating, hot water, ventilation and lighting) and unregulated (plug loads). EUI is independent of PV generation (e.g. regardless of how much PV generation is attributed to the building the EUI is the same).



Semi-detached - LETI best practice constrained retrofit

	Targets	Achieved in example
Fossil fuel free	Fossil fuel free home	Fossil fuel free home
Space heating demand	60 (50+10) kWh/m ² /yr	51 kWh/m ² /yr
Hot water demand	20 kWh/m ² /yr	20 kWh/m ² /yr
Energy Use Intensity	60 (50+10) kWh/m ² /yr	60 kWh/m ² /yr
Renewable energy	40% of roof covered in PV	40% of rooftop covered in PV



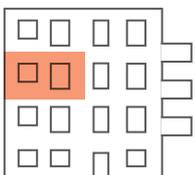
Detached - LETI best practice constrained retrofit

	Targets	Achieved in example
Fossil fuel free	Fossil fuel free home	Fossil fuel free home
Space heating demand	60 (50+10) kWh/m ² /yr	55 kWh/m ² /yr
Hot water demand	20 kWh/m ² /yr	14 kWh/m ² /yr
Energy Use Intensity	60 (50+10) kWh/m ² /yr	58 kWh/m ² /yr
Renewable energy	40% of roof covered in PV	No PV



Mid-terrace - LETI best exemplar retrofit

	Targets	Achieved in example
Fossil fuel free	Fossil fuel free home	Fossil fuel free home
Space heating demand	20 kWh/m ² /yr	16 kWh/m ² /yr
Hot water demand	20 kWh/m ² /yr	20 kWh/m ² /yr
Energy Use Intensity	40 kWh/m ² /yr	40 kWh/m ² /yr
Renewable energy	40% of roof covered in PV	40% of rooftop covered in PV



Flat - LETI best practice unconstrained retrofit

	Targets	Achieved in example
Fossil fuel free	Fossil fuel free home	Fossil fuel free home
Space heating demand	50 kWh/m ² /yr	26 kWh/m ² /yr
Hot water demand	25 (20+5) kWh/m ² /yr	24 kWh/m ² /yr
Energy Use Intensity	50 kWh/m ² /yr	49 kWh/m ² /yr
Renewable energy	40% of roof covered in PV	No PV

Figure 4.6 - Typical house archetypes from the stock model showing what could be achieved

Semi-detached example



Best practice constrained retrofit

Based on average UK building stock

Archetype data from model

Areas

Treated floor area	100 m ²
Heat loss floor	48 m ²
Roof	46 m ²
External Walls	89 m ²
Single Glazing	4 m ²
Double Glazing	16 m ²

Occupants

Adult Occupiers	2
Child Occupiers	1

Related case study

Zetland Road, Manchester

Deep retrofit of a semi-detached home originally constructed in 1894.

SIGNPOST Chapter 6 - Zetland Road case study

Energy targets

Fossil fuel free home

60
kWh/m²/yr

Energy Use Intensity (EUI) over treated floor Area (TFA) (constrained)

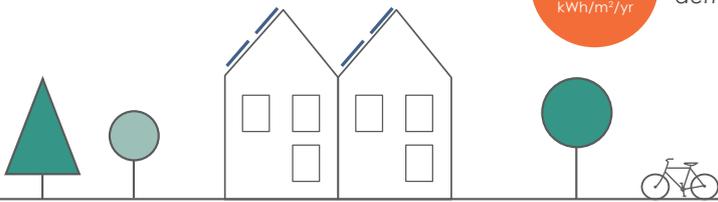
Space heating demand (constrained)

60
kWh/m²/yr

20
kWh/m²/yr

Hot water demand

40%
of roof area covered in PV panels



Retrofit improvements

Total energy demand

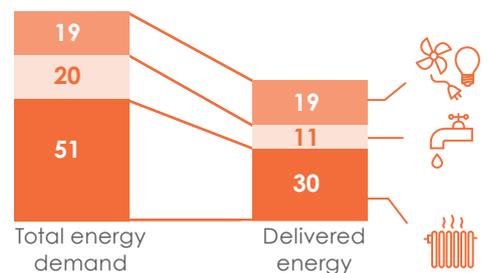
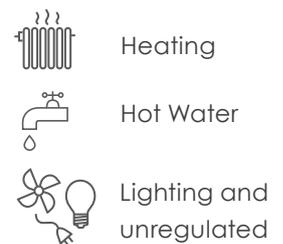
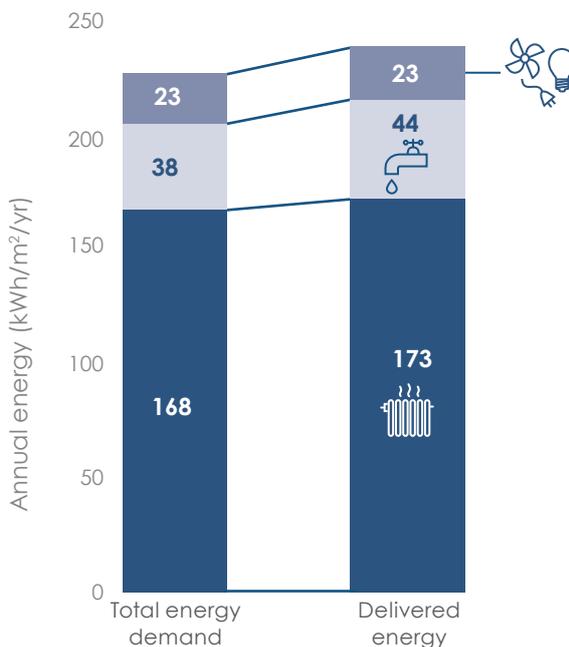
the space heating demand; hot water demand; and the electricity required for lights, ventilation and plug loads.

Delivered energy

refers to the energy consumed by the building for heating, hot water and electricity. It is called Energy Use Intensity when divided by the floor area of the building.

SIGNPOST

Annex A: How do our homes produce carbon?



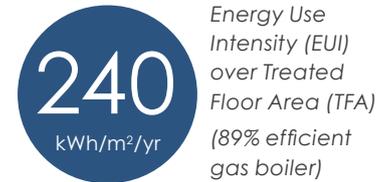


Existing specification

Fabric

Walls	Solid uninsulated walls	Existing	1.35 W/m ² .K
Floors	Uninsulated suspended timber floors		1.00 W/m ² .K
Roof	Minimal loft insulation		1.00 W/m ² .K
Glazing	Single glazing		4.80 W/m ² .K
	Double glazing		2.00 W/m ² .K
Air Tightness	Leaky building		11.50 ach@50Pa
Thermal Bridging	High thermal bridging		0.20 W/m.K

Pre-retrofit



Systems



Space heating
Gas

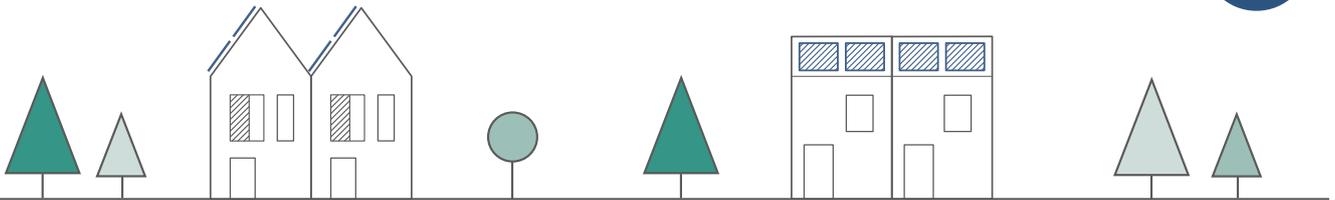


Hot Water

Shower Use 35.5 litres/person/day
Other Uses 15 litres/person/day
Tank Insulation 3.0 W/K
Pipe Insulation 0% (percentage of the overall primary pipe length (heat source to heat store) that is insulated)



Ventilation
Natural (with extract fans)



Final specification

Fabric

		Best practice			
		Unconstrained	Constrained	Exemplar	
Walls	Internal wall insulation	0.18 W/m ² .K	<u>0.32 W/m².K</u>	0.15 W/m ² .K	Underlined values have been used to achieve the post-retrofit EUI and space heating demand
Floors	Insulated between joists	0.18 W/m ² .K	<u>0.20 W/m².K</u>	0.15 W/m ² .K	
Roof	Additional loft insulation	0.12 W/m ² .K	<u>0.12 W/m².K</u>	0.12 W/m ² .K	
Glazing	Replace glazing	1.00 W/m ² .K	<u>1.30 W/m².K</u>	0.8 W/m ² .K	
Air Tightness	Draught-proofing and sealing	2.00 ach@50Pa	<u>3.00 ach@50Pa</u>	1.0 ach@50Pa	
Thermal Bridging	Mitigated	0.10 W/m.K	<u>0.10 W/m.K</u>	0.08 W/m.K	

Systems



Space heating
ASHP



Hot water

Use of low flow fittings and improved insulation

Shower use 16 litres/person/day
Other uses 9 litres/person/day
Tank insulation 1.5 W/K
Pipe insulation 90%

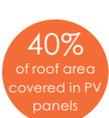


Ventilation
MVHR

Renewables



Photovoltaics
40% of rooftop fitted with PV



(percentage of the overall primary pipe length (heat source to heat store) that is insulated)

Post-retrofit



Detached example



Best practice constrained retrofit

Based on average UK building stock

Archetype data from model

Areas

Treated floor area	172 m ²
Heat loss floor	83 m ²
Roof	78 m ²
External Walls	162 m ²
Single Glazing	12 m ²
Double Glazing	25 m ²

Occupants

Adult Occupiers	2
Child Occupiers	1

Related case study

The Nook, Brighton

Deep retrofit of a detached, 6 bedroom home "hard to treat" home.

Chapter 6 - The Nook case study

Energy targets

Fossil fuel free home



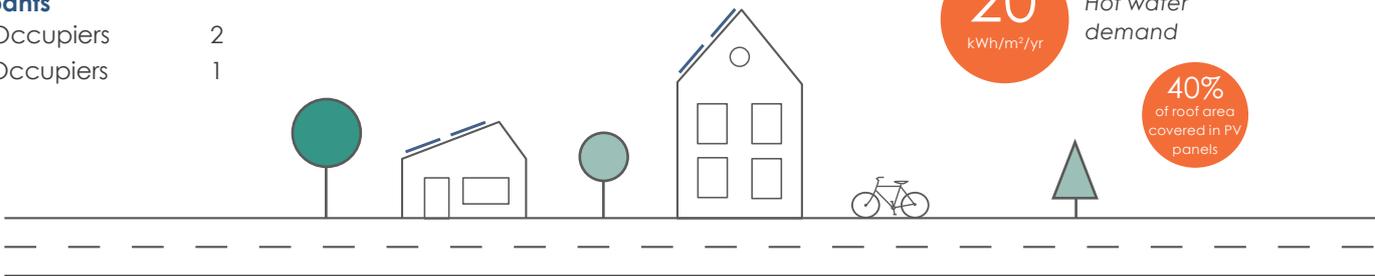
Energy Use Intensity (EUI) over treated floor Area (TFA) (constrained)

Space heating demand (constrained)



Hot water demand

40% of roof area covered in PV panels



Retrofit improvements

Total energy demand

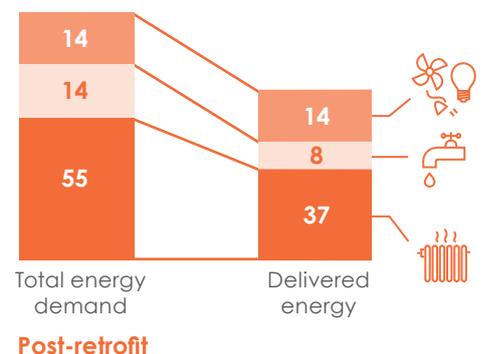
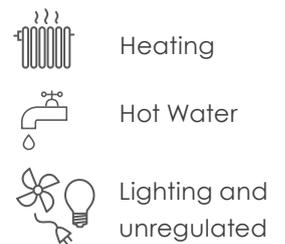
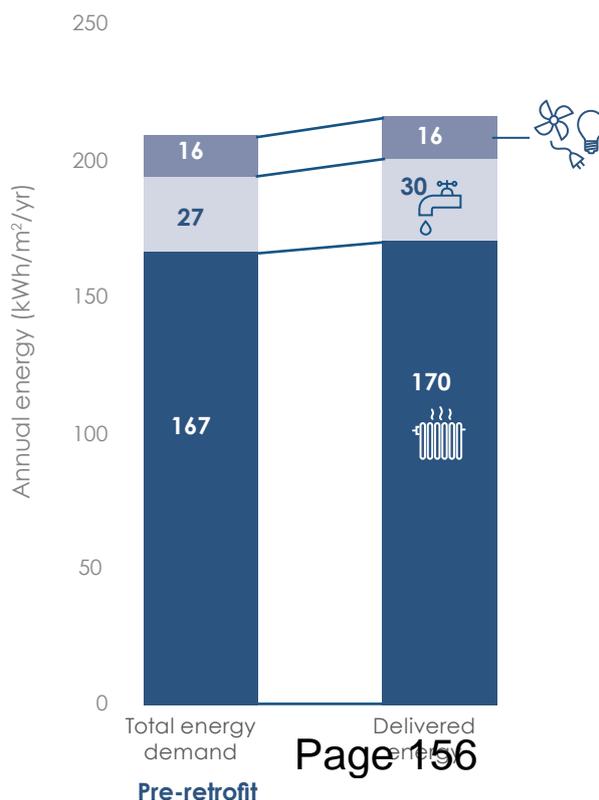
the space heating demand; hot water demand; and the electricity required for lights, ventilation and plug loads.

Delivered energy

refers to the energy consumed by the building for heating, hot water and electricity. It is called Energy Use Intensity when divided by the floor area of the building.

SIGNPOST

Annex A: How do our homes produce carbon?





Existing specification

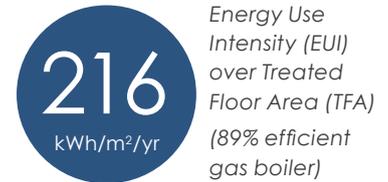
Fabric

Walls	Solid uninsulated walls
Floors	Uninsulated solid floors
Roof	Minimal loft insulation
Glazing	Single glazing Double glazing
Air Tightness	Leaky building
Thermal Bridging	High thermal bridging

Existing

Walls	1.35 W/m ² .K
Floors	0.80 W/m ² .K
Roof	1.00 W/m ² .K
Glazing	4.80 W/m ² .K
Air Tightness	2.00 W/m ² .K
Thermal Bridging	11.50 ach@50Pa
Thermal Bridging	0.20 W/m.K

Pre-retrofit



Systems

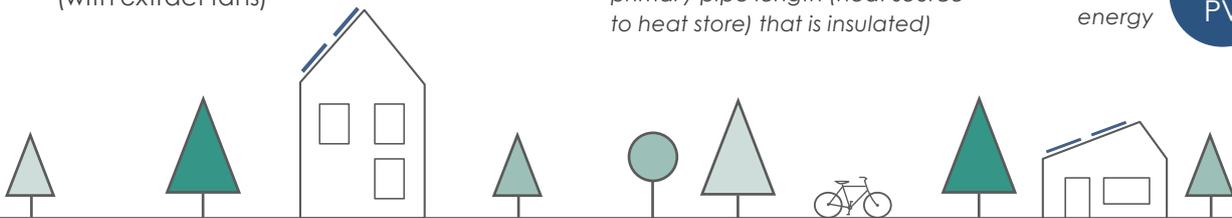
Space heating
Gas

Ventilation
Natural (with extract fans)



Hot Water

Shower Use	35.5 litres/person/day
Other Uses	15 litres/person/day
Tank Insulation	3.0 W/K
Pipe Insulation	0% (percentage of the overall primary pipe length (heat source to heat store) that is insulated)



Final specification

Best practice

Fabric

Walls	Internal wall insulation
Floors	No action
Roof	Additional loft insulation
Glazing	Replace glazing
Air Tightness	Draught-proofing and sealing
Thermal Bridging	Mitigated

Unconstrained

Walls	0.18 W/m ² .K
Floors	0.18 W/m ² .K
Roof	0.12 W/m ² .K
Glazing	1.00 W/m ² .K
Air Tightness	2.00 ach@50Pa
Thermal Bridging	0.10 W/m.K

Constrained

Walls	<u>0.32 W/m².K</u>
Floors	<u>0.80 W/m².K</u>
Roof	<u>0.12 W/m².K</u>
Glazing	<u>1.30 W/m².K</u>
Air Tightness	<u>3.00 ach@50Pa</u>
Thermal Bridging	<u>0.10 W/m.K</u>

Exemplar

Walls	0.15 W/m ² .K
Floors	0.15 W/m ² .K
Roof	0.12 W/m ² .K
Glazing	0.8 W/m ² .K
Air Tightness	1.0 ach@50Pa
Thermal Bridging	0.08 W/m.K

Underlined values have been used to achieve the post-retrofit EUI and space heating demand

Systems

Space heating
ASHP

Ventilation
MVHR



Hot water

Use of low flow fittings and improved insulation

Shower use	16 litres/person/day
Other uses	9 litres/person/day
Tank insulation	1.5 W/K
Pipe insulation	90%

(percentage of the overall primary pipe length (heat source to heat store) that is insulated)

Post-retrofit



Renewables

Photovoltaics
None



Mid-terrace example



Exemplar retrofit

Based on average UK building stock

Archetype data from model

Areas

Treated floor area	85 m ²
Heat loss floor	41 m ²
Roof	40 m ²
External Walls	49 m ²
Single Glazing	1 m ²
Double Glazing	13 m ²

Occupants

Adult Occupiers	2
Child Occupiers	1

Related case study

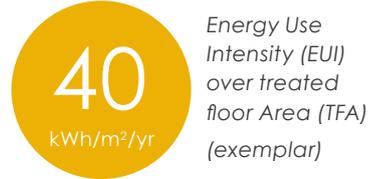
Haddington Way, Aylesbury

A comprehensive retrofit for a row of terraced homes.

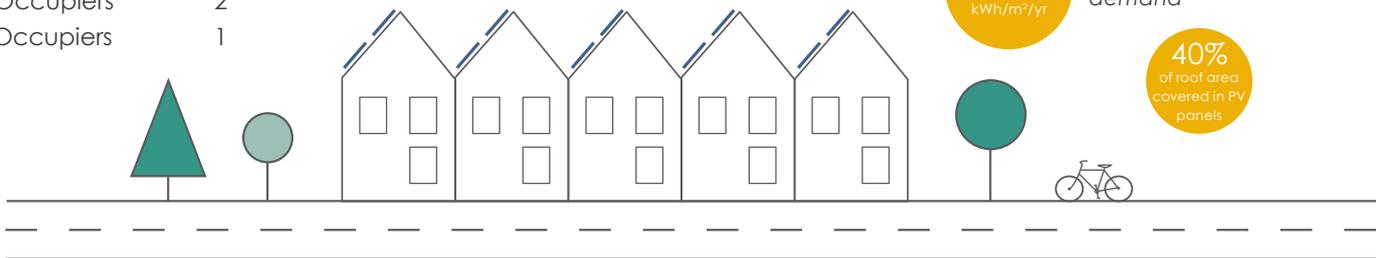
SIGNPOST Chapter 6 -
Haddington Way case study

Energy targets

Fossil fuel free home



40% of roof area covered in PV panels



Retrofit improvements

Total energy demand

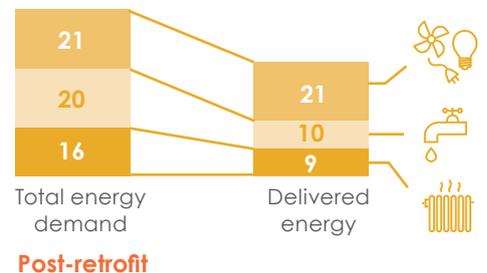
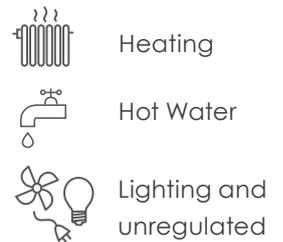
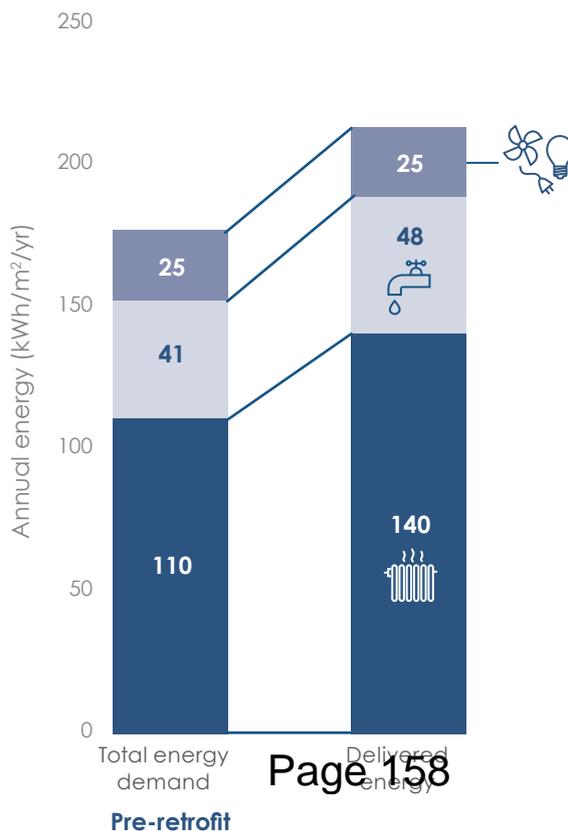
the space heating demand; hot water demand; and the electricity required for lights, ventilation and plug loads.

Delivered energy

refers to the energy consumed by the building for heating, hot water and electricity. It is called Energy Use Intensity when divided by the floor area of the building.

SIGNPOST

Annex A: How do our homes produce carbon?





Existing specification

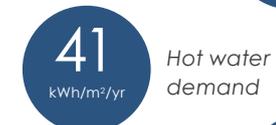
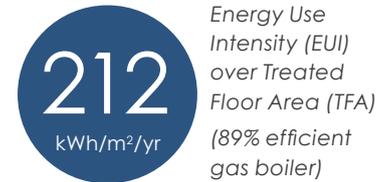
Fabric

Walls	Cavity uninsulated walls
Floors	Uninsulated solid floors
Roof	Minimal loft insulation
Glazing	Single glazing Double glazing
Air Tightness	Leaky building
Thermal Bridging	High thermal bridging

Existing

Walls	1.00 W/m ² .K
Floors	0.35 W/m ² .K
Roof	1.00 W/m ² .K
Glazing	4.80 W/m ² .K
Air Tightness	2.00 W/m ² .K
Air Tightness	11.50 ach@50Pa
Thermal Bridging	0.20 W/m.K

Pre-retrofit



Systems

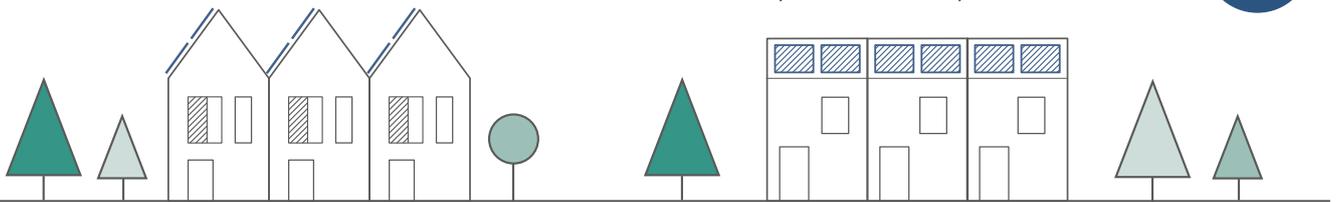
Space heating
Gas

Ventilation
Natural (with extract fans)



Hot Water

Shower Use 35.5 litres/person/day
Other Uses 15 litres/person/day
Tank Insulation 3.0 W/K
Pipe Insulation 0% (percentage of the overall primary pipe length (heat source to heat store) that is insulated)



Final specification

Fabric

Walls	Cavity and external insulation
Floors	Insulate below new screed
Roof	Additional loft insulation
Glazing	Replace glazing
Air Tightness	Draught-proofing and sealing
Thermal Bridging	Mitigated

Best practice

Unconstrained	Constrained	Exemplar
0.18 W/m ² .K	0.32 W/m ² .K	<u>0.15 W/m².K</u>
0.18 W/m ² .K	0.20 W/m ² .K	<u>0.15 W/m².K</u>
0.12 W/m ² .K	0.12 W/m ² .K	<u>0.12 W/m².K</u>
1.00 W/m ² .K	1.30 W/m ² .K	<u>0.8 W/m².K</u>
2.00 ach@50Pa	3.00 ach@50Pa	<u>1.0 ach@50Pa</u>
0.10 W/m.K	0.10 W/m.K	<u>0.08 W/m.K</u>

Underlined values have been used to achieve the post-retrofit EUI and space heating demand

Systems

Space heating
ASHP

Ventilation
MVHR



Hot Water

Use of low flow fittings and improved insulation

Shower use 16 litres/person/day
Other uses 9 litres/person/day
Tank insulation 1.5 W/K
Pipe insulation 90%

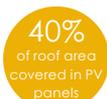
(percentage of the overall primary pipe length (heat source to heat store) that is insulated)

Post-retrofit

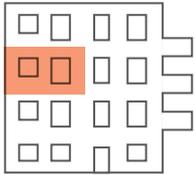


Renewables

Photovoltaics
40% of rooftop fitted with PV



Flat example



Best practice unconstrained retrofit

Based on average UK building stock

Archetype data from model

Areas

Treated floor area	73 m ²
Heat loss floor	34 m ²
Roof	18 m ²
External Walls	48 m ²
Single Glazing	1 m ²
Double Glazing	10 m ²

Occupants

Adult Occupiers	1
Child Occupiers	1

Related case study

Wilmcote House, Portsmouth

Retrofit of an existing 11 storey housing estate with residents in occupation.

SIGNPOST Chapter 6 - Wilmcote House case study

Energy targets

Fossil fuel free home

50
kWh/m²/yr

Energy Use Intensity (EUI) over treated floor Area (TFA) (unconstrained)

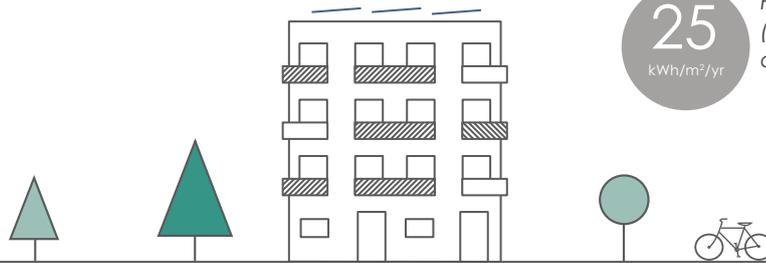
Space heating demand (unconstrained)

50
kWh/m²/yr

25
kWh/m²/yr

Hot water demand (additional allowance)

40% of roof area covered in PV panels



Retrofit improvements

Total energy demand

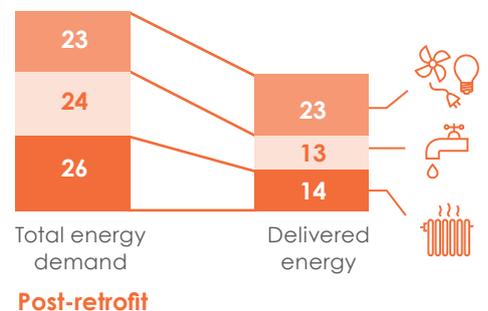
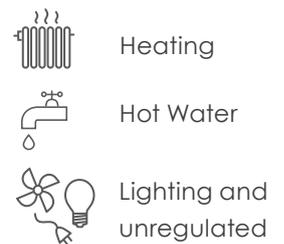
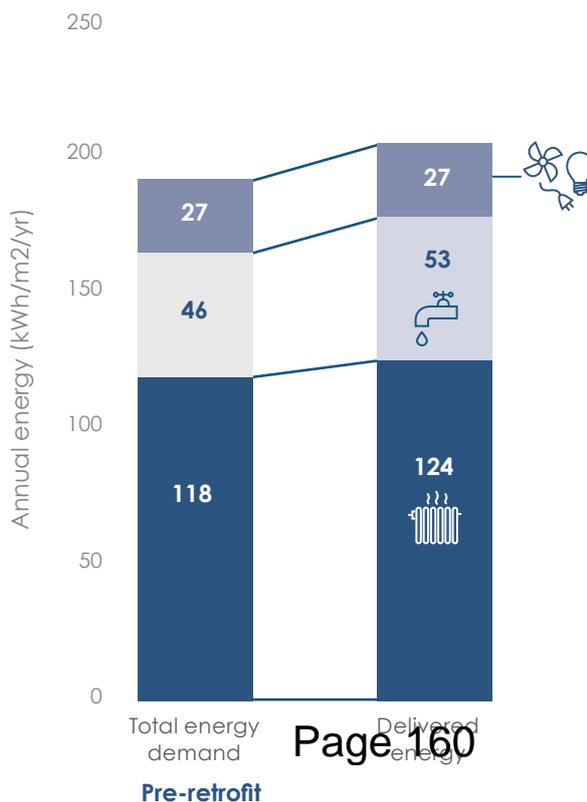
the space heating demand; hot water demand; and the electricity required for lights, ventilation and plug loads.

Delivered energy

refers to the energy consumed by the building for heating, hot water and electricity. It is called Energy Use Intensity when divided by the floor area of the building.

SIGNPOST

Annex A: How do our homes produce carbon?





Existing specification

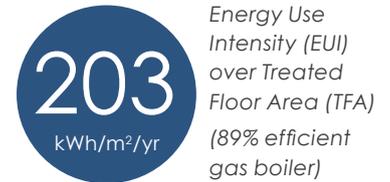
Fabric

Walls	Insulated cavity walls
Floors	Uninsulated solid floors
Roof	Minimal loft insulation
Glazing	Single glazing Double glazing
Air Tightness	Leaky building
Thermal Bridging	High thermal bridging

Existing

Walls	0.43 W/m ² .K
Floors	0.35 W/m ² .K
Roof	1.00 W/m ² .K
Glazing	4.80 W/m ² .K
Air Tightness	11.50 ach@50Pa
Thermal Bridging	0.20 W/m.K

Pre-retrofit



Systems

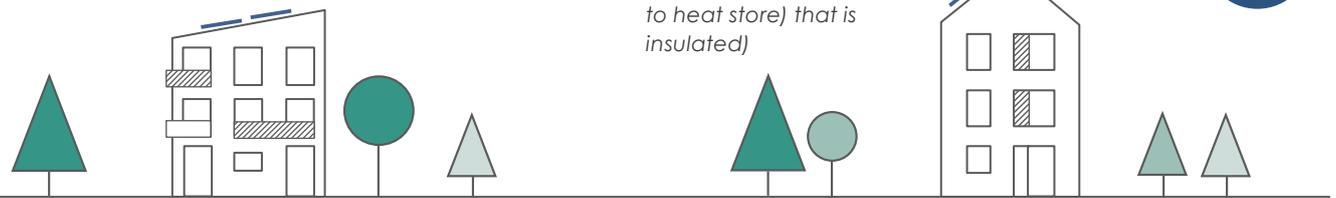
Space heating
Gas

Ventilation
Natural (with extract fans)



Hot Water

Shower Use 35.5 litres/person/day
Other Uses 15 litres/person/day
Tank Insulation 3.0 W/K
Pipe Insulation 0% (percentage of the overall primary pipe length (heat source to heat store) that is insulated)



Final specification

Fabric

Walls	External wall insulation
Floors	Insulated below new screed
Roof	Additional loft insulation
Glazing	Replace glazing
Air Tightness	Draught-proofing and sealing
Thermal Bridging	Mitigated

Best practice

Unconstrained	Constrained	Exemplar
<u>0.18 W/m².K</u>	0.32 W/m ² .K	0.15 W/m ² .K
<u>0.18 W/m².K</u>	0.80 W/m ² .K	0.15 W/m ² .K
<u>0.12 W/m².K</u>	0.12 W/m ² .K	0.12 W/m ² .K
<u>1.00 W/m².K</u>	1.30 W/m ² .K	0.8 W/m ² .K
<u>2.00 ach@50Pa</u>	3.00 ach@50Pa	1.0 ach@50Pa
<u>0.10 W/m.K</u>	0.10 W/m.K	0.08 W/m.K

Underlined values have been used to achieve the post-retrofit EUI and space heating demand

Systems

Space heating
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Use of low flow fittings and improved insulation

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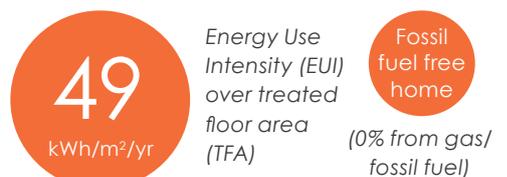
(percentage of the overall primary pipe length (heat source to heat store) that is insulated)

Renewables

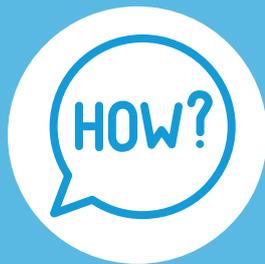
Photovoltaics
None

No PV

Post-retrofit



5



How do we
do it?

5.1 Introduction

This section provides LETI's outline process and key practical guidance for carrying out retrofit. It is intended as an overview not detailed guidance, as there are a lot of fantastic resources already available - a selection of which are provided in Annex J. This section is also intended to complement, not replace, existing guidance, retrofit tools and accreditations such as PAS2035, the STBA Retrofit Wheel, the AECB Retrofit Standard, and step by step EnerPhit (see Annex I for how the LETI Process maps onto PAS 2035).

- ▶ **SIGNPOST** *Annex I: LETI Retrofit Process and PAS 2035*
- ▶ **SIGNPOST** *Annex J: References and further information*

5.2 Whole building approach and Retrofit Plan

Retrofit can be complex. There are a lot of factors at play: from technical constraints, like how the existing foundations are constructed; to the number of people living in the building, how much time they spend there and their individual preferences for heating and hot water; to whether there is enough money available to do everything at once or whether it needs to be done gradually.

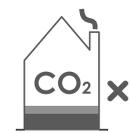
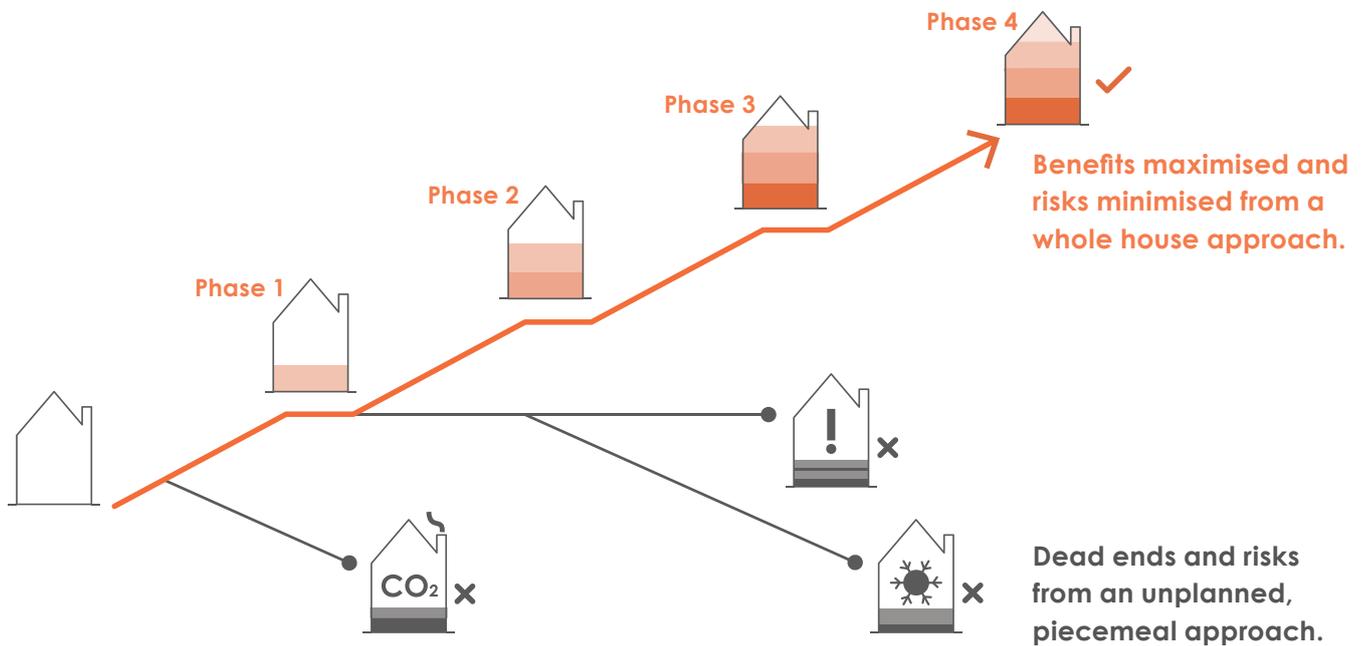
In order to successfully deliver energy savings and health and comfort improvements, a coordinated approach is needed for the whole building. The whole building might be one home, a number of connected homes in a terrace or block of flats, or have multiple uses. The work might be a whole retrofit in one go, or just one element at a time, for example replacing something that's worn out. This is called a 'whole building approach' and to do it a 'Retrofit Plan' will need to be created. (See Chapter 2 for the benefits of a whole building approach and the risks of a piecemeal approach).

5.3 Issues with a piecemeal approach

A conventional approach to refurbishing homes is to change each element individually without considering the building as a whole. Carrying out a single piece of maintenance or improvement work as an opportunity arises is not a problem in itself, but it needs to be part of a phased and planned retrofit approach. Dealing with different parts of the building piecemeal, even if 'upgrading' the individual element, can result in negligible energy and carbon savings and potentially damage to the building.

Figure 5.1 illustrates how a whole-building approach can deliver the most benefits and avoid unintended consequences.

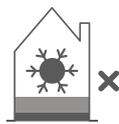
- ▶ **SIGNPOST** *Chapter 2 - What is retrofit?*



A piecemeal approach can fail to deliver the energy and carbon savings predicted.

The building is a complex system and isolated interventions that may be bypassed by other bits of poor building fabric, have less impact than a considered approach to the whole building.

The occupants will also rightly take the 'improvement in comfort'^{5.1} first, meaning the retrofit has to go further to reduce overall energy use.



A piecemeal approach can lead to works obstructing future improvements preventing the full benefits from being realised.

A piecemeal approach can obstruct or lock in quality constraints that impede later stages of retrofit. For example installing a new fitted kitchen that prevents floor insulation and internal wall insulation from being installed to an adjacent neighbouring wall.



A piecemeal approach can cause damage to health and the building structure.

Local measures might change the internal conditions and put more stress on other parts of the home. For example replacing windows could reduce the air infiltration and so ventilation rate to the home, causing damp and poor air quality.



A whole house approach delivers the maximum benefit with the least risk.

Work is phased, meaning interventions can be designed to work together to deliver the most benefit as effectively as possible. Initial phases of work can be planned to prepare for, and not block, work in the future phases. The health of the occupants and the building can be protected throughout.

Figure 5.1 - Piecemeal versus whole house approach diagram.

5.4 A Retrofit Plan for the whole building

Before you start a retrofit it is critical to have completed a plan for the whole building, even if you are doing just a small piece of work.

A Retrofit Plan is a masterplan for all the individual pieces of work needed to improve the home, and how these interrelate. This means that when one piece of work is carried out, it can consider the impact on future phases. The Retrofit Plan might change over time, but gives a snapshot of the intention, and helps think through the consequences.

A Retrofit Plan might also be called a Whole House Plan, or be a part of a Building Renovation Passport. Building Renovation Passports are emerging in other countries and are being considered in the UK as a way of formally recording information about a building that can be shared publicly, or between owners in a digital building logbook. This would also include predicted energy performance and actual energy consumption. All these developments are an excellent step forward, however in the meantime a simple list or short document can fulfil the purpose.

The Retrofit Plan can be prepared by an architect competent in retrofit, or a specialist builder. Where required the Retrofit Plan can be prepared by someone with a Retrofit Coordinator Level 5 diploma qualification and registered with TrustMark. This could be for additional reassurance, to meet grant funding requirements, or to comply with PAS 2035. PAS 2035 is soon to be a requirement on all publicly funded retrofit projects.

► **SIGNPOST** *Annex I: LETI Retrofit Process and PAS 2035*



This 'Retrofit Plan' should:



Set out key building information, constraints, risks, and opportunities related to the building and context (e.g. flood risk zone, local air pollution, shading and overheating risk, heritage value, client's requirements).



Set out the key works proposed along with related strategies and details. As a minimum it must cover:

- Maintenance items that need to be resolved before making changes
- Ventilation strategy for each phase
- The insulation and airtightness strategy enclosing the building for walls, floors and roofs
- The window and door upgrade strategy
- Critical junctions between upgraded fabric elements that will need to be designed.



Set out the sequence of work. The strategy should highlight opportunities to phase the works, ensure that the design and package of measures for each part integrates with the complete retrofit, avoids obstructing future work phases, and functions in itself without causing issues with the internal conditions or structure of the home.



Be appropriate in its level of detail and intervention for the building size, context, use, owner and occupants, scope of work, and heritage value. For an owner-occupier single dwelling it might be very simple, for example a short document. For a complex historic building or a landlord-owned block containing hundreds of properties, it is likely to be a very comprehensive document.



Include a plan for monitoring and reporting energy consumption. This might include a predicted energy consumption calculation during design for comparing back to once complete, sub-metering of heating, groups of homes and electric cars, or simply an upgrade to a smart meter.



Stay with the building, recorded in a way that can be handed over to future owners. It should also be a live document, that records works that are undertaken, and may be revised with new proposed strategies and details.

Figure 5.2 - Retrofit Plan guidelines.

5.5 The LETI Retrofit Process

Overview and how the Retrofit Plan fits in

This chapter sets out the LETI 'Retrofit Process', aiming to provide a simple, widely applicable framework to help guide building owners, developers, designers, and contractors through the stages of their retrofit project.

The Retrofit Process flowchart is broken down into the following stages:

- 1 **Define the project and outcomes**
- 2 **Understand the building and risks**
- 3 **Plan and evaluate the improvements**
- 4 **Install and commission**
- 5 **Check outcomes**

Information produced throughout the process should be recorded in the Retrofit Plan. The stages of the Retrofit Process flowchart can be used as the structure/headings of a building's Retrofit Plan.

Note on mapping onto other tools

The Retrofit Process has been set out so that it neatly maps onto the common design approach described in the RIBA Plan of Work. It has also been designed to sit alongside and compliment PAS 2035. See Annex I for more details on mapping the LETI Retrofit Process onto PAS 2035.

▶ **SIGNPOST** *Annex I: LETI Retrofit Process and PAS 2035*

Things to remember

The LETI Retrofit Process endeavours to provide a widely applicable yet flexible approach to the retrofit of existing buildings, acknowledging that:

1. Retrofitting buildings is a complex process with existing buildings being diverse in age, materials, construction, condition, location, purpose, and owner. Each retrofit project requires consideration and often individual treatment and some bespoke solutions.
2. There will be differences between some buildings and owners / occupiers. As such, some parts of the framework may be more or less relevant for certain projects (e.g. a housing association vs an owner-occupier). However, many of the core decision points are common across projects. Steps that are relevant only to certain kinds of projects are highlighted/separated in the Process.
3. A lot of decisions are interconnected. An iterative process is required, where decisions are considered in the round and initial decisions are revisited and refined as the project progresses and more information is available. The Retrofit Process is intended to be used in this iterative way.

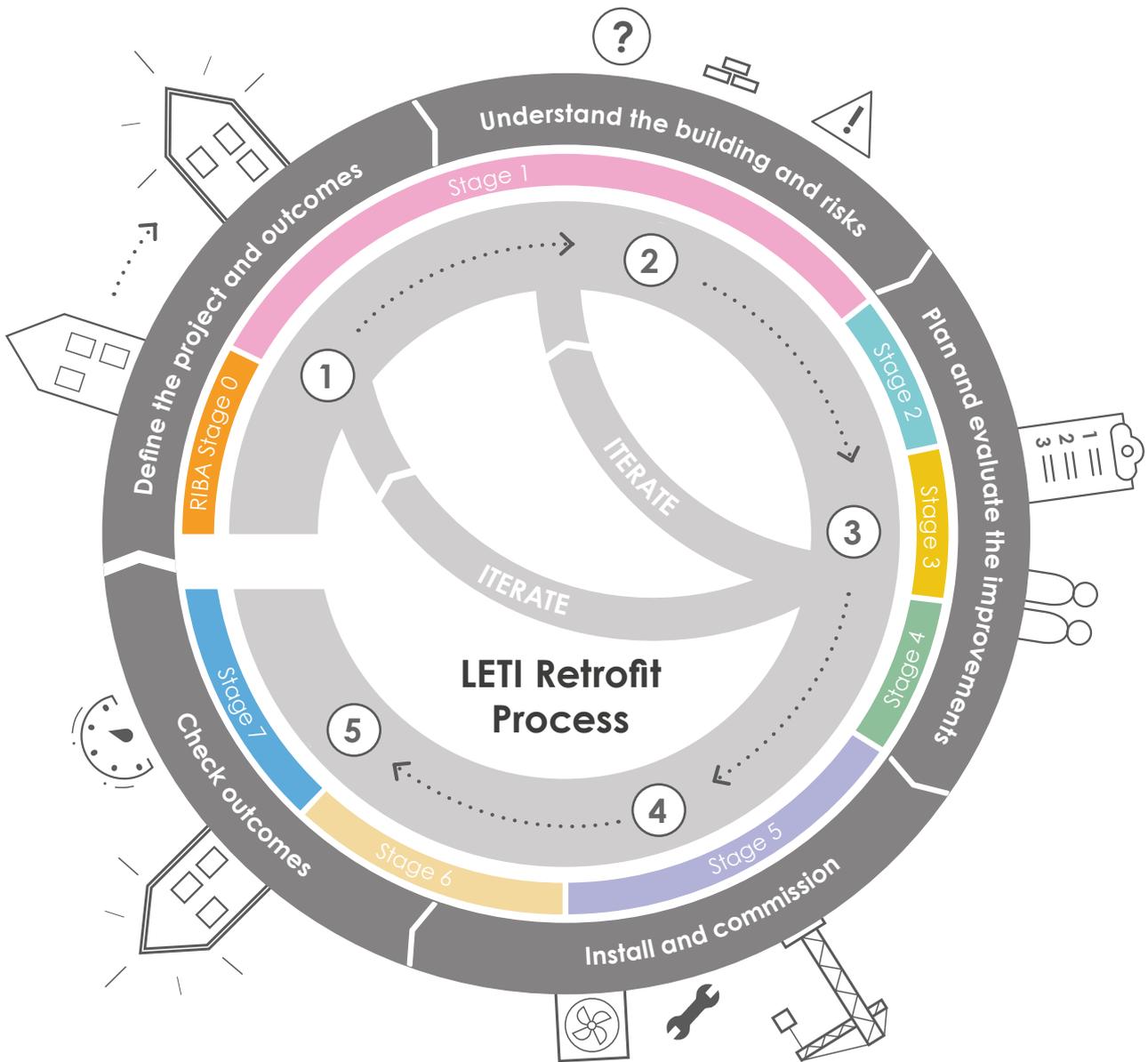
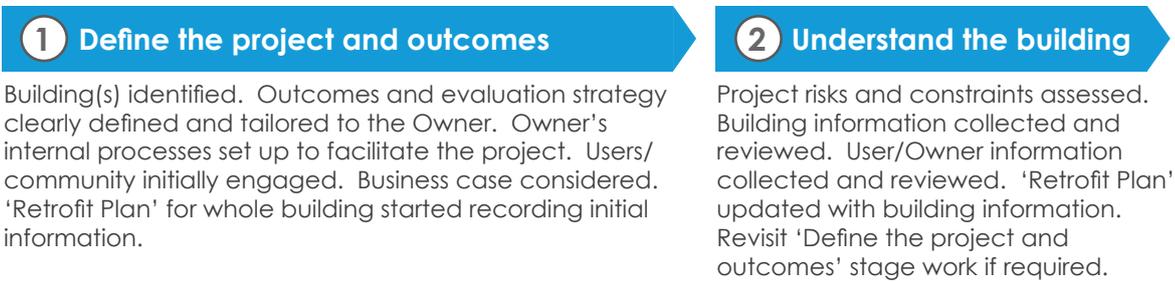


Figure 5.3 - LETI Retrofit Process summary diagram showing the key stages and how, where necessary, early design and evaluation gives a chance to revisit the project definition and building evaluation with new information.

RIBA Stages: Stages 0-1 Strategic definition, preparation and brief

LETI Retrofit Process Stages



Sub-Stages



Building users + Team	Get professional help from an early stage	Owner and user engagement on project, aims challenges and insights			Interview occupants for insights (inc. on fire safety) If owner is an organisation: Collect insights and constraints from owner and FM team
General	Identify the building to be retrofitted in this project and consider coordinating with neighbours If part of a portfolio: Identify and review portfolio to be retrofitted Set out retrofit roadmap for rest of portfolio Consider coordinating with other landlords	If tenanted or large scale: Define community and carry out initial community engagement If owner is an organisation: Review of owner constraints for project (e.g. procurement reqs, existing sustainability initiatives, decision making) Establish internal decision making processes for project	Agree retrofit outcomes (energy, health, comfort targets and certifications). Set energy targets using the flowchart in Section 4.4 Agree non-retrofit outcomes and improvement works Agree monitoring, evaluation, and dissemination strategy Prepare a business case	Research the building and context assess constraints and risk (initial assessment, largely desktop based) Check heritage value Check flood risk Check radon gas risk	Survey the building and assess findings (inc. existing monitoring data, existing condition, existing ventilation strategy, any retrofit measures already installed) Review fire safety Review and confirm retrofit outcomes
Retrofit Plan			Start Retrofit Plan, recording building owner and outcomes information		Update Retrofit Plan with risk, constraints, and other information



Stages 2-4 Concept design, spatial coordination and technical design

Stages 5-7 Manufacturing and construction, handover and use

3 Plan and evaluate the improvements

Improvement options have been designed and evaluated. A plan is in place for how to deliver them. Alternative options explored as required. Detailed evaluations and modelling undertaken as required. 'Retrofit Plan' updated with strategy and design information. Revisit 'Define the Project' and 'Understanding The Building' stage work if required.

4 Install and commission

Construction team and quality control set up. Works undertaken. Works are performing as intended. Users/Owner are ready to operate building. Retrofit Plan updated to record works done and site any discoveries.

5 Check outcomes

Building continues to perform as intended. Users/Owner are satisfied. Learning reviewed/disseminated. Retrofit Plan updated and kept with building.



User engagement and buy-in to works and delivery strategy

Engage the construction team

Liaise with building users throughout construction

Train users / owner how to operate the building

Review project with whole team, users and FM team + Including users interviews

- Identify critical and future maintenance items
- Identify easy wins
- List improvement options
- Evaluate options and model as required

Produce phasing plan
Consider delivery and procurement strategy

Prepare Design and specification and carry out any further modelling / evaluation as required

Share Retrofit Plan with whole team and ensure everyone understands it.

Identify a **site quality champion**

Set up **quality checks**

Undertake construction. Including any enabling works

Commission the building at completion

Check performance against targeted outcomes

Monitor performance to check building is performing as intended and client and users happy
Disseminated learning

Diagnose and resolved any issues. Additional checks as required

Wherever possible:
Whole life carbon assessment

Wherever possible:
Comprehensive monitoring over a number of years.

Update Retrofit Plan, inc. retrofit strategy, phasing, whole-life value, and design

Update Retrofit Plan inc. works complete, changes to phases, site discoveries

Update Retrofit Plan inc. evaluations and remedial work, Keep with building

Figure 5.4 - LETI Retrofit Process flowchart mapped onto RIBA work stages

5.6 Detail on following the LETI Retrofit Process

Overview and how the whole house plan fits in

This section provides more information on some of the steps in the LETI Retrofit Process. The headings of the Process can be used to organise the Retrofit Plan document (sometimes also referred to as a 'Whole House Plan' document, 'Building Renovation Passport', or 'Building Logbook').

A lot of information is included to cover a wide range of project scales and tenure. Not all the sections will be relevant to all projects.

1 Define the project and outcomes



Identify the building(s)

For a single home this is simple, but for flats or terrace housing the Retrofit Plan may cover more than one dwelling.

Consider coordinating with neighbours or landlords to reduce the cost and have more impact. E.g. retrofitting a whole terrace rather than individual houses.

For landlords consider reviewing all of the stock and creating a retrofit strategy and roadmap for the whole portfolio. This might break the stock down into archetypes to be tackled with repeatable approaches. Consider coordinating with other landlords.

► **SIGNPOST** Annex B: Table of example opportunities for starting retrofit

Talk to the building users and owner

You will need to talk to everyone using or with an interest in the building to explain the plan and aims of the project. Eventually the benefits, cost, timeline and what works are proposed may need to be communicated.

For landlords, consider whether there are existing initiatives, departments, decision makers, or procurement restrictions that need to be considered while forming the project. Consider setting up a project board to streamline decision making.



Set a baseline

Consider using available energy, water, temperature, or indoor air quality data to set a baseline case for the retrofit. Calculate current EUI from past energy bills, estimate current space heat demand. This gives something to compare the completed work against. For long term projects you could install monitoring equipment to gather data on your baseline.

Agree outcomes

Set the retrofit outcomes. Set a target, LETI best practice unconstrained, constrained or LETI exemplar) and which route will be taken (the modelling method which has energy targets or the constituent element method that sets fabric and system targets) using the flowchart in section 4.4. In addition set targets on health and comfort improvements. Be aspirational, even if there is limited funding available to start with, the Retrofit Plan should aim for the maximum benefit.

▶ **SIGNPOST** *Chapter 4 - LETI home retrofit targets*

This guide starts with the goal of reducing energy demand and carbon emissions, but others might have different motivations that can be integrated with the plan. Refer to Section 2.2 'Benefits of retrofit' section to justify why. Outcomes should be clear, measurable, meaningful targets against the baseline established.

▶ **SIGNPOST** *Chapter 1 - Why retrofit?*

▶ **SIGNPOST** *Chapter 2 - What is retrofit?*

Consider any other maintenance or improvement works that could happen at the same time. For example an extension to give more space, or improving fire safety.

Form a high-level plan for how the outcomes will be measured and learning shared. It's easy for this to be forgotten if left until the end. Consider using a certification or a building energy standard such as the AECB Retrofit Standard or EnerPhit.

Get professional help

Setting the right outcomes is important for a successful retrofit. Consider getting professional help at an early stage and making a plan for the full team that you'll need later. You may also be required to have a Retrofit Coordinator if you are seeking grant funding or required to follow PAS 2035.

Prepare a business case

This can help communicate the benefits formally. The business case should aim to cover the whole life cost (including energy and maintenance savings, increased asset value, etc.), the cost of alternatives, and the value in non-financial benefits. For small projects, a simple budget and a description of the benefits may be enough; for larger projects a 30-40 year cash flow and net present value (NPV) calculation may be useful.

Itemise the cost of any non-retrofit works separately. E.g. Amenity improvements, replacing kitchen/bathrooms, fire safety improvements.

2 Understand the building



Research the building context

Use mapping and image data to get some initial information about the building. Research planning history. Consider the constraints on retrofit (space, external appearance, conservation, context). Where is the access to the building? Are there external walls onto a street or public highway? Are there external walls onto a neighbouring property? Is the roof line affected by neighbouring properties?

Use the PAS2035 risk assessment process to categorise the building and proposed work as appropriate

Check heritage value

Find out if the property or neighbours are listed or in a conservation area. Resources: Listed buildings in England: <https://historicengland.org.uk/listing/the-list/> Your local authority will have a map showing conservation areas on their website. Works to listed buildings should be planned by a professional and will need planning permission. External works visible from the front of the property in a conservation area are likely to need planning permission.

Even if a building is not listed or in a conservation area, there may be other external factors that will influence the retrofit design. The homeowner or neighbours may value the appearance of the building or group of buildings and the historical context should be considered.

If the project is following PAS 2035, a conservation 'significance assessment' will be needed, following BS 7913:2013 (Guide to the Conservation of Historic Buildings). Based on the heritage value review targets set in stage 1 if required.

Check flood risk

Buildings with a high risk of flooding should take steps to mitigate flood damage as part of the retrofit. Check flood risk at <https://flood-warning-information.service.gov.uk/long-term-flood-risk>

Check radon gas risk

Buildings in an area with a high risk of Radon can use the retrofit to check infiltration into the building and reduce the chance of build up. Check whether the building is in a radon risk zone <https://www.ukradon.org/information/ukmaps>

Review fire safety

Existing buildings may not meet fire safety standards. Making alterations to existing buildings may affect their fire safety. Ensure retrofit works do not degrade fire safety. Consider measures to improve fire safety as part of the planned works. Single homes must be checked against the building regulations approved document Part B, which may provide enough information. But for more than one home or larger projects a specialist should be employed to survey and review fire safety as part of the works. Speak to building users for insights on current fire safety.



Survey the building

Visit the property to carry out a survey for retrofit. Inspect surfaces for damage and identify key barriers for improvements (such as space constraints preventing the addition of insulation). List the main constructions for walls, roofs and floors. Identify whether the construction is vapour open and relies on moisture escaping internally. Some invasive surveys will be required. Look in sockets, look in the loft at the tops of walls, look under the carpet. In areas where the details of the existing building fabric or construction can not easily be ascertained, note what further surveys or investigation during the start of works are needed. Alter the Retrofit Plan.

List the types of window and doors, material, glazing type, approximate age. Identify areas where the window position could limit the insulation depth, for example on a flanking wall. Look out for any windows close to a wall return that could limit the insulation depth.

Based on what has been found out, review and confirm targets set in stage 1. For example one of the walls may have space constraints thus the constrained U-value for this element may now be targeted).

Identify the current ventilation strategy for each room or area. Identify the current heating system type(s), fuel, and all heat source and hot water tank locations. Identify main service incoming locations and likely pipe runs.

Record all areas of internal and external damp and moisture and weathering. Identify external cracks, external damage or other possible structural issues. Note external ground levels in relation to internal floor levels. Note drain locations.

Consider and catalogue materials that can be reused or recycled. For further guidance see <https://www.leti.london/ecp>

Resources: If you are not confident inspecting the building consider a RICS building condition survey. <https://www.ribuild.eu/know-your-building>

Identify other surveys that may be required.

Interview the residents

Talk to the residents to understand issues with their home such as leaks, damp patches, hot or cold areas. Occupants will have knowledge about damp, draughts, uncomfortable areas of the home that may not be visible. Ask for existing building information such as previous drawings, surveys, home reports, warranties and guarantees. Ask for energy bills.

Find out what repair, improvement or extension works are planned. Retrofit improvements can be more economic, attractive and less disruptive if carried out alongside other planned improvements.

3 Plan and evaluate the improvements



Identify maintenance items

Consider urgent maintenance and replacement work (e.g. windows that need to be replaced this year). Consider future maintenance and replacements that will be required (e.g. will the existing roof need replacing in 3 years). For the business plan, these are costs that will be incurred whether the building is retrofitted or not.

Some maintenance items will impact the work that can be completed and may need to be rectified in advance. Leaking gutters, blocked drains or air bricks should be sorted early to allow the building to dry as much as possible.

Identify easy wins

Identify any easy temporary wins that could reduce energy in the short term: simple draught proofing around door and window frames, pipework, chimneys and fireplaces, and where cables enter and leave the building; insulation to primary pipework; high power light fittings; coal or oil heating when an alternative is available.

List improvement options

List all the measures that will form the retrofit improvement at its full extent. Insulation to walls, roof and floors. Ensure insulation is moisture open where existing walls depend on vapour open construction. Ventilation strategy (see Annex D). Window replacements or secondary glazing. Heating system replacement. Identify space for a hot water tank (or compact heat storage) and external heat pump. Different interventions could be as an options appraisal, or as a single recommended package of measures.

List accompanying works that will complement the energy efficiency improvements: reducing external levels, extensions or remodelling, redecoration.

▶ **SIGNPOST** *Chapter 4 - LETI home retrofit targets*

▶ **SIGNPOST** *Annex B: Table of example opportunities for starting retrofit*

▶ **SIGNPOST** *Annex C: Illustrative insulation strategies*

▶ **SIGNPOST** *Annex D: Retrofit ventilation strategies*

▶ **SIGNPOST** *Annex G: U-value sweet spots*

Evaluation options

Evaluate and compare the options. Carry out computer modelling such as energy, heat transfer, and moisture risk as required to understand and check what is possible. Use modelling to understand the fabric and system upgrades needed to meet the targets set, or follow the constituent element guidelines. The unconstrained fabric and system targets should be used wherever possible based on individual elements, for example the front wall might be constrained, but the rest of the property can use the unconstrained values.

Consider undertaking a whole life carbon assessment. Consider materials that may be reused.



Produce phasing plan

Coordinate with maintenance and improvement plans and the opportunities arising from this work. Consider funding availability. It may be necessary to hold off carrying out work so that the first 'safe' phase can be afforded in its entirety. Larger packages are likely to be more cost effective and easier to manage quality, but have higher capital cost. Save plenty of contingency funds, retrofit tends to uncover further work that may increase the cost of the phase.

Package the work into one or more phases. Each phase must work on its own. Consider disruption to residents and neighbours, will the residents need to move out? Can critical disruptive work be concentrated in one phase?

▶ **SIGNPOST** *Annex I: LETI Retrofit Process and PAS 2035*

Prioritise the ventilation strategy. Prioritise high heat loss areas to improve comfort, typically windows and exposed floors. The ventilation strategy must be designed for each stage of the work and it can make sense to install this in the first phase. Good ventilation reduces risks associated with all the other improvement measures.

▶ **SIGNPOST** *Annex H: Moisture issues and how to avoid them*

Consider coordinating works with neighbours or other buildings in the local area to reduce cost.

Delivery and procurement strategy

Consider how the phases of work best be procured and delivered. How will the procurement deliver construction quality, what checks or oversight will be in place? Will building users need to be decanted for some or all of the phases? Consider building contracts including performance/value linked incentives based on monitoring.

Design

For each phase a detailed design should be drawn up. This must consider future phases and prepare the building. For example, if the roof is being repaired the eaves could be extended to accept external wall insulation in the future.

The design should be appropriate to the scale of the retrofit. Drawn information and a written specification are needed as a minimum. Ensure statutory requirements such as planning, Building Control, CDM are met whilst the design and retrofit strategy should be coordinated with all team members.

▶ **SIGNPOST** *Chapter 4 - LETI home retrofit targets*

▶ **SIGNPOST** *Annex C: Illustrative insulation strategies*

▶ **SIGNPOST** *Annex D: Retrofit ventilation strategies*

Aim to keep systems, services and controls as simple as possible. For tenanted buildings aim to keep a familiar type of heating control.

Resources: <https://retrofit.support/> is a publicly available library of construction details for existing buildings.

4 Install and commission



Engage a builder or contractor

Find a contractor or builder who is familiar with your building type and construction, shows interest in what you are trying to do, and wants to understand how to improve energy efficiency. Encourage local trades and expertise, much of retrofit is just 'good building'. Be wary of claims of lots of experience unless there is a clear project track record and separate recommendation, very little of this type of work has been carried out in the UK. Some projects will require certain qualifications from a builder or contractor.

► **SIGNPOST** *Annex I: LETI Retrofit Process and PAS 2035*

Share the Retrofit Plan

Make sure the whole team - contractor, client and designers - are aware of the Retrofit Plan, how the phase under construction fits in with the plan, and buy into delivering the outcomes.

Highlight any known areas that require further investigation.

Identify a site quality champion

This could be a retrofit coordinator, clerk of works, architect, designer or even the homeowner. They should have a regular site presence, know the Retrofit Plan and be able to provide impartial feedback to the contractor.

Set up quality checks

Plan how the work will be reviewed and the key quality check points for the first phase. Ensure the site quality champion attends site at an appropriate frequency for the project. Focus on the installation of insulation, require sign off before it is covered. Plan any interim air leak tests.

Construction

Carry out the current planned phase of works. Ensure enabling works to reduce the risk of retrofit are carried out first. Removing asbestos, repairing key maintenance items and making sure any construction that will be covered is dry and in good condition. Retrofit typically involves undoing some previous short term fixes before starting the new works.

There will be unexpected things that arise as the existing building is uncovered and may mean more work. Leave slack in the programme. Be ready for changes and put a process in place for reviewing and amending the design to account for changes.

Carry out quality checks through the construction. Check the thickness and conductivity of insulation materials, check there are no air gaps between or behind batts or boards. Discuss issues on site and solve problems with the installers. Carry out interim air tests to find and repair air leaks while the air barrier vapour control layer is accessible.



Liaise with building users throughout construction

Communicate progress and changes to the residents. Provide opportunities for residents to understand the works happening (e.g. tours and updates). Especially important where residents are staying in-situ / not decanted.

Commissioning

Commission ventilation, heating and other systems as appropriate. The ventilation system must be commissioned by an independent engineer including measuring supply and extract flow rates through room terminals, and balancing the air flow through each MVHR.

More complex systems, particularly communal heat pump systems, should be commissioned again after the first winter.

Demonstrate function of metering and monitoring equipment.

Check performance against outcomes at practical completion

Test project against any energy targets (SHD, HWD and EUI) that have been set.

Carry out a final or end of stage air test for the building. Make sure certification submissions have been carried out.

Resident engagement and handover

Keep engagement simple and to what is necessary. Try not to overwhelm residents on the operation of their home, they should be able to live in their home as they please, even if it uses a little more energy.

Provide some simple resources such as one page how-to guides in logical locations, such as near the equipment.

Record works in the Retrofit Plan

Update the Retrofit Plan to record the changes that have been made. Add any further information that is available from invasive survey. Include information on what the next phase should be and any key considerations for integrating it with the work that has been completed.

Include or update a maintenance plan to include the new finishes and systems.



5 Check outcomes

Review and monitor

Post occupancy evaluation to verify the building is performing for a minimum of 1 year (including one full heating season) as intended and client and users are happy.

Compare the actual, monitored performance with the LETI energy targets (SHD, HWD and EUI) and/or Fabric and system targets agreed on for the project. On a small project this might be meter readings, a review meeting with the team, and short user interviews. Wherever possible, ideally install monitoring devices to gain additional insights (e.g. energy sub meters, CO₂ or humidity sensors). Sub-metering the main heat source (e.g. heat pump) is especially useful to estimate space heating demand and DHW consumption

Try to include setting up monitoring equipment as part of the main contract. See RIBA Plan for Use guide and Wood knowledge Wales - Building Performance Evaluation Guide for more information.

Disseminate learning to the whole team and use it to inform any future phases of work planned.

Diagnose and resolve any issues

Monitoring data can help quickly and cost-effectively diagnose issues, especially on larger projects. Carry out additional investigations or monitoring if required to diagnose reported issues.



5.7 References and footnotes

5.1 - Taking an improvement in comfort over and above reduction in energy bills: People living in poor quality housing will tend to underheat their homes, typically due to cost issues. Once the fabric is improved, residents can afford to maintain their home at higher temperatures. Thus, the direct comparison of pre and post-retrofit energy consumption will need to account for this as the before/after energy savings may not be as great as has been modelled.

6



Case studies

Archetype case studies

The following archetype studies focus on how properties with different form factors can be successfully retrofitted in a variety of ways. They aim to provide real life examples for the illustrative archetypes shown in Chapter 4.

- 110  **Archetype 1: Haddington Way**
Mid-terrace
- 114  **Archetype 2: Zetland Road**
Semi-detached
- 118  **Archetype 3: The Nook**
Detached
- 122  **Archetype 4: Wilmcote House**
Flats
- 126  **Archetype 5: Gloucester Place Mews**
End-terrace

▶ **SIGNPOST** Chapter 4 - LETI home retrofit targets



Semi-detached



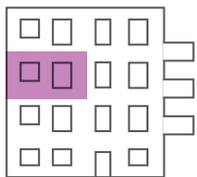
Detached



Mid-terrace



End-terrace



Flat



Archetype 1, mid-terrace: Haddington Way

Location: Aylesbury

Description: Mid-terrace mid-1990 house

Completion year: 2010

Architecture: MEPK Architects

Energy and sustainability consultants: Rickaby Thompson Associates, Viridian Solar

Contractor: Willmott Dixon

Space heating post-retrofit (modelled):
41 kWh/m²/yr

Energy Use Intensity post-retrofit (modelled):
40 kWh/m²/yr

Project summary

Haddington Way, Aylesbury was comprehensively retrofitted in 2010, upgrading the thermal envelope in conjunction with a package of renewables. As part of the Technology Strategy Board Retrofit for the Future programme (TSB-31), it was monitored for 2 years after completion.

Pre-retrofit the external envelope consisted of:

- insulated cavity walls with face brick exterior
- suspended concrete beam and block ground floor
- double glazed windows
- pitched tiled roof enclosing both loft room and cold attic spaces.

Space heating was provided by a dual tariff electric storage system and hot water via a dual immersion cylinder. The property is ventilated via opening windows, with extract fans serving the kitchen and bathrooms.

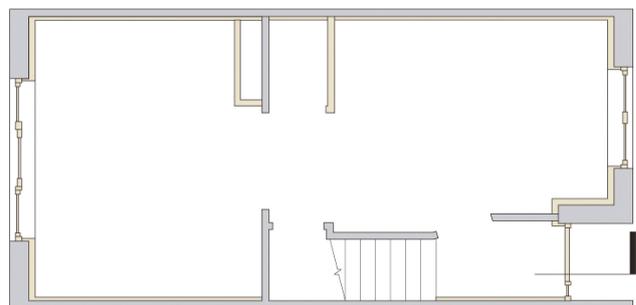


Figure 6.1 - Plan, MEPK Architects



Figure 6.2 - Front after, MEPK Architects



Figure 6.3 - Rear after, MEPK Architects

Fabric upgrade

The principle of fabric first was applied. The external walls were lined internally with Spacetherm PP, a laminated panel composed of 40mm thick aerogel insulation, 6mm plywood and 9.5 mm plasterboard interior facing. Aerogel is a very high performing insulation type, allowing a good level of improvement to be obtained whilst keeping loss of internal floor area to a minimum. Post retrofit wall U-value 0.23 W/m².K.

The beam and block ground floor was overlaid with 75mm Kingspan Kooltherm K3, a rigid phenolic foam insulation board under 18mm tongue and groove chipboard flooring. As this raised the floor level, the internal doors needed to be cut short and re-hung. Post retrofit floor U-value 0.17 W/m².K.

Existing double-glazed windows, rooflights, and external doors were replaced with new, argon filled, ultra-low-e double glazed window units (U-value 1.10 – 1.24 W/m².K) and insulated doors (U-value 1.6 W/m².K).

Roof insulation was added at rafter level in the sloping soffit ceilings; 150mm Celotex (rigid PIR insulation board) fitted between the rafters and soffits renewed with insulated plasterboard, to mitigate thermal bridging across the rafters.

Above the roof insulation, a vapour permeable breather membrane was installed with a minimum 25mm ventilation gap maintained between the insulation and the underside of the roof tiles to protect the timber roof structure from potential degradation due to condensation.

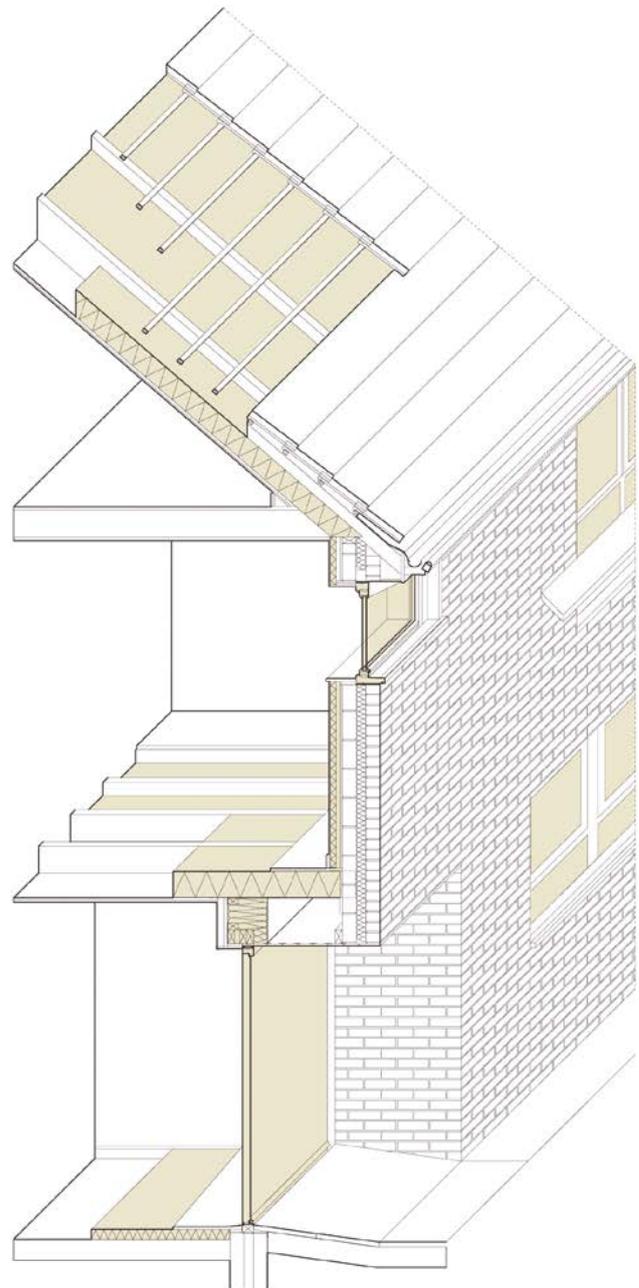


Figure 6.4 - Detailed section post retrofit, from: Baeli, M., 2013, Residential Retrofit: Twenty Case Studies. RIBA Publishing, London^{6.1}



Significant measures were undertaken to eliminate unwanted air permeability and maintain a continuous air tightness layer, including: wrapping of joist ends; sealing of window reveals with Pro-Clima Tescon tape; and use of grommets where pipe penetrated air barrier layers. The measured air tightness of the house was reduced from 13 to 5 m³/m²/hr@50Pa.

Two sun-pipes were fitted between the roof and the internal bathrooms to bring in natural daylight and reduce the need for artificial light during the day. The attic space is contained within the building's thermal envelope and accommodates the new building services installations.

Building services

The space heating, hot water supply and background ventilation have been met by a combination of complementary active and renewable systems. These are to limit the amount of electricity needed to meet the dwelling's needs.

An exhaust air heat pump unit (EAHP) supplies both hot water and warms incoming ventilation air. This unit contains a 180 litre hot water cylinder and fans for the fresh air intake and stale air exhaust for the kitchen and bathroom. The EAHP recovers heat from the extracted air to produce hot water. During winter, any excess heat not needed for water heating is used to warm the fresh air supply. The design team has moved away from using this type of unit on future projects since it was heavy and hard to find space to accommodate. It struggled to meet the energy demand for space heating and hot water heating. A single direct electric panel heater is installed in the hallway of the property, to provide top-up space heating. 9m² photovoltaic panels by Viridian Solar provide electricity to preheat hot water for the EAHP.

A solar thermal system, 4.5m² of flat plate solar collector panels on the roof and a 250-litre storage cylinder in the attic supplies pre-heated water to the EAHP unit. Monitoring showed between mid-spring to mid-autumn, the solar thermal panels supplied most of the hot water.

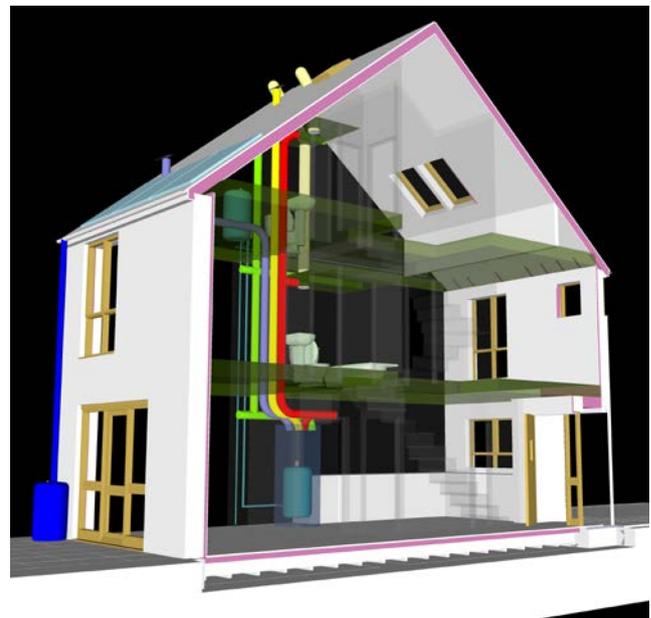
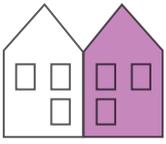


Figure 6.5 - Schematic of building services, MEPK Architects



Archetype 2, semi-detached: Zetland Road

Location: Chorlton, Manchester

Description: Pair of Victorian semi-detached - pre-1919, solid wall, uninsulated

Completion year: Autumn/winter 2018

Client, developer, project manager, building services engineer, contractor, and Passivhaus consultant: Ecospheric

Architecture: Guy Taylor Associates with Ecospheric

Structural engineer: Studio One Consulting

Electrical contractor: Environmental Building Services Ltd.

Space heating demand post-retrofit:
12.5 kWh/m²/yr

Heat load post-retrofit: 10.4 W/m²

Renewable energy generation post-retrofit:
41.6 kWh/m²/yr

Heat loss form factor (PHPP): 2.20

Building type: Two Victorian semi-detached homes built in 1894, combined internal floor area of 374.3m² (187m² per house)

Budget: £887,000 (for the pair of semi-detached)

Certification or standard achieved: EnerPhit Plus certified (the two combined dwellings certified as one building, party wall not thermally insulated).

Energy Use Intensity (EUI) for the two houses

Predicted EUI (modelled): 32.4 kWh/m²/yr

Actual EUI (measured):

Year one – 42.2 kWh/m²/yr

Year two – 34.0 kWh/m²/yr

Note EUI: One of the dwellings was occupied for 18 months before the other. As the original building form prevented significant party wall U-value upgrade this resulted in increased energy demand whilst the second dwelling was vacant. The results for Year 2 show the actual energy demand decreasing and it is expected to further decrease for the first whole year that both are occupied.

Electricity generated by PVs

Predicted: 53.1 kWh/m²/yr

Measured: 48.2 kWh/m²/yr

Note PV: The designers predicted demand and generation figures from PHPP and associated measured figures from the meters. 80% of electricity is generated when the house does not need it and is exported to the grid. There are no smart meters in either building so it has been assumed for calculation purposes that only 20% of the PV generation is consumed on site based on average usage patterns. The PV generation was lower than expected as there was a fault shortly after commissioning. Energy generation has increased since the fault resolved.



Project summary

The project included the re-conversion from flats to the two original semi-detached homes. The internal layout was reconfigured, the fabric improved thermally with new services.

The design proposed super insulating and sealing the whole envelope. In addition, the project was a test bed for technologies. Some of the project's interesting technologies are:

- Fully breathable fabric to every external wall, floor and roof of the house
- Electromagnetic field free electrical design and smart meter
- Thermocline control (hot water tank that avoids de-stratification of water in tank and saves energy).

The project was uncompromising and as a technology

test bed there were successes and failures with associated wastage which would result in a much more economically viable project if repeated. The technologies and specifications used are applicable to a wider class of building on future projects. The PHPP energy model, continuously updated during the project, was a useful tool and critical to the project's success. Using practically no petrochemicals, the embodied energy within building materials used in the refurb was kept to a minimum.

New external walls and roof include insulated Steico I-joists clad in Organowood. Existing brick walls at the front were modelled in WUFI where it was determined no brick creams were necessary. This was further ratified when in-situ moisture measures showed nearly all have the moisture content of a typical wall of this type. Thermalime was applied to the wood fibre boards on the side walls.



Figure 6.6 - Front after retrofit, photo by Rick McCulloch



Figure 6.7 - Rear after retrofit, photo by Rick McCulloch

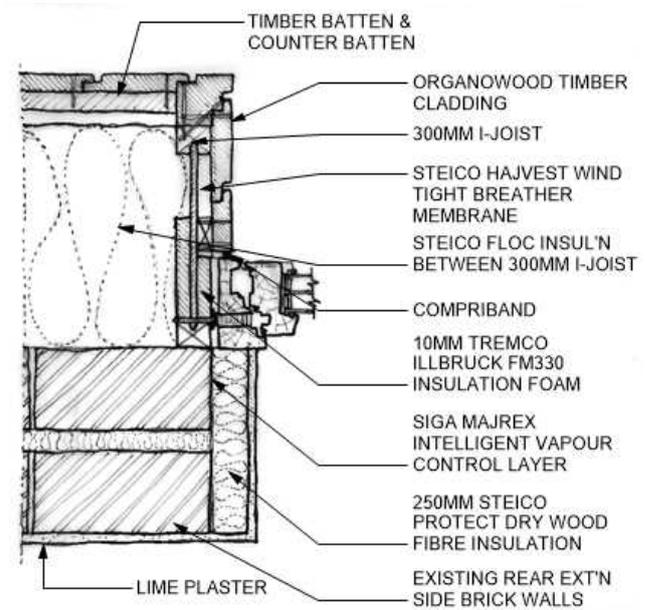
Insulation is a combination of recycled newspaper insulation blown between Steico I-joists and Steico woodfibre insulated board fixed to insulated I-joists on front, side walls and roof. The air tightness layer internally to the new I-joists, walls and roof is a Siga Majrex intelligent vapour control membrane with plasterboard on top. A parge coat of Thermalime created a consolidated level wall over which the cork lime and graphene enhanced lime paint for a fine finish capable of acting as the vapour control layer for all of the existing external brick walls. In recognition of inevitable imperfections in construction the strategy was to ensure every layer in the building fabric would be as breathable as possible to allow the fabric to dry quickly if wetted.

New windows and doors were developed with Viking. Seasonal overheating was also a concern at design stage, so to exploit the existing brick thermal mass of internal walls they were parged with cork lime plaster and painted with Graphenstone paint. In addition, a thermostatically controlled roof light with rain sensor provides effective passive cooling as part of the hybrid ventilation system. Typical U-values after completion:

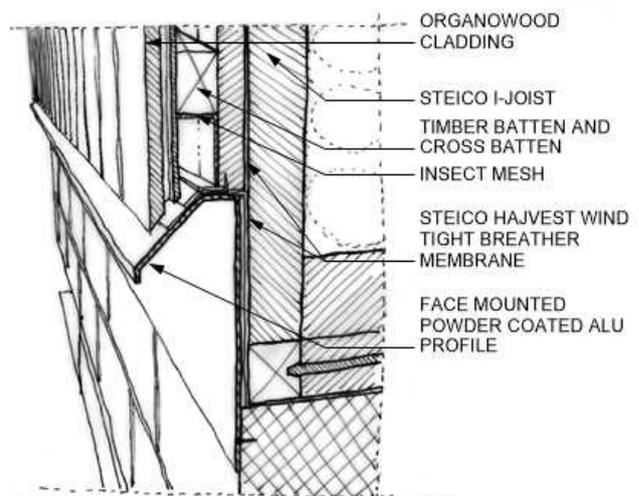
- Walls: 0.175 - 0.116 W/m².K
- Floors: 0.165 W/m².K
- Roof: 0.108-0.148 W/m².K
- Windows: 0.68 W/m².K (uninstalled U-value^{6.2})
- Doors: 0.72 W/m².K (uninstalled U-value)
- Roof windows: 0.81 W/m².K

Building services

- Heating system: integrated 2kW electric post heater on the MVHR ventilation system, DiBT accredited Wiking log burning stove. Domestic hot water electrically heated in a Mixergy 300L tank.
- Ventilation: Paul Novus 300 (PHI certified) heat recovery ventilation system.
- Renewables: 30m² area of photovoltaic (PV) panels were added to the roof of each house to power the lighting and appliances but also heat the hot water tank.

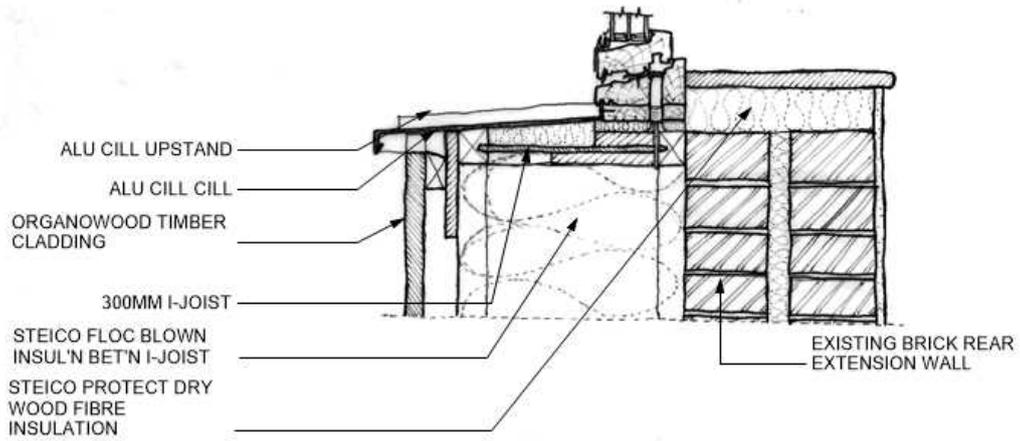


PLAN VIEW JAMB - REAR EXTENSION

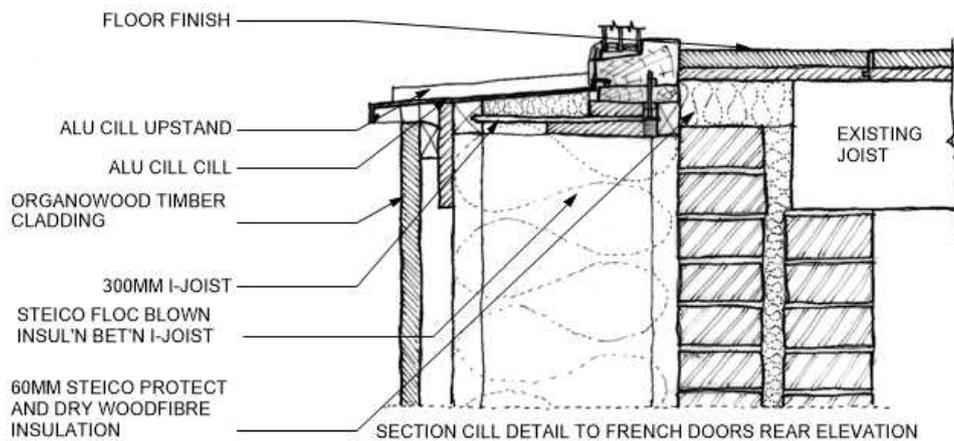


AXONOMETRIC VIEW DETAIL - REAR EXTENSION

Figure 6.8 - Construction section details by Chris Rodgers, Guy Taylor Associates



SECTION CILL DETAIL REAR ELEVATION



SECTION CILL DETAIL TO FRENCH DOORS REAR ELEVATION



Archetype 3, detached: The Nook

Location: Preston Village, Brighton

Description: Detached villa - pre-1919, solid wall, uninsulated

Completion year: 2010

Client: Two Piers Housing Co-operative

Architecture: BakerBrown Studio Ltd

Consultants: Green Building Store

Contractor: Earthwise Construction

Budget: 'all-in' £166,500, and out-turn of £172,000

Certification or standard achieved: EPC B

Energy Use Intensity post-retrofit (measured):
73 kWh/m²/yr

Project summary

The Nook is a two story, 'detached Victorian villa' in multiple occupation (HMO), housing six adults. It has been chosen as a typical example of housing stock in Brighton and along the south coast. Prior to the retrofit it was largely uninsulated with single-glazed windows. The project aimed for a realistic, replicable and robust 'whole house' solution to retrofitting solid wall Victorian housing, demonstrating deep cuts in CO₂ emissions, and moving the property from "hard to treat" EPC F rating to EPC B by dramatically reducing space and water heating demand, and electrical consumption. The building is not listed but sits within a conservation area under an Article 4 Direction, meaning change to the appearance of the façade was restricted and the team had to deal with a number of technical, procedural and programme challenges for the retrofit.



Figure 6.9 - Front after retrofit

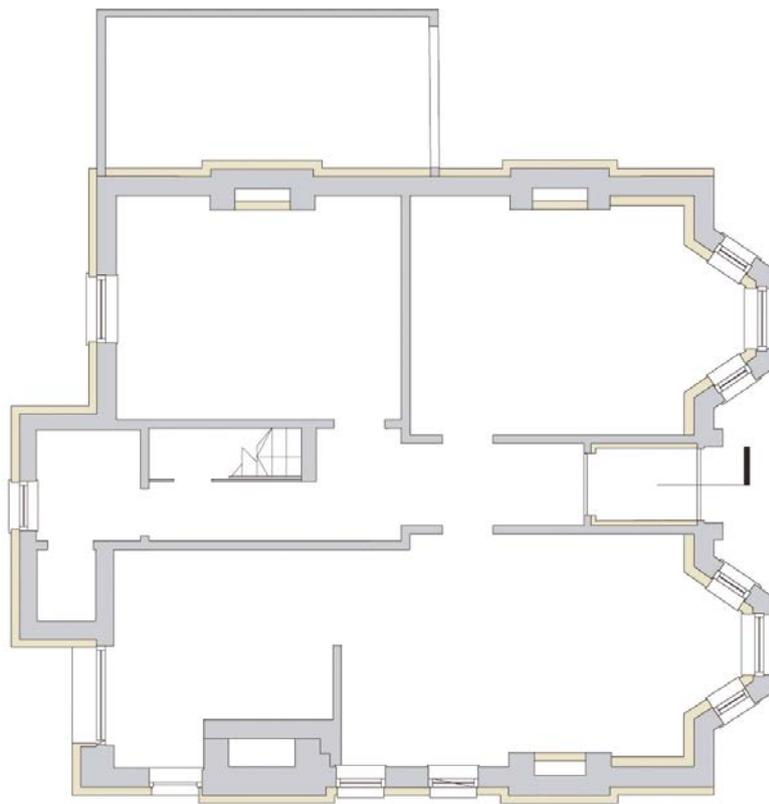


Figure 6.10 - Ground floor plan - Marion Baeli and Paul Davis + Partners^{6,3}

Fabric

The retrofit introduced a 120mm internal insulation to the front façade, 120mm (2x60mm Kingspan Kooltherm) external solid wall insulation to the sides and rear, 120mm PUR ground floor insulation, and a mix of 188mm cold roof insulation, with an additional 50mm warm roof insulation, triple glazed windows to side and rear elevations and double-glazed sashes to the front. The project also employed an air tightness layer around the whole house, a Paul Novus [F] 200 DC MVHR, a condensing gas boiler, a 450L twin-coil highly-insulated hot water tank, and two Thermomax DF 100 roof-mounted evacuated tube solar thermal arrays. The heating system provides domestic hot water and top-up space heating, re-using the existing radiator circuits. Additional features included energy efficient appliances and lighting with compact fluorescents.

Planning and heritage

Resolving the planning and heritage concerns was a key challenge in the project. The internal insulation and choice of windows to the front was developed to respond to the constraints of the Article 4 Direction without undue cost. Replicating the historic features of the façade in over-cladding was cost-prohibitive. During feasibility, triple glazing had been proposed all round but was not acceptable to the Conservation Officer. After two planning applications and considerable work by the architect in collating and presenting convincing energy data on the options and in-depth work on the details, the windows were finally granted approval. The discussions with planning and the Conservation Officer delayed the start on site by over four months with significant 'knock-on' impacts.

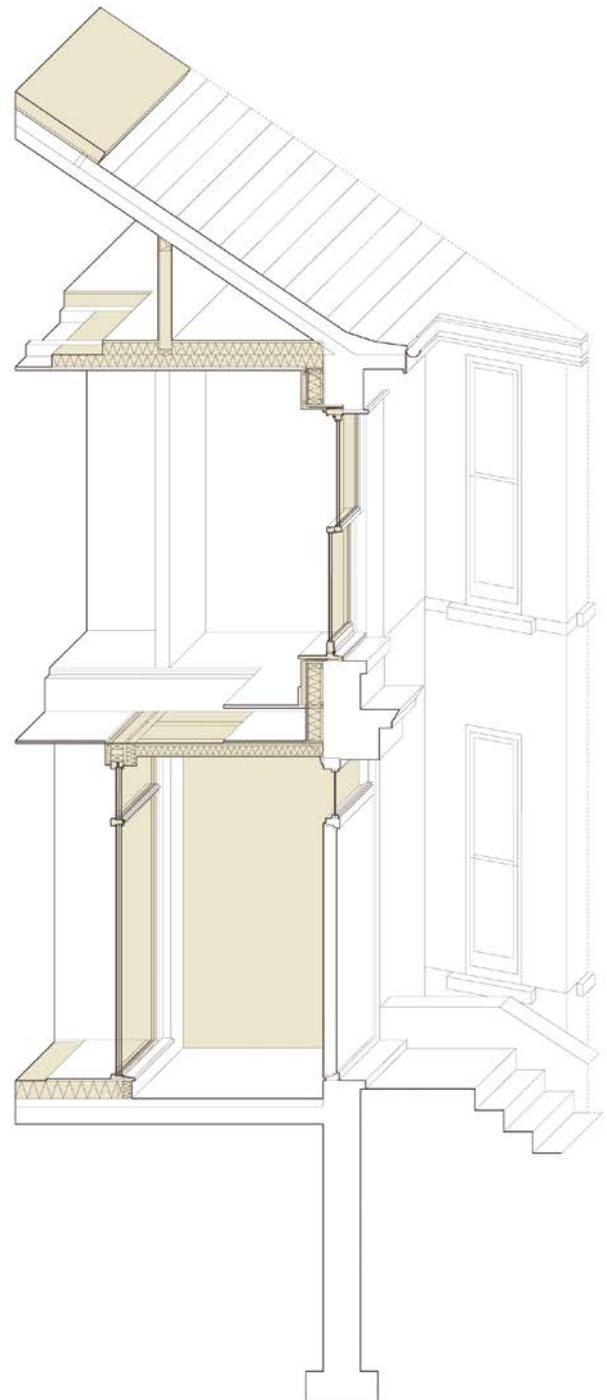


Figure 6.11 - Detailed section - Marion Baeli and Paul Davis + Partners^{6.3}



The insulation strategy, including EWI to sides and rear, internal insulation to front and internal flanking returns, and a thick layer of PUR overlaying the solid floor to avoid the need to break up the ground floor slab, introduced technical challenges to avoid thermal bridging at interfaces but the resultant U-values achieved come close to Passivhaus standards. Ensuring continuity of the insulation and airtightness layer, and insulation of the internal projection of the entrance lobby into the building, required careful detailing and site workmanship, as is typical in retrofit.

Whilst the work to the building was extensive, it had to allow the occupants to remain living in the accommodation for as long as possible during the build. They remained for all but three weeks of the period during which the most invasive works were undertaken.

Budget including design fees, prelims and VAT was £166,500 and the project achieved an all-in out-turn cost of £172,000 allowing for asbestos being discovered and removed and the loss of the Low Carbon Buildings grant for solar thermal.

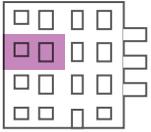
Key watch points were:

- Ensure enough time in the project for negotiation with approving bodies and manage expectations.
- Material availability: 120mm Kooltherm was subject to minimum order, making two layers of 60mm necessary and resulting in increased labour, cost and duration of installation.
- Complexity of detailing to ensure continuity of air-tightness layer and insulation, and elimination of thermal bridges – the project team were keen to understand long-term how effective the installation has been.



Figure 6.12 - Installation of external wall insulation - BBM Sustainable Design

The completed project achieved its aims as a viable, efficient retrofit which significantly improved the energy performance of the property and could readily stand as a model for future work.



Archetype 4, flats: Wilmcote House

Location: Somerstown, Portsmouth

Description: 1960s flats (prefabricated LPS construction). 107 existing flats + 4 new ground floor flats added during the retrofit.

Completion year: staggered completion of blocks during 2017-2018

Client: Portsmouth City Council

Architecture: ECD Architects

Structural engineer: Wilde Carter Clack

Quantity surveyor and project management: Keegans

Building services: NLG

Contractor: Engie

Contractor's design team: GSA Architects; Design Buro; Curtins Engineers

Certification or standard achieved: Step-by-step EnerPHit

Space heating demand pre-retrofit (modelled): 188 kWh/m²/yr

Space heating demand post-retrofit (modelled): 23 kWh/m²/yr

Project summary

Wilmcote House is a housing estate located in Portsmouth, consisting of three 11-storey interlinked towers, with a combined treated floor area (TFA) of 10,233 m². The blocks were originally constructed as a concrete prefabricated structure in 1968, using a large panel 'Bison REEMA' variant system. With no place to relocate the residents within the existing 107 flats and maisonettes, Portsmouth City Council commissioned ECD Architects^{6.4} for the building's regeneration to be achieved with the residents in occupation. The project aimed to achieve over 80% reduction in space heating demand and was designed to the EnerPHit standard; it was, at the time of completion, the largest residential EnerPHit delivered with residents in occupation in the world.



Figure 6.13 - Courtyard side completed. ECD Architects.



The existing concrete wall panels included a very small amount of insulation, but this was ineffective, and alongside inefficient double-glazed windows and old electric storage heaters, the flats experienced high levels of heat loss. Many of the residents could be classified as experiencing fuel poverty, as shown in residents' feedback carried out before the works. Studies by Teli et al.^{6,5} at the University of Southampton showed economic constraints factored into many residents underheating their homes below WHO recommendations also exacerbating damp risk and mould growth.

The architect's thermal and airtightness strategy involved the simplification of the thermal envelope, with a new load-bearing steel frame erected on the garden-side elevation. This allowed the external

corridors to be enclosed and allowed the living rooms to be extended to meet the new simplified external envelope. The existing stair cores were left uninsulated and outside the thermal envelope, which improved the building's form factor significantly. The 3 blocks were externally insulated with 300mm non-combustible mineral wool insulation, which wrapped the entirety of walls and roofs. The retrofit included the installation of triple-glazed windows and high-efficiency individual MVHR units in each flat.

The client partnered with the London School of Economics (LSE) in a research project which interviewed residents before, during and after the works. University of Southampton continued to monitor internal temperatures to determine the impact of the works on winter fuel poverty and summer overheating risk.



Figure 6.14 - Courtyard side during construction, showing new EWI and triple-glazed windows being fitted. ECD Architects.

The thermal performance of the building fabric was radically improved, with the estimated space heating demand reduced from 188 kWh/m²/yr to approximately 23 kWh/m²/yr. Initial post-occupancy evaluation conducted by University of Southampton suggests that performance is in line with predictions. Results for the 2018-19 heating seasons suggest that the building can provide WHO temperature standards in order to maintain health with little to no active heating^{6,6}.

Thermal comfort surveys conducted during the first round of monitoring after the insulation works were completed (2017-18) suggested a low heating usage amongst tenants, with 60% of participants utilising their heating less than once per week. Whilst 36% had not used their heating at all over the winter period.

The fabric first approach significantly improved thermal comfort conditions for residents that did not engage heating

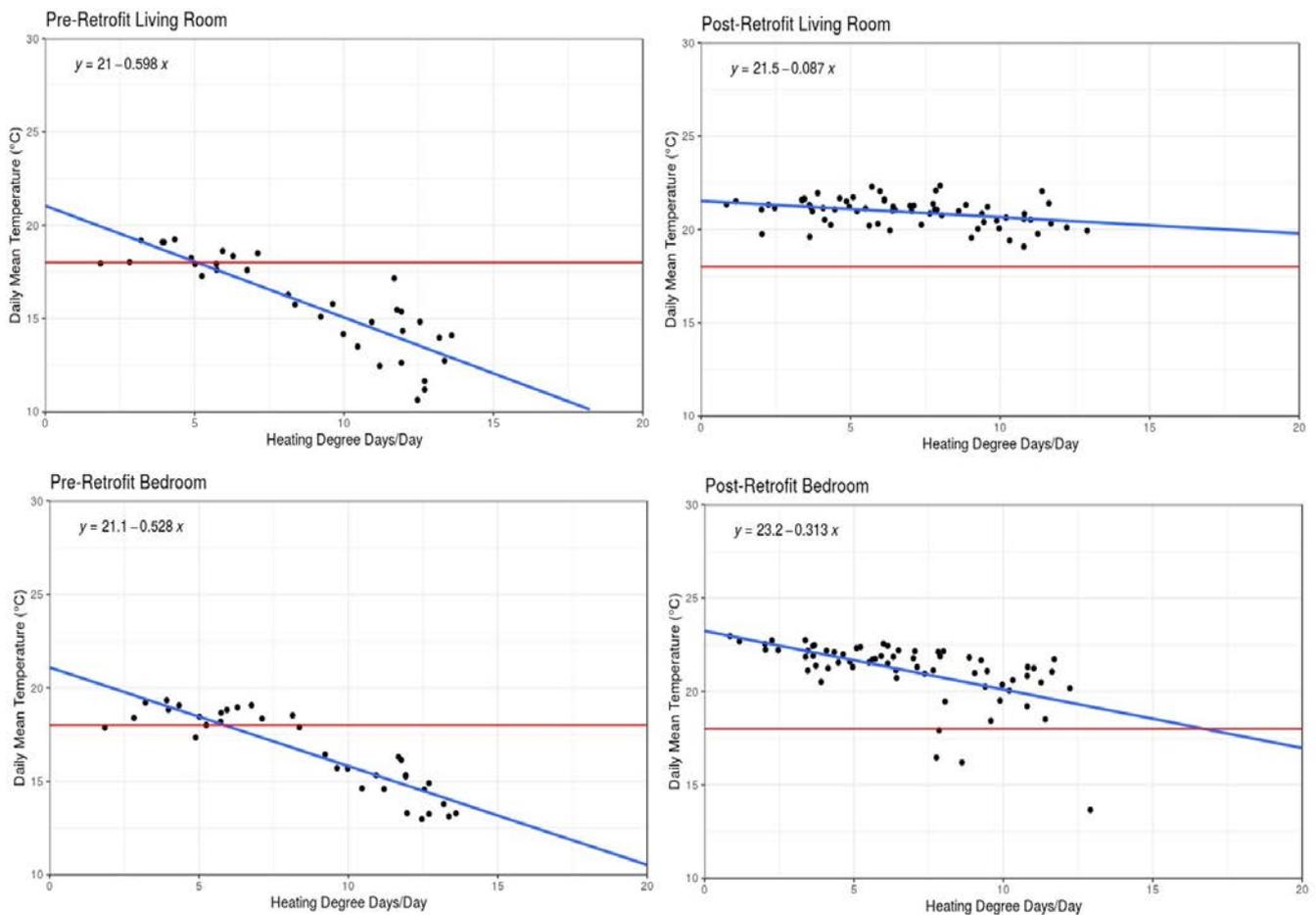


Figure 6.15 - Scatter plots show a single dwelling (living room and bedroom) that are under-heated prior to the retrofit, and currently maintains significantly better internal temperatures utilising the same heating practice post retrofit^{6,6}.



in a 'typical' heating strategy. In order to maintain "safe and well-balanced indoor temperatures to protect the health of general populations during cold seasons" (WHO), a minimum 18°C is utilised as the target benchmark in their study.

Figure 6.15 shows a pre- and post-retrofit comparison of a dwelling (living room and bedroom before and after the retrofit) where the resident did not use the heating in their home, possibly due to economic constraints. The point of intersection of the blue and red lines estimates a threshold for which some form of heating may be required in order to maintain a daily average of 18°C. The shift of point of intersection between pre- and post-retrofit indicates the Heating Degree Days threshold change. Prior to the retrofit,

this dwelling would experience approximately 160 days annually that would require heating (in varying magnitudes) in order to maintain 18°C. Post retrofit, this dwelling in particular is able to maintain 18°C without the requirement for active heating. This study exemplifies the tangible benefits in quality of life for residents who are experiencing fuel-poverty and can transition from living in cold, draughty, mouldy flats, to living in warm, comfortable and healthy homes.

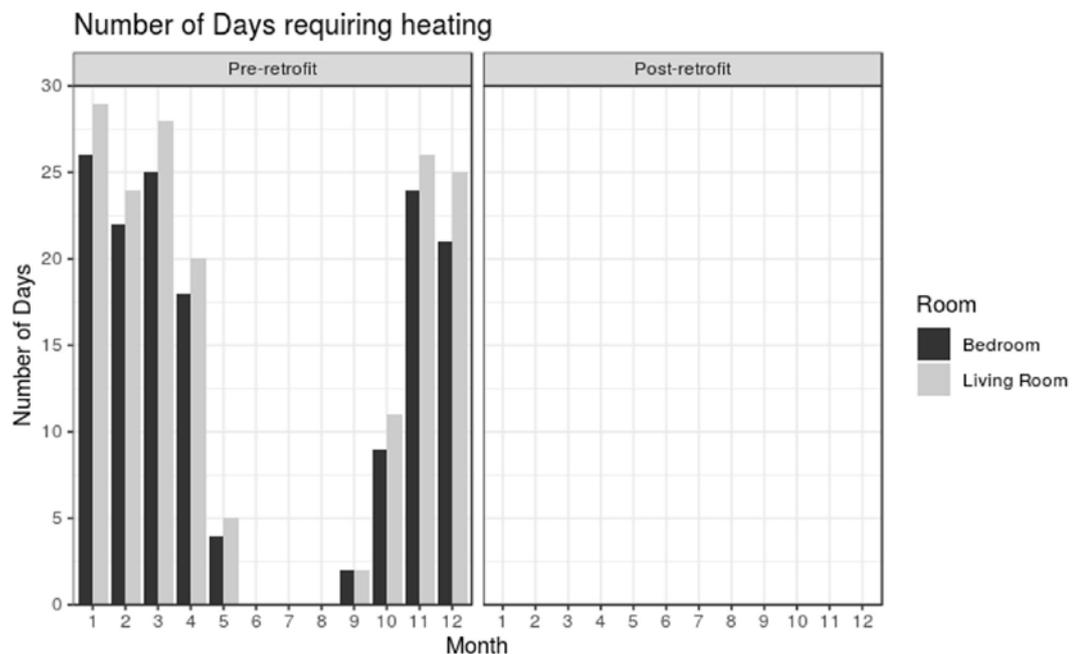


Figure 6.16 - Bar graph showing hypothetical performance under a TMY (Typical Meteorological Year). Showing the number of days that would typically require some form of heating in order to maintain 18°C^{6,6}. This graph shows that no active space heating is required post-retrofit to maintain 18°C.



Archetype 5, end-terrace: Gloucester Place Mews

Location: Marylebone, London

Description: Grade II listed 'end of terrace' Mews House, pre-1919

Completion year: 2018

Client: The Portman Estate

Architecture: Feilden + Mawson LLP

Building services: Leonard Engineering Design Associates

Energy consultant: Sturgis Carbon Profiling

Structural engineer: Furness Partnership

Quantity surveyor: STACE

Contractor: Richardsons of Nyewood

Budget: £700,000, including full interior refurbishment

Certification or standard achieved:
EPC B, BREEAM Excellent, certified Passivhaus (EnerPHit) standard using the elemental method

Space heating demand post-retrofit (modelled):
37 kWh/m²/yr

Project summary

Gloucester Place Mews is in a conservation area, which made the planners resistant to any external alterations to the house. Therefore, the project included a complete reconfiguration of the internal layout. The client has a large property portfolio of rental properties. The brief was for a high quality retrofit for rental accommodation. The client wanted to test a fabric-first approach whilst monitoring costs along with their supplier's readiness and skills. The improvements would benefit tenants with improved internal comfort levels, lower energy costs and improve air quality. It was the first listed building in the UK to be certified to EnerPHit standard.



Figure 6.17 - Open plan kitchen/dining post retrofit, Feilden + Mawson LLP



Figure 6.18 - Passivhaus certified rooflight, Feilden + Mawson LLP



Figure 6.19 - View along mews to front elevation, , Feilden + Mawson LLP

The new internal layout retained the garage at ground level, which led to a larger than average form factor; the heat loss area is 396m² and TFA (treated floor area) is 121m². The fabric upgrade was robust; the internal walls were insulated with 40mm Aerogel to avoid a reduction in internal floor area, an airtightness membrane with 30mm service void and magnesium oxide board finished with lime plaster and breathable paint. The airtight layer in the build-up of the building envelope had to be carefully detailed around the interfaces between new and existing elements. This included connections between existing external walls and new structure. Likewise the insulation was carefully detailed to eliminate thermal bridges, in particular, around the internal garage volume. Existing windows were refurbished and new triple-glazed secondary glazing fitted along with Passivhaus certified front door and rooflights.

The only element of the existing interior retained was the stairs, which itself presented challenges in achieving adequate insulation and airtightness against the external wall behind the stringer, affecting the detailing of the window when reinstalled against the front wall. Given the small and relatively complex form, the completed airtightness result of 0.7 was well within the EnerPHit threshold. A new heating and hot water system was installed along with an MVHR (mechanical ventilation and heat recovery) as well as the provision of monitoring equipment to give the client feedback to inform future projects.

The fabric first approach centred around specification, procurement/availability and quality control. Some materials were somewhat specialist and subject to long lead times. Site detailing of complex junctions

and interfaces with historic fabric and detailing require very close attention. An adequately detailed survey prior to and during design would have eliminated some of the issues experienced on site.

The energy, water and indoor environment of the resultant property were monitored during 2018/2019, although the property was not fully inhabited – only one of three double bedrooms were occupied – data analysis offers some useful conclusions.



Figure 6.20 - Installation of internal wall insulation (40mm Aerogel applied to the internal walls to minimise loss of space), Feilden + Mawson LLP



Key issues identified in the occupancy study were:

- Reliability of monitoring – meters showed some data loss, possibly due to loss of internet connectivity.
 - Habitation affects quality of data and further monitoring of different tenancies would help build better understanding of performance issues.
- Occupant understanding of building operation is key to energy efficiency.
 - Monitoring had not been installed in downstairs bedrooms, so no data exists for those portions of the accommodation. No conclusions could be drawn for these rooms in terms of thermal comfort, particularly in a summer heatwave.

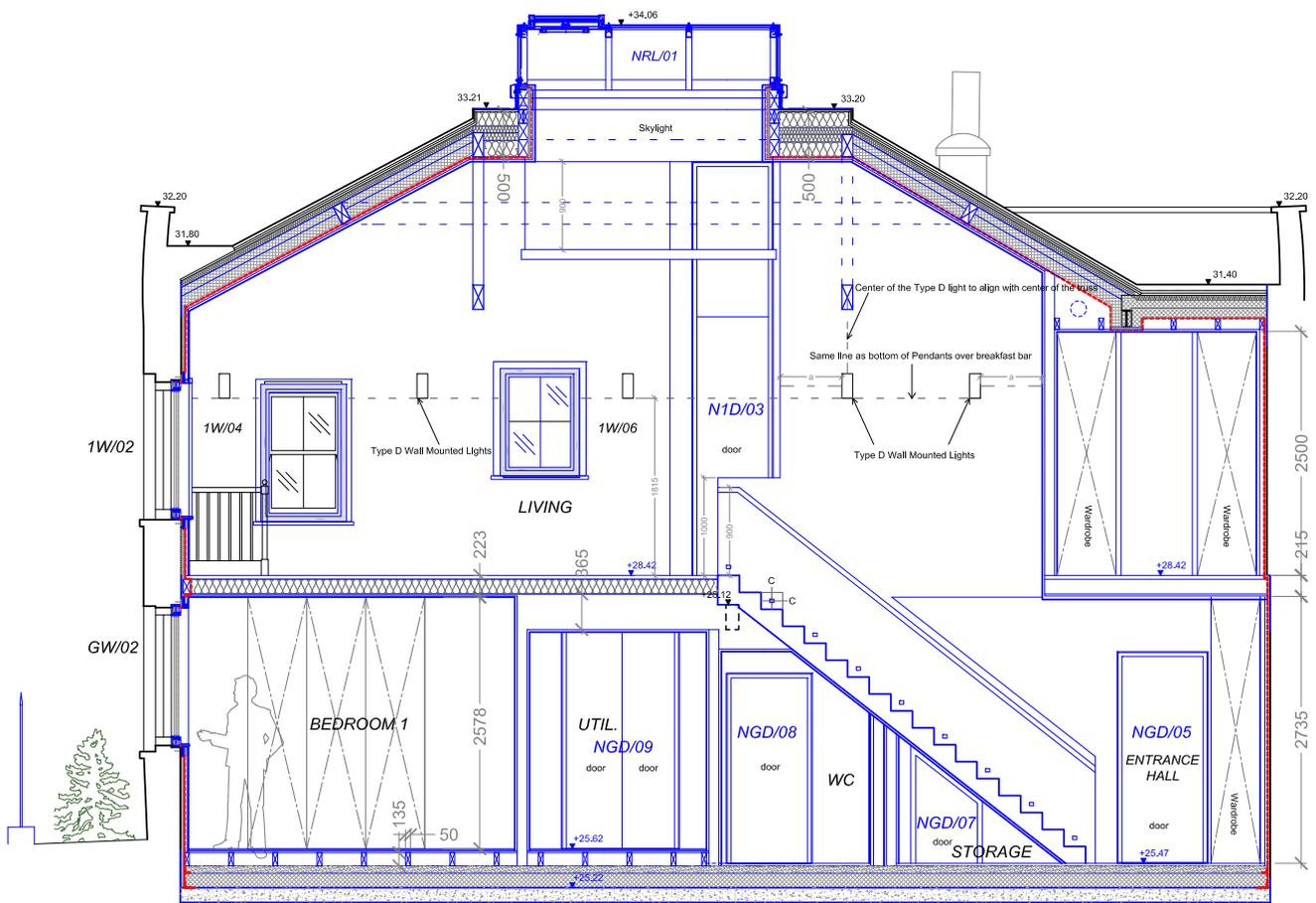


Figure 6.21 - Section, Feilden + Mawson LLP^{6,7}

Thematic case studies

The case studies provide real-world examples of retrofits that align with the general themes that we have set out in the archetype pages. They may not conform fully with the archetypes, but demonstrate what can be achieved, as well as the techniques used and challenges that need to be overcome.

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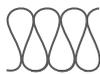
Deep and step-by-step retrofit



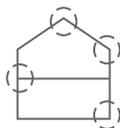
Stakeholder engagement



Windows



Insulation



Thermal bridging



Airtightness



Moisture



Case study 1: Sterndale Road

Location: Notting Hill, London

Description: Victorian mid-terrace house

Topic: Stakeholder engagement and communication

Client: Notting Hill Housing with United House Developments Limited

Architecture: Baily Garner

Contractor: United House

Budget: £108,987.00

Certification or standard achieved: EPC B

low-E glass to achieve $1.2 \text{ W/m}^2\text{.K}$. The lower ground floor was remediated with 220mm lightweight expanded clay aggregate, under limecrete solid floor with 55mm screed. A new A-rated gas boiler, radiators with thermostatic radiator valves, and underfloor heating in the lower-ground floor were fitted, plus a twin-coil thermal store (to accept solar hot water feed). Solar Thermal panels give half of the annual hot water demand. A 0.875 kWp photovoltaic array was installed. Lighting was upgraded to low-energy fittings throughout.

Project summary

This property in Sterndale Road^{6,8} aimed to inform eco-refurb specifications for Notting Hill's Property Services and Development Department. Intended to form the basis of future mass refurbishment of Victorian, Edwardian and Georgian properties. It sought to identify technologies and products that would perform best environmentally whilst also being commercially viable.

Pre-work thermographic surveys and air pressure testing showed poor results: air leakage of $17.5 \text{ m}^3/\text{m}^2/\text{h}$ @50Pa, excessive draughts around windows and doors, numerous thermal bridges, cold spots and a minor insulation defect in the recently refurbished roof.

65mm of insulation backed plasterboard was fitted to walls to achieve $0.32 \text{ W/m}^2\text{.K}$. The flat roof, renewed and upgraded prior to the project with 240mm wood-fibre insulation, was designed to achieve $0.15 \text{ W/m}^2\text{.K}$. Existing windows were replaced with double-glazed,



Figure 6.22 - Front post retrofit



Improvements included acoustic privacy, rainwater harvesting to toilets, water saving sanitary appliances, recycling facilities and innovative technologies (such as a smart voltage management system). The internal layout largely was unchanged but a new habitable space in the lower-ground floor created a new bedroom, home workspace and living room with access to the garden. Post-works air tightness tests showed $5.9\text{m}^3/\text{h.m}^2@50\text{Pa}$, and the Energy Performance Certificate (EPC) moved from band G to band B.

Stakeholder involvement was critical. A notable element of the project was the measuring, monitoring and engagement strategy, which included gathering feedback from contractors on buildability and the

value of different improvement measures. The Notting Hill's Residents Repairs Working Party (RRWP) was involved in the project throughout, including setting project aspirations, attending contractor interviews, and engagement in the workshops held to assess suitability of the many options of materials and technology considered for inclusion in the building. Green features specified were strongly influenced by feedback from RRWP. Operational costs were important to residents and an open day was held part-way through, which visitors were encouraged to comment and ask questions.



Figure 6.23 - SAP rating post retrofit



Case study 2: Pavillion Road

Location: Hans Town Conservation Area, Chelsea, London

Description: Mid-terrace, mews house

Topic: Windows

Client: Cadogan Estate

Architecture: Latitude Architects

Structural engineer: ConisbeeMEP

Building services: HITEK

Project manager and cost consultant: The Trevor Patrick Partnership

Passivhaus Designer and BREEAM assessor: Sturgis Carbon Profiling

Passivhaus Certifier: CoCreate

Historic buildings consultant: Donald Insall Associates

Planning advisers: Gerald Eve

Contractor: Richardson's (Nyewood) Ltd.

Budget: The client reported a 6% increase above business as usual

Certification or standard achieved: BREEAM UK Domestic Refurbishment 2014 "Outstanding" and PassivHaus EnerPhit certification using the elemental method

Space heating demand post-retrofit (modelled): 32 kWh/m²/yr

Energy Use Intensity post-retrofit (modelled): 96 kWh/m²/yr

TFA (treated floor area): 128m²

Project summary

This two-storey Hans Town Conservation Area, solid-wall, mews house was fully demolished internally, with façades retained and reconstructed anew as a three-storey, two-bedroom modern dwelling, to high thermal performance and quality of interior fit-out. This pilot project is part of Cadogan's sustainability strategy, reducing environmental impacts across the Estate.

The project targeted a high BREEAM rating and Passivhaus EnerPhit certification. Pre- and post-completion monitoring was extensive, including energy at meter/sub-meter level, thermal comfort, indoor air quality (IAQ), moisture/damp levels, and occupant feedback.

Retention of the historic façades introduced some issues with detailing and spatial planning, which were resolved in the finished project by internal insulation, replica triple-glazed windows, replacing doors in the same style, as well as repairing and repointing the original brickwork. The most significant challenge appears to have been obtaining Conservation Area consent for the changes to the external appearance and specifically the windows, together with some complex detailing of the insulation interface between the retained rear façades and the new mansard roof construction, impacting on the configuration of the internal space.

A 'fabric first' approach was taken:

→ A glass mineral wool insulation system was applied to the internal face of front and rear façades, rigid PIR insulation was used in the new warm-roof mansard and to the new ground floor slab, and aerogel was used to ensure appropriate visual detailing of the dormer windows to suit the aesthetics of the Conservation Area.



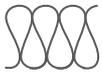
- Timber sash triple-glazed windows met the conservation requirements.
- An airtight membrane was introduced, and the contractor's workforce was specially trained in the correct use of the special sealing and bonding tapes prior to work on site. Airtightness responsibility was assigned to a designated member of site staff to help ensure every area was properly sealed prior to being covered up by subsequent construction.

Heating and ventilation was achieved using a gas boiler and a Renovent Excellent-400 (Plus) MVHR. Smart meters were installed so occupants can see usage directly.

The project is considered by Cadogan to have been very successful and achieved BREEAM 'Outstanding' as well as PassivHaus EnerPhit certification. After living in the property for over a year, the occupiers report noticeably good indoor air quality, greatly reduced noise and significantly lower energy bills than in their previous residences – with a gas bill of only £200/year for all heating, hot water and cooking. Cadogan is taking lessons from this project into future developments, increasing building efficiency on their journey towards net zero.



Figure 6.24 - Front post retrofit.



Case study 3: Shaftesbury Park Terrace

Location: Shaftesbury Park Estate Conservation Area, Wandsworth, London

Description: Pre-war (1870s) mid-terrace house

Topic: Insulation

Client: Peabody Estate

Architecture: Feilden Clegg Bradley Studios with Bill Gething

Consultants: Max Fordham, Rickaby Thompson Associates

Contractor: Wates

Budget: £80,791 of which energy saving measures and collateral costs were £78,876

Energy Use Intensity pre-retrofit (modelled):
341 kWh/m²/yr

Energy Use Intensity post-retrofit (modelled):
87 kWh/m²/yr

- Internal Aerogel insulation was introduced to front and rear walls, and returned along both party walls.
- 80mm external PUR insulation was added to the rear kitchen extension and over-clad with timber rainscreen board.
- Insulation was provided on the ceiling line within a cold roof void.

Project summary

This two-bedroom house is located in a conservation area. Peabody's aim for the project was to find solutions that could be applied to their 21,500 other homes in London. The occupants were to remain in situ during the majority of the works.

Pre-retrofit, the house was largely uninsulated, with solid brick walls, single-glazed sash windows, and suspended timber ground floors. Employing the principle of 'fabric first':

- Windows were replaced with double-glazed sashes to the front and triple-glazed casements to the rear with trickle vents in line with the strategy of providing natural ventilation.



Figure 6.25 - Front elevation. Feilden Clegg Bradley Studios



→ The suspended ground-floor timber joists originally were supported on timber wall plates bedded in the brick wall. The joist ends were cut back and new joist ends spliced on, re-supported on foam glass. The void under the joists was filled with blown polystyrene bead cavity wall insulation after re-routing services to ensure cabling did not overheat and gas pipes were not run through unventilated voids. The need to re-route services incurred additional costs for the project.

from an integrated Passive Stack Ventilation system. The ventilation strategy consisted of trickle vents on windows and a fan-assisted passive stack ventilation from the kitchen and bathroom. The passive stack vent used an experimental heat pump recovering heat from the exhaust air and an exhaust air heat pump (EAHP). The heat is fed back into the domestic hot water thermal store. Solar thermal panels pre-heat hot water for the existing retained condensing boiler, connected to radiators.

The team decided MVHR would have taken up too much space, being problematic to install through the existing structure, also its benefits would likely have been limited due to the practicality of achieving the necessary high levels of airtightness. The strategy was efficient boiler installation, heat pump recovering heat

Originally, Passivhaus certified triple-glazed casements were proposed; however, these were not acceptable to the planners, due to their visual appearance impacting on the heritage value of the conservation area. Double-glazed casements were considered an acceptable balance.

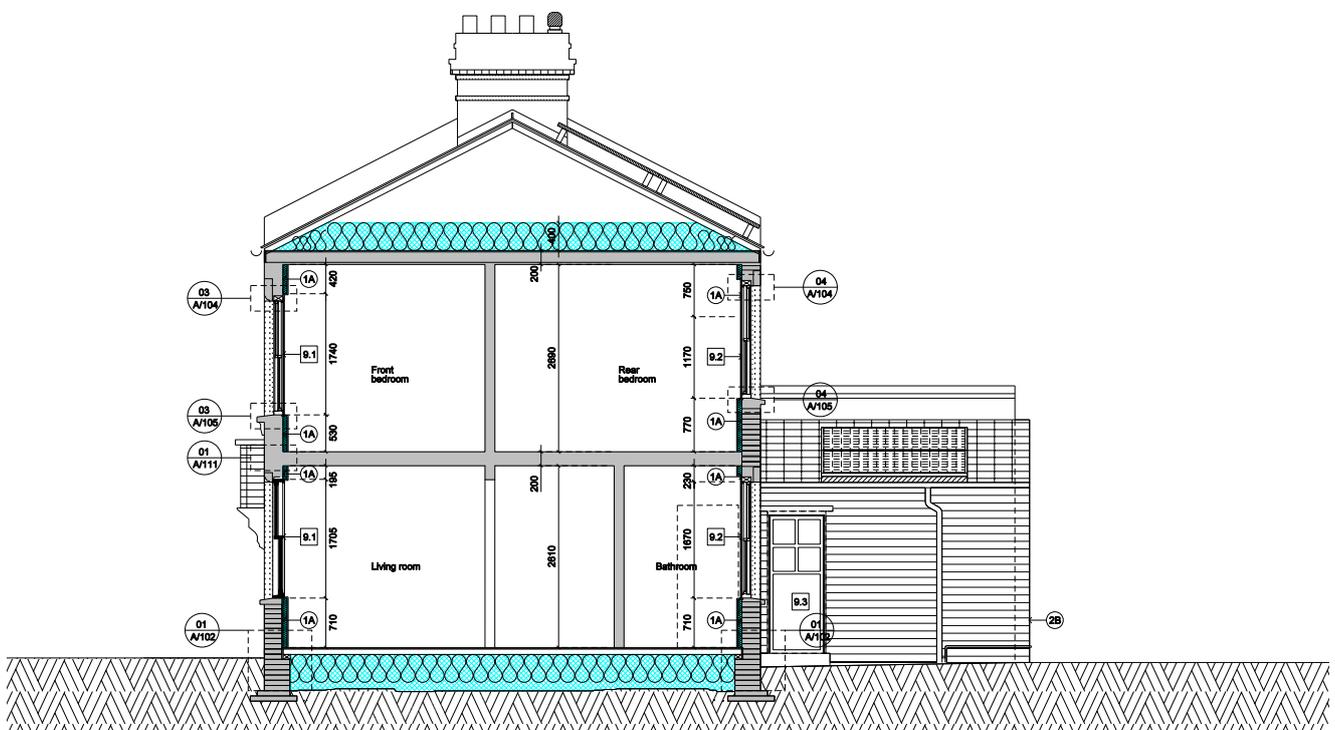


Figure 6.26 - Section - Feilden Clegg Bradley Studios



Case study 4: Passfield Drive

Location: Tower Hamlets, London

Description: Post-war (1960's) mid-terrace

Topic: Deep retrofit with residents in-situ

Client: Southern Housing Group

Architecture: bere:architects

Building services: Alan Clarke

Structural engineer: Galbraith Hunt Pennington

Contractor: AD Enviro

Budget: Design stage £89,618, Out-turn construction £115,957 (£14,943 of which was client enhancements)

Certification or standard achieved: 'Quality-Approved Energy Retrofit with Passive House Components' as set out in the certification criteria by the Passive House Institute (PHI)

Space heating demand pre-retrofit (measured):
315 kWh/m²/yr

Space heating demand post-retrofit (measured):
31 kWh/m²/yr

Energy Use Intensity pre-retrofit:
385 kWh/m²/yr

Energy Use Intensity post-retrofit:
54 kWh/m²/yr

Floor area: 96m²

Project summary

The three-storey mid-terrace house was occupied by three generations of a single family. The project, completed in 2011, aimed to establish principles of carrying out works with the occupants remaining in occupation.

Pre-retrofit, the property was under-heated, suffered damp and condensation problems. Windows were single-glazed with metal frames. Walls were solid brick (rendered externally), and the roof had minimum insulation. The ground floor was a solid concrete slab. Clear communication managed expectations from the outset, the occupants were keenly engaged in the process, and in the post-completion monitoring. Site-work took approximately 8 months from start on site to full completion.

200mm of insulation was added to the loft space prior to the start of the retrofit works. Subsequent retrofit works comprise:

→ 200mm and 250mm EPS external insulated render system to front and rear walls.



Figure 6.27 - Front post retrofit, bere:architects



- The external insulation was extended one metre below ground to foundation level, to limit the heat losses through the ground slab.
- A further 200mm mineral wool insulation was provided to the attic to give 490mm total thickness.
- High performance vacuum insulation and protective boarding to floor slab beneath finishes. Internal wood fibre insulation to flank walls and details to eliminate cold bridges from neighbouring façades and party walls.
- Continuous airtightness membrane was installed in the attic, sealed to cementitious parge coat to walls. Continuous airtight seal from parge coat to airtightness membranes in extension. Windows sealed to a parge coat with continuous tapes. Airtightness grommets fitted to all new and existing service penetrations.
- Passivhaus certified triple-glazed windows and doors with U-value of 0.8 W/m².K.
- New timber-framed rear extension with 375mm wood fibre insulation to walls and 225mm mineral wool and 150mm wood fibre insulation to roof.
- 92% efficient mechanical ventilation with heat recovery (MVHR) installed. Roof-mounted solar thermal array with solar cylinder and a re-configured conventional gas boiler.
- High performance insulation (0.038 W/m.K at 40°C) to hot water pipes.

Site work took longer than planned due to a number of issues: the need to work around the occupants; delays in materials procurement; and long lead-ins for specialist materials. There were significant problems with quality of workmanship and a significant amount of remedial work had to be undertaken to achieve the required airtightness. Final measured airtightness was, however, improved from 5.6ach@50Pa to 1.9ach@50Pa. Post-project reviews identified that efficiencies could be gained by undertaking the work on a larger scale, enabling training and skills for all trades.



Figure 6.28 - Thermal imaging winter 2012 post retrofit, bere:architects



Case study 5: Bloomsbury House

Location: Bloomsbury, London

Description: Mid-terrace, Georgian conservation property

Topic: Windows in a listed property

Architecture: Prewett Bizley Architects

Structural engineer: Jonathan Parks

Contractor: Bow Tie Construction

Budget: Energy saving works £200k (380m²)

Certification or standard achieved: Near miss EnerPHit

Space heating demand post-retrofit (modelled):
25 kWh/m²/yr

Energy Use Intensity post-retrofit (modelled):
45 kWh/m²/yr

Project summary

The 'Bloomsbury House' is a historic listed Georgian townhouse in Bloomsbury, London. It had been used as an office for some decades but was converted back to a single-family dwelling as part of this project. It has come close to meeting the EnerPHit standard even with the limitations of working with an existing grade II listed building. Given the listed status, great care needed to be taken with the historic fabric of the building. Original features were kept in-situ and fabric efficiency measures as well as new services were very carefully planned.

Generally, the twentieth century additions at the rear of the house were the easiest to work with and it was possible to use modern triple-glazing and modern insulations. Service runs were carefully routed through these parts and within the deep floor structure of the main house.

For the main house the internal insulation strategy includes five types of moisture open insulation (cellulose, woodfibre, glass wool, aerogel and open-cell sprayed insulation). These layers generally replaced plasterwork that had been altered or damaged in the latter part of the twentieth century. The brickwork on the outside was also carefully repaired to enhance the drying potential of the fabric.

Perhaps the greatest challenge was how to tackle the very large multi-pane sash windows. While most of these were not original (in fact they were mostly



Figure 6.29 - High performance secondary glazing post retrofit. Prewett Bizley Architects



later Victorian replacements) the conservation officer would not accept replacement sashes with insulating glass.

Therefore, the architect approached a secondary glazing supplier to see what might be possible. Together they married an existing slender frame system (normally used to carry single-glazing) with evacuated insulation glass. The result was an especially high-performance type of secondary glazing that had very little impact on the appearance of the windows when viewed from either inside or outside. As well as achieving an estimated U-value of around $1.0 \text{ W/m}^2\cdot\text{K}$. This solution proved to be very airtight and helped with the final air test result of $1.4 \text{ ach}@50\text{Pa}$. The secondary glazing also almost eliminated the street noise from the interiors which creates a very serene and peaceful atmosphere.

In order to minimise duct runs, two MVHR systems were fitted. The duct routes were carefully planned to have no impact on the interiors. One serves the upper part of the house and the other the lower two floors. The air quality has been measured and is especially good with CO_2 counts never exceeding 1000ppm.

The very low space heat demand enabled the radiator system to be removed altogether and the house is heated with underfloor heating. Heating and hot water are provided by an air source heat pump mounted within the 'M' of the mansard roof. Internal temperatures are impressively consistent even during very cold weather.

The project is testament that it does not need to be an either-or choice between improving energy performance or conservation. It is possible to conserve the planet and our historic buildings.

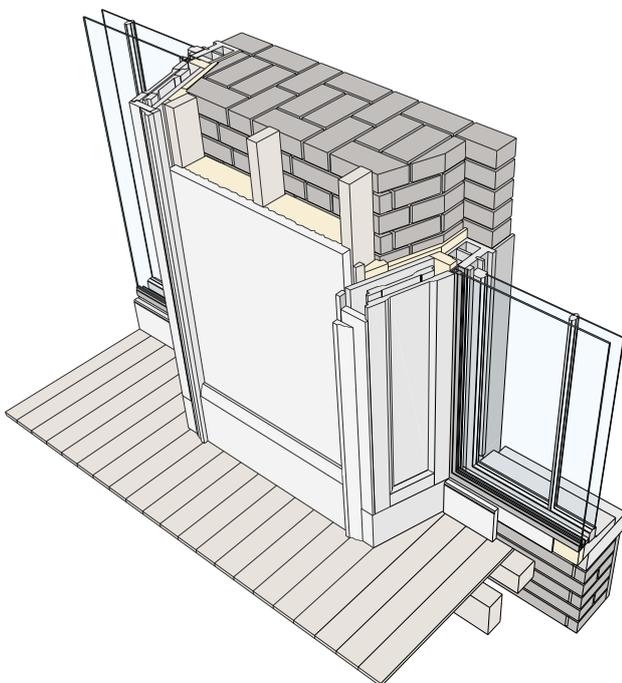
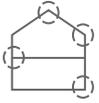


Figure 6.30 - Axonometric showing insulation to walls, shutter box and secondary glazing to existing windows, Prewett Bizley Architects



Case study 6: Erneley Close

Location: Manchester

Description: 32 walk-up flats in two separate maisonette blocks and six cottage style bungalows.

Topic: Thermal bridging

Architecture: Edelmann and Ebling

Developer: R-Gen Developments

Passivhaus consultant: Eric Parks

Building services: Alan Clarke

Structural engineer: Marston and Grundy

Contractor: The Casey Group

Budget: £3.1M

Certification or standard achieved: Passivhaus EnerPHit certification in 2015

Space heating demand post-retrofit (modelled): 23 kWh/m²/yr (both blocks)

Energy Use Intensity post-retrofit:

Smaller block - 73.5 kWh/m²/yr

Larger block - 76.8 kWh/m²/yr

Space heating demand (measured): 21 kWh/m²/yr (based on analysis interpolated from data collected January - April 2015)

Air pressure results:

Smaller block - 1.0@50pa over total floor area of 740m²

Larger block - 1.0@50pa over total floor area of 1228.3m²

U-values:

Roof 0.08 W/m²K

Timber Frame Infill Walls: 0.097 W/m²K

Gable End Walls: 0.12 W/m²K

Ground Floor: 0.21 W/m²K

Doors and Windows: 0.9 W/m²K

Note: the EUI is higher than the LETI targets due to the heating and hot water system being a communal gas boiler system.

Project summary

In May 2015, Eastlands Housing (now One Manchester) completed work on its retrofit to EnerPHit standard of 32 social housing flats in two blocks in Erneley Close, in Gorton, Manchester. It was intended that the development would reduce energy bills, create new community greenspace and make the area a destination of choice.

The scheme not only looked to adopt the EnerPHit standard across the site, but equally created a connection of place making between the buildings. The building works included vast improvements in the fabric U-values, airtightness and in particular, addressing thermal bridging.



Figure 6.31 - Close up after retrofit



Typical of 60s maisonette blocks, these had a number of architectural features, external horizontal walkways, balconies and vertical piers. The construction used cast through concrete, where the concrete continues from internal areas to external areas which created significant thermal bridges in the structure. The Passivhaus consultant estimated the thermal bridges contributed to around a third of the total heat loss.

The solution adopted was to wrap the balconies and features with insulation and use insulated skirting where cold spots were found. Several different variations were implemented as the building works progressed and a great deal of thermal analysis was undertaken to support the best solution.

Originally, the plan was to keep the residents in situ, with the strategy for the wall performance being to retain the inner leaf blockwork walls, applying a parge coat and then adding insulation externally. However, once major works began, the blockwork walls were found to be structurally deficient and with

the decanting of the residents, the decision was taken to remove the walls entirely. In place, an insulated timber frame was installed, allowing for the use of a timber framed backing wall and easier sealing of the perimeter.

This project highlighted the importance of intrusive surveys needed from the outset of the design phase to facilitate design with the necessary level of information and enable adapting the program and procurement to suit findings.



Figure 6.32- Elevation prior to retrofit



Figure 6.33 - Elevation post retrofit



Case study 7: Hensford Gardens

Location: Sydenham

Description: Mid-terrace 1960's

Topic: Step by step retrofit

Client: Marion Baeli and Robert Prewett

Architecture: Prewett Bizley Architects

Building services: Borisa Ristic; Green Building Store (MVHR)

Structural engineer: Rodrigues Associates

Contractor: Borisa Ristic

Budget: £150,000 total budget for the build. Energy efficiency measures were about £55,000

Certification or standard achieved: Step by Step EnerPHit (not registered)

Space heating demand pre-retrofit (modelled):
150 kWh/m²/yr

Space heating demand post-retrofit (modelled):
Step 1: 40kWh/m²/yr
Step 2: 23kWh/m²/yr

Energy Use Intensity post-retrofit:
65 kWh/m²/yr

First step:

The first stage was to carry out the most disruptive works. It consisted of removing many of the internal partitions on ground floor to form a more open plan space and to add a new loft addition that would create a fourth bedroom. This reorganisation work provided the opportunity to re-roof the whole house with a thick layer of insulation and to add floor insulation over the slab on ground. The party walls which were of cavity brickwork were insulated with blown mineral wool and also insulated internally where they form external walls. The front walls and windows were left untouched save for air tightness measures in readiness for step 2. During the reorganisation of the floors, ducting for a future heat recovery ventilation system was fitted.

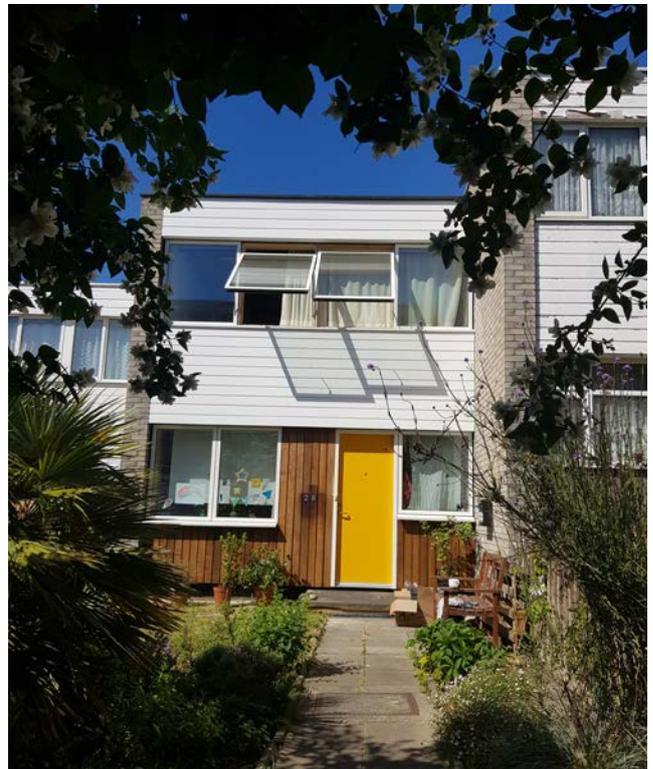


Figure 6.34- Front after retrofit, Marion Baeli and Robert Prewett

Project summary

As a step by step retrofit, this project may be helpful for other home owners who do not have the capital to carry out a whole house retrofit at once. The project also involved the replanning of the house alongside the retrofit works. To start with, the owners/ architects carried out an overview of the project potential and decided that EnerPHit would be possible but that capital restrictions would mean it would have to be done in stages.



Second step:

Step 2 took place over 2 weeks, 3 years after the original works. It involved the complete renewal of the front and rear façades which were infill construction between the party walls. The cavity wall infill was removed and replaced with super insulated timber framing. New triple glazed windows were fitted with attention paid to avoiding the cold bridges particularly with the party wall brickwork. A precast concrete beam at first floor which was part of the original construction, required careful insulation with thin vacuum insulation panels. Following the installation of the new windows the envelope was tested for air tightness, achieving a 0.7 ach @ 50 Pa result. It is hoped that the final compliance test will remain below 1.0 in order to achieve EnerPHit.

Third step:

The MEP strategy included replacing the 15 year old gas boiler and installing a whole house ventilation system in the new roof extension. This arrangement will stay in place for a few more years, until a fourth step can be implemented which will include the replacement of the boiler with a thermal store and external air source heat pump. The enclosure of the boiler cupboard has been designed to accommodate the dimensions of a thermal store and positioned within proximity of the future air source heat pump location.

Extra consideration:

The second step aimed to recycle materials as much as possible. For this, the majority of the bricks and blocks removed were crushed and re-used to form the base of a new terrace and landscaping. The existing 5m long oak facade cladding panels from the 1960's were re-planed; repainted and re-installed in place. Even the window panes of the original pvc glazing were re-used to form allotment glass houses.



Figure 6.35 - Internal wall insulation to original external building envelope which was mostly cavity but solid in isolated location, Marion Baeli and Robert Prewett

Case study 8: Princedale Road

Location: Holland Park

Description: Mid-terrace Victorian house

Topic: Airtightness

Client: Octavia

Architecture: PDP London

Building services: Ryder Strategy ; Green Tomato (now Enhabit)

Passivhaus consultant: Green Tomato (now Enhabit)

Sustainability consultant: Eight Associates

Contractor: Ryder Strategy

Budget: £180,683 total budget for the build. Energy efficiency measures were about £59,870

Certification or standard achieved: PassivHaus certification

Space heating demand post-retrofit (modelled): 10 kWh/m²/yr

Energy Use Intensity post-retrofit (measured): 31 kWh/m²/yr

Energy bills (actual): £1,000 (annual post retrofit, electricity only)

U-values:

Front elevation: 0.15 W/m²K

Rear elevation: 0.15 W/m²K

Party walls: 0.25 W/m²K

Windows: 0.8 W/m²K

Door: 1.2 W/m²K

Floor: 0.15 W/m²K

Roof: 0.17 W/m²K

Airtightness: 0.34 m³/ m².h@50Pa

Project summary

This project was, for social housing provider Octavia, part of the 'Retrofit for the Future' Government programme aiming to reduce carbon emissions from existing dwellings by 80%.

The house is a typical mid-19th century London terraced house located in a conservation area. The project features an internal insulation strategy, a unit combining MVHR, an exhaust air source heat pump and hot water storage, solar thermal panels, triple glazed sash look-alike windows. Like all the 100 houses of the Retrofit for the Future Programme, this house has been monitored for over 2 years and delivered outstanding energy and comfort results and achieved 80% carbon reductions.

Due to its location in a conservation area, external wall insulation was not feasible. The team therefore followed the principles of PassivHaus 'fabric-first' approach with an internal wall insulation strategy as



Figure 6.36 - Front post retrofit, Paul Davis + Partners



part of the complete upgrade of the external building fabric as the house was in a very poor condition.

It was essential that the continuity of internal insulation and airtightness layers throughout the building envelope was maintained, coupled with the installation of a robust ventilation system (build tight, ventilate right). This is to avoid any water vapour condensing within the building fabric, which can cause long-term damage to buildings and must be avoided.

In this house, the approach was to keep the strategy as simple as possible with the minimum variety of materials, combined with robust detailing. The house has been retrofitted with a thick insulated and airtight layer inset within an existing Victorian building envelope. It is a rare example of a continuous strategy where the same thickness and insulation material has been installed on all floors, walls and ceilings and where the airtightness layer is made of a single material type with taped and jointed OSB timber boards. These were also strategically positioned between two layers of insulation to ensure its protection from potential penetrations (nails) and also to enable the location of sockets and switches back boxes within the top insulation layer without compromising the integrity of the airtightness line.

The airtightness test was carried out with a small fan and was done in two steps. The first was carried out at the stage when the airtightness and windows were installed but not the finishes. This enabled the team to remediate minor leaks while they were still accessible. Another test was carried out on completion to ensure that no trade intervention affected the performance of the airtight layer as a last chance to remedy any issues. This stepped approach is really important to avoid any potential difficult remedial works which

might involve abortive works and impact on cost and programme of a project.

The strategy was bold but was justifiable in a house which was in a very poor state of repair. Ten years on, there are no signs of moisture anywhere in the house's fabric and the internal conditions have been comfortable and entirely draft-free giving the house a very long lease of life.

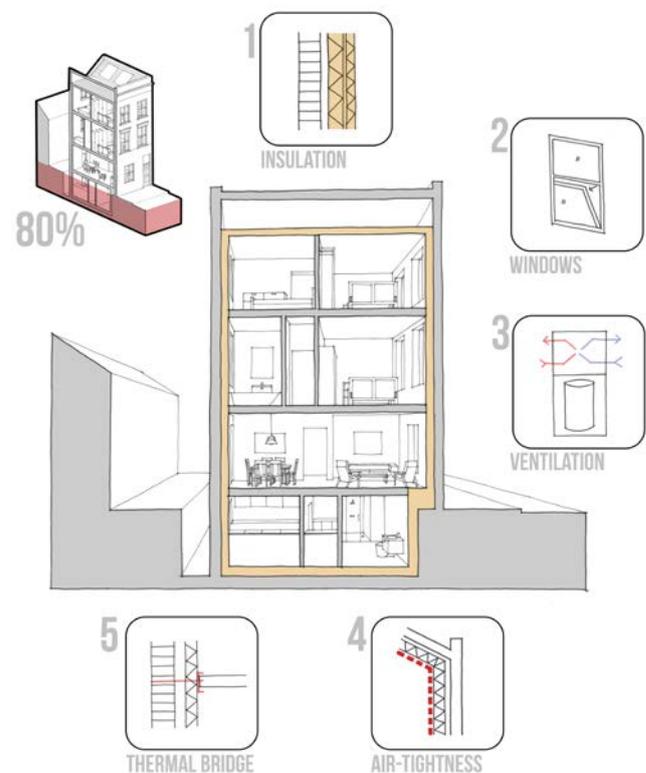


Figure 6.37 - Schematic of retrofit works, Paul Davis + Partners



Case study 9: Rectory Grove

Location: Clapham, London

Description: Semi-detached Early Victorian house
Grade II listed

Topic: Internal insulation moisture content
monitoring

Architecture: Harry Paticas - Arboreal Architecture

Building services: Alan Clarke

Building performance pre-design investigations:
Archimetrics

Structural engineer: The Morton Partnership

Certification or standard achieved: AECB Silver

Space heating demand pre-retrofit:

180 kWh/m²/yr

Space heating demand post-retrofit:

40 kWh/m²/yr

Energy Use Intensity post-retrofit (modelled):

79 kWh/m²/yr

Walls: 9 types of insulation used including
Woodfibre, Aerogel, IQ Therm (between joists)

U-value range: 0.15 - 0.58 W/m²K

Airtightness: All walls plastered with lime plaster
as air tightness layer 1.8ach post-retrofit (9.6ach
pre-retrofit).

Ventilation: continuous mechanical extract (MEV)
from kitchen and wet rooms

Project summary

This project is an example of monitoring the hygrothermal performance (moisture content between existing masonry walls and new insulation) after a thermal upgrade along with repairs and fabric improvements of a Grade II Victorian house in a conservation area.

Pre-design investigations were carried out at the outset, an assessment was carried out of the existing building, including airtightness test, thermographic survey of fabric and a survey revealing actual U values of existing walls.



Figure 6.38 - Front elevation, Arboreal Architecture

Post construction monitoring of relative humidity and wood moisture equivalent was carried out using 19 wireless moisture sensors installed during the building construction. Some within the cold loft space and 15 mounted on Douglas fir wood blocks installed in the masonry behind the lime plaster and new insulation. The sensors aimed to obtain data to assess the risks on the moisture and temperature within the insulated walls and hence appraise the risks to buried existing timbers. All timbers built into the walls (including joist ends, lintels and wall plates) were treated with boron wood preservative paste.

Results showed the higher the thermal resistance of the insulation (i.e. better), the lower the temperature of the brickwork, which resulted in higher RH (relative humidity). There was also a correlation between the orientation of the wall (i.e. direction of prevailing wind and rain) and RH values. The data showed that the wet winter months were the worst, with the peak moisture content in February, then drying out occurred over the summer months aided by the vapour permeable materials (masonry, lime plaster, insulation and paint etc.). The walls continued to dry out slowly for a period of approximately 6 years after construction and have now equilibrated.



Figure 6.39 - Schematic of types of insulation to rear elevation, Arboreal Architecture



Figure 6.40 - Hygrothermal monitors between existing masonry walls and new internal insulation, Arboreal Architecture

References and footnotes

Archetype 1 - Haddington Way

6.1 - Baeli, M. (2013) Residential Retrofit: 20 case studies. RIBA Publishing. <http://mepk.co.uk/project/haddington-way/>

Archetype 2 - Zetland Road

6.2 - The uninstalled U-value refers to the U-value of the window or door before it is installed. This U-value includes the pane and frame, but excludes the heat loss from thermal bridging around the window/door where it meets the wall. Poor installation can reduce a window/door's U-value, as heat is lost through the frame at points where either the installation doesn't meet it, or there are thermal bridges or cold air gaps. Poor window installation can also cause condensation along window frames.

<https://passivehouseplus.ie/magazine/upgrade/the-deepest-greenest-retrofit-ever>

<https://www.ecospheric.co.uk/zetland>

<https://www.passivhaustrust.org.uk/projects/detail/?cId=91>

Archetype 3 - The Nook

6.3 - Baeli, M. (2013) Residential Retrofit: 20 case studies. RIBA Publishing. <http://mepk.co.uk/project/haddington-way/>

Archetype 4 - Wilmcote House

6.4 - ECD Architects: <https://ecda.co.uk/projects/wilmcote-house-2/>

6.5 - Teli et al (2015) Fuel poverty-induced 'prebound effect' in achieving the anticipated carbon savings from social housing retrofit

6.6 - Stephen, J. (2020) Southampton University monitoring data and analysis (PhD work)

Traynor, J. (2019) EnerPHit: A Step by Step Guide to Low Energy Retrofit. RIBA Publishing.

Archetype 5 - Gloucester Place Mews

6.7 - http://www.feildenandmawson.com/projects_2_gloucester_place_mews.html

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Case study 1 - Sterndale Road

6.8 - "Sterndale Road - A Refurbishment Case Study: achieving an 84% carbon saving" report by the Energy Saving Trust, 2011.

Case study 5 - Bloomsbury House

<https://www.architectsjournal.co.uk/buildings/how-prewett-bizley-architects-balanced-heritage-and-building-performance>

Case study 6 - Ernely Close

[https://www.passivhaustrust.org.uk/UserFiles/File/UK%20PH%20Awards/2015/2015%20posters/ERNELEY%20CLOSE_Poster%20web\(1\).pdf](https://www.passivhaustrust.org.uk/UserFiles/File/UK%20PH%20Awards/2015/2015%20posters/ERNELEY%20CLOSE_Poster%20web(1).pdf)

<https://ukphc.org.uk/ukphc14-presentations>

<https://usir.salford.ac.uk/id/eprint/46328/>

Case study 7 - Hensford Gardens

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Annex

Annex A: How do our homes produce carbon?

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In reading this document, it is useful to have a common model to explain how dwellings use energy and also take into account the impact of different types of heating technology and changing carbon factors. If we start with the dwelling itself, energy use can be broken down into 4 distinct areas:

-  1. Space heating
-  2. Hot water
-  3. Lighting, pumps and fans (usually associated with the heating and hot water systems)
-  4. Appliances (also known as plug loads or Unregulated energy)

All this energy is the actual amount of energy used by the occupants in the home and is called final demand. For example, this might include 1kWh of heat energy emitted by a radiator.

The type of energy used in items 3 and 4 will always be electrical (excluding gas hobs), whereas items 1 and 2 will vary from dwelling to dwelling – but is most often natural gas in the UK.

Once delivered to a home, electrical energy used directly is 100% efficient – e.g. 1 kW of electrical power delivered to an electric panel heater will emit 1 kW of heat. However, the heating mechanism for other fuels is not 100% efficient and so there will be losses, meaning that additional energy needs to be delivered to the home to provide the same amount of final output. This is known as the delivered energy.

For example, if a home needs 10 kW of heating and hot water on a winter's day and uses a gas boiler which is 90% efficient, then 11.1 kW of gas will need to be delivered to the property. It may also need, for example, 5kW for lighting, appliances and pumps etc.

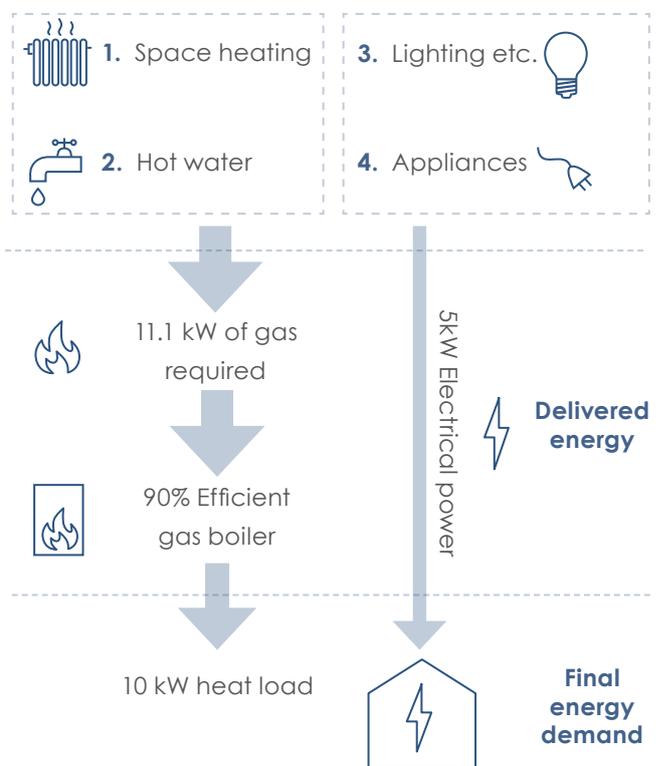


Figure A.1 - Delivered and final energy for 90% efficient gas boiler

If we were to use a heat pump instead of a gas boiler, then this is the same principle, but the heat pump uses electrical energy not gas. However, it also extracts energy from the air or ground and so is able to provide more heat energy than the electrical energy it consumes. In effect, a heat pump is more than 100% efficient. A heat pump's level of efficiency is known as its Coefficient of Performance or COP. For example, a

heat pump with a COP of 2 will produce 2kW of heat for every 1kW of electrical power.

Thus, our model now becomes:

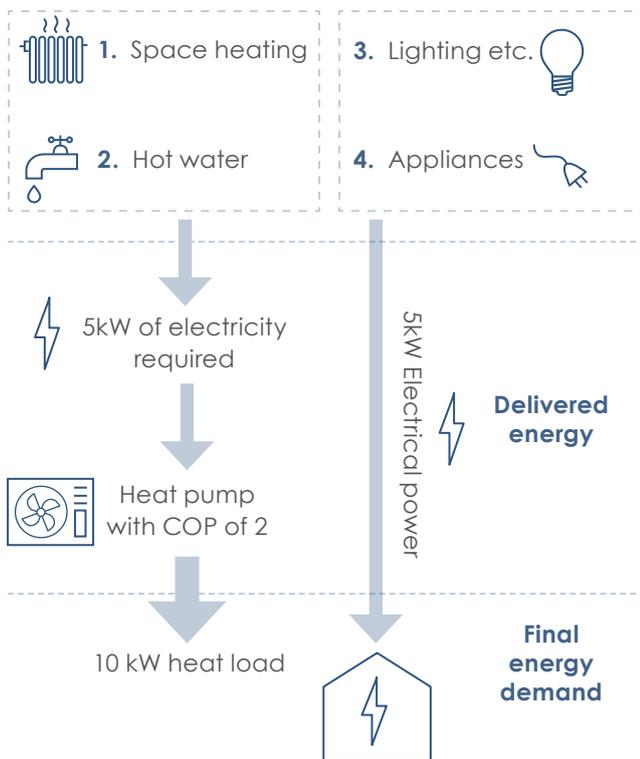


Figure A.2 - Delivered and final energy for heat pump with COP of 2

Each of these different forms of energy has different carbon factors – i.e. the amount of CO₂ emissions that result from each unit of energy consumed. For a gas boiler this will be fairly consistent over time as you are simply burning a fossil fuel. For electrical energy this changes constantly as more or less renewable energy is introduced to our national electricity grid – solar and wind energy is not that predictable. We can estimate the average carbon factor for electricity for the next few years, but in the long term, it is difficult to predict

exactly what will happen. In 2020 the annual average carbon factor for electricity is around 140g of CO₂ per kWh and for gas, it is 210g^{A.1}. Currently, the carbon factor in use within SAP^{A.2} is 519g of CO₂ per kWh which means that SAP will significantly overestimate the carbon emissions from electricity.

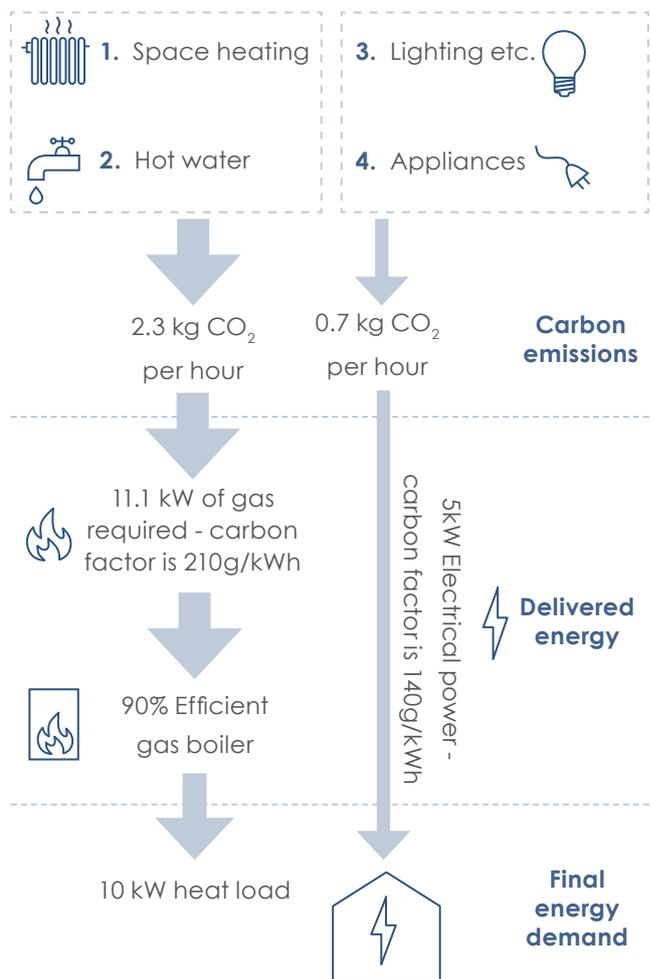


Figure A.3 - Average carbon Emissions associated with energy use

In looking at the long-term efficiency of buildings, it is important to consider how the various components of our model might change. As we have already seen, the carbon factor for electricity in particular will vary both in the short and long term. Over the next 30 years the carbon intensity of our national grid will depend on a range of factors, technologies and government policies – so is impossible to predict with absolute accuracy. Our heat generation technologies will also change. The typical lifetime of a gas boiler or heat pump is around 20 years ^{A.3}. At that point it will need to be replaced with perhaps a more efficient device, or something completely different. This new device will probably have a different efficiency and thus change the amount of delivered energy required.

However, the final energy required is likely to remain more consistent over the lifetime of the building. For heating, the final energy required is related in most part to the fabric performance of the building – the insulation in its walls, floors and roofs, its window performance, ventilation system and airtightness. All these are set at the point of construction and will perform consistently throughout the building's life. The demand for hot water is related in most part to the number of occupants and their living habits and so is not affected by the technology. Finally, appliance load is again related to occupancy habits, but it is also likely that future appliances will be more efficient, thus reducing the demand.

Thus, to get a true picture of the actual energy efficiency of buildings, as well as their impact on climate change over time, we must look at all aspects of the chain of delivery of energy to the building.

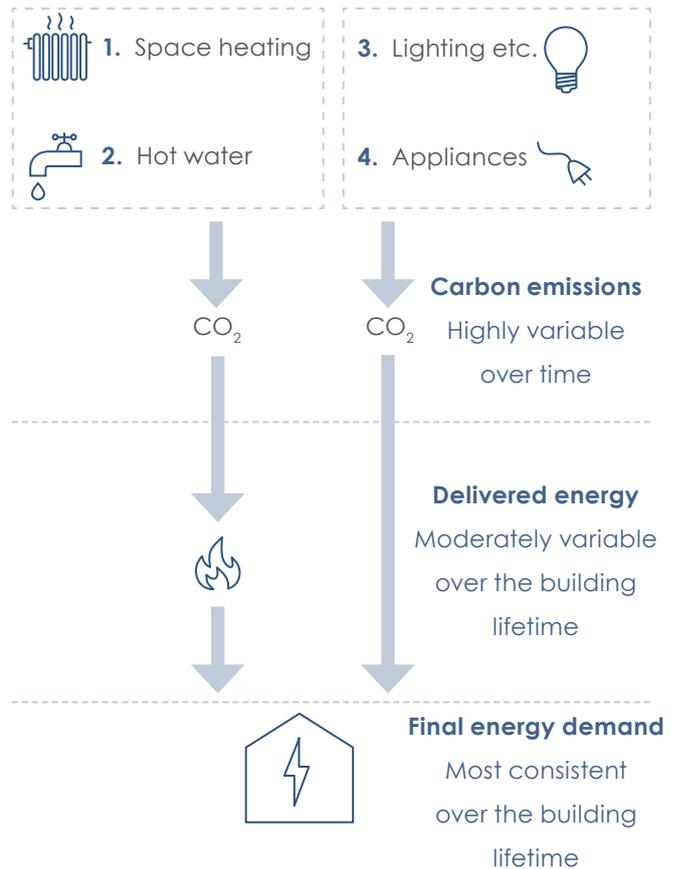


Figure A.4 - How variable is the chain of delivery of energy to the building

The Performance Gap

Whilst energy models are useful to predict energy demand, we must also consider the evidence from monitoring of actual buildings in use. This data indicates that a typical building regulations standard home will require, on average, at least 60% more energy for heating than is predicted ^{A.4}. Whilst the causes of this performance gap are beyond the scope of this paper, it is important that it is included in our

considerations as otherwise we will make inaccurate comparisons and draw incorrect conclusions. The performance gap typically has the most impact on the space heating demand of a building as it primarily relates to the fabric performance of the building ^{A.5}.

Thus, our model becomes:

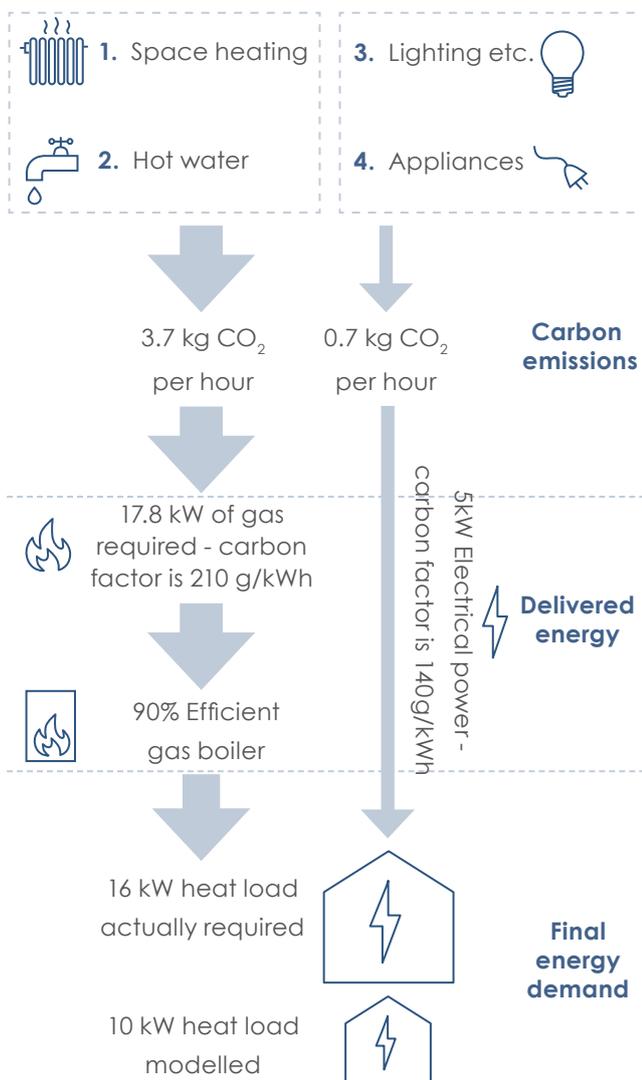


Figure A.5 - The performance gap

A.1 References and footnotes

- A.1 - Proposed SAP 10.1 carbon factors – see <https://www.bregroup.com/wp-content/uploads/2019/10/SAP-10.1-01-10-2019.pdf> table 12d
- A. 2 - The Standard Assessment Procedure (SAP) is the methodology used by the government to calculate building energy and carbon use. The current edition is 2012, version 9.92.
- A. 3 - CIBSE Guide M, Appendix 12.A1: Indicative economic life expectancy
- A. 4 - Passivhaus: The Route to Zero Carbon? Passivhaus Trust, March 2019, Appendix 2
- A. 5 - See, for example, <http://www.zerocarbonhub.org/current-projects/performance-gap>

Annex B - Table of example opportunities for starting retrofit

Even when making ad-hoc or individual changes to improve, extend, or maintain a home, you should be thinking about and working towards a Retrofit Plan. Not doing so will often lock in future high carbon

emissions. Don't miss an opportunity!

Here are some example changes to homes and associated thermal improvement that could be made:

Major changes	Design lifetime	Retrofit measures to action or consider
Extension	Building life	<ul style="list-style-type: none"> → Extension built to new build insulation and airtightness standards → Triple glazed new windows → Ventilation to extension, duct runs and space for MVHR → Space for heat pump and hot water tank → External wall insulation to surrounding walls → Reduce thermal bridges to connection with existing fabric → Ground floor insulation → Consider upgrading other windows near extension works.
Loft conversion	Building life	<ul style="list-style-type: none"> → Roof insulation and airtightness → Triple glazed new windows → Ventilation duct runs to the rooms below to support MVHR → Window replacement to other floors whilst there is access.
Floor repair or subsidence	Building life	<ul style="list-style-type: none"> → Floor insulation → Reduce thermal bridges to connection with existing building.

Major changes	Design lifetime	Retrofit measures to action or consider
Basement dig	Building life	<ul style="list-style-type: none"> → Basement built to new-build insulation and airtightness standards → Ventilation to basement, duct runs and space for MVHR. → Space for heat pump and hot water tank → Reduce thermal bridges to connection with existing building → Ground floor insulation to other areas.
Landscaping around building	~10-30 years+	<ul style="list-style-type: none"> → Perimeter insulation at ground to wall junction → Perimeter drainage → External wall insulation.
Repair and replacement	Design lifetime	Retrofit measures to action or consider
Roof repair (tiles, flat roof)	~30 years	<ul style="list-style-type: none"> → Roof insulation and airtightness → Airtightness connections to surrounding elements.
External render or paint	<10 years (cement) 25 years (BBA certified)	<ul style="list-style-type: none"> → External wall insulation → Replace windows whilst there is access

Annex B

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Repair and replacement	Design lifetime	Retrofit measures to action or consider
Windows and door replacement	10 years guaranteed, although design life is typically 20-30 years for new windows	<ul style="list-style-type: none"> → Replacement triple glazed windows or best available for appearance constraint → Ventilation approach. Recommend new windows don't have trickle vents, move to MVHR. Required for mechanical extract → Airtightness connection to wall and floor → Insulation to window reveals and connection with (future) wall insulation. → Window may need to be moved in the future.
Re-plastering wall or ceiling	~20 years	<ul style="list-style-type: none"> → Internal wall insulation (if appearance constrained) → Roof and wall airtightness.
Kitchen replacement	~5-10 years	<ul style="list-style-type: none"> → Ventilation strategy. Replace cooker hood with recirculation type if strategy is for MVHR, or continuous extract as part of MEV system → Insulation to kitchen floor → Internal wall insulation behind units.
Boiler	10-15 years	<ul style="list-style-type: none"> → Replace with heat pump system → Building fabric improvements are required to reduce heat load so the heat pump can meet demand and operate efficiently with low running costs.
Extract fan / Cooker hood	~5-10 years	<ul style="list-style-type: none"> → Ventilation strategy. Replace cooker hood with recirculation type if strategy is for MVHR, or continuous extract as part of MEV system → Induction hob and all electric cooking.

Repair and replacement	Design lifetime	Retrofit measures to action or consider
Electrical wiring	Tested every 10 years (homeowner) or 5 years (landlord)	<ul style="list-style-type: none"> → Spare capacity for installing heat pump in the future → Metering including sub-meter for electric vehicle charging and heating → Spare capacity for electric car charging.
Maintenance	Design lifetime	Retrofit measures to action or consider
External paint	10 years	→ External wall insulation.
Internal decoration	~2-5 years	→ Internal wall insulation.

Figure B.1 - Table of example opportunities for starting retrofit

If you can't afford to upgrade to what is needed as part of the Retrofit Plan, it might be better not to do the work at all at this time, and instead save until you can do what is needed for each phase. Installing a lower specification now 'locks in' poor emissions for the future. On the other hand not doing retrofit at all might mean it never happens, and leaves the potential for future regrets. Don't decorate before you insulate.

Annex C - Illustrative insulation strategies

This annex provides some illustrative strategies for adding insulation to buildings. It provides suggestions based on the basic construction type and also whether the retrofit is likely to be constrained by heritage or conservation features. The strategies proposed here can be used to achieve the target U-values set out in this guide.

Key

- 1. External wall insulation
- 2. Option for internal or external insulation
- 3. Internal insulation
- 4. External rear wall insulation in some cases
- 5. New insulated roof or loft insulation
- 6. Loft insulation
- 7. External roof insulation
- 8. Ceiling insulation

C.1 High level insulation strategies in a conservation area



Figure C.1 - High level insulation strategy for heritage negative buildings

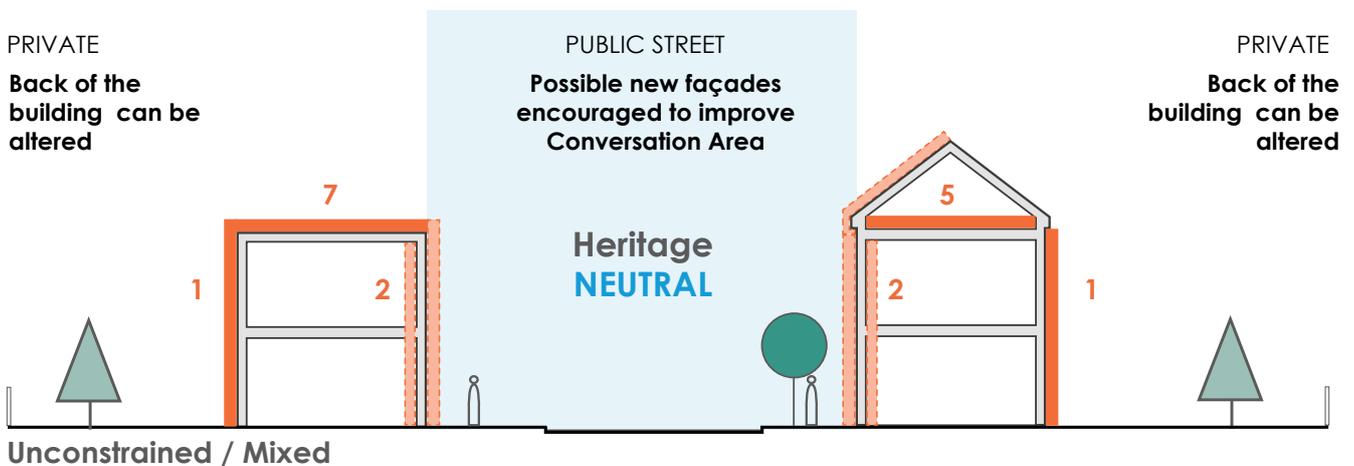


Figure C.2 - High level insulation strategy for heritage neutral buildings

Heritage Negative
Buildings in a Conservation Area with a potential for detrimental effect on building features.

Heritage Positive
Buildings in a Conservation area which have significant external heritage features which will preclude any significant change in appearance to front façades.

Heritage Neutral
Buildings in a Conservation Area with limited or no notable heritage features.

Listed Buildings
Buildings where both internal and external heritage features are likely to constrain retrofit actions.

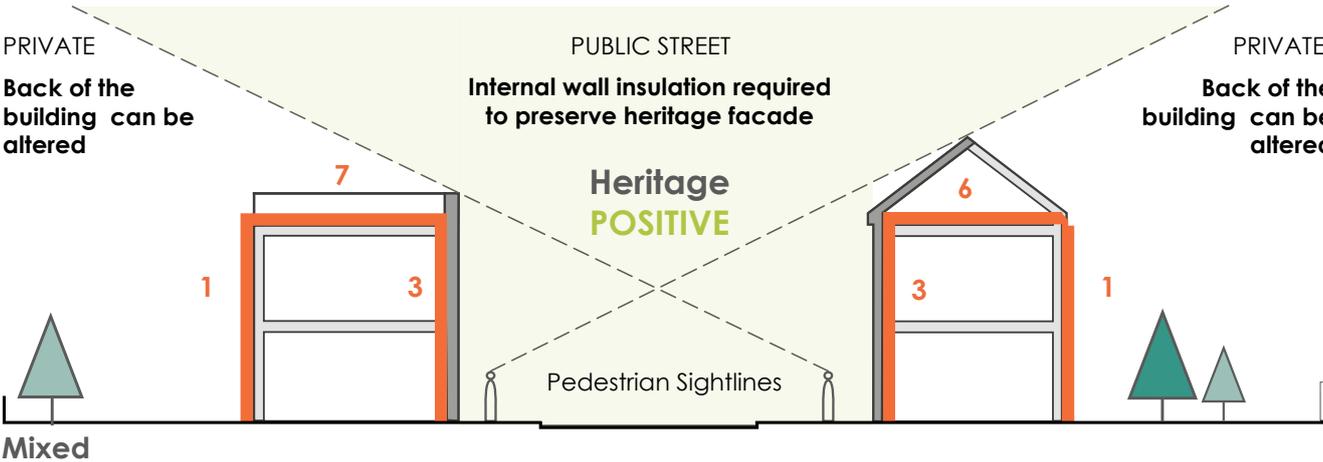


Figure C.3 - High level insulation strategy for heritage positive buildings

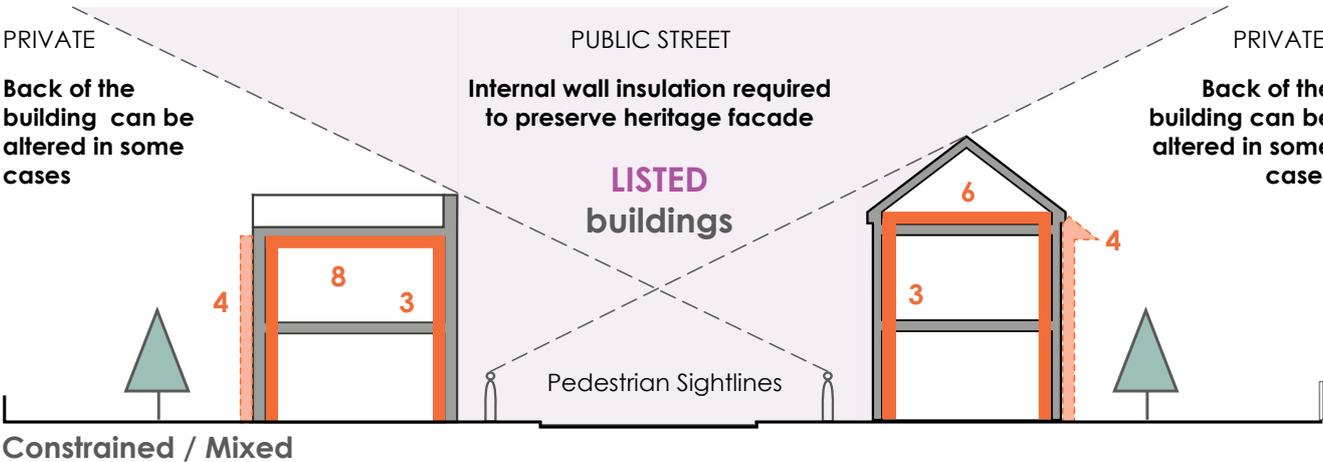


Figure C.4 - High level insulation strategy for listed buildings

C.2 Insulation strategies for floors

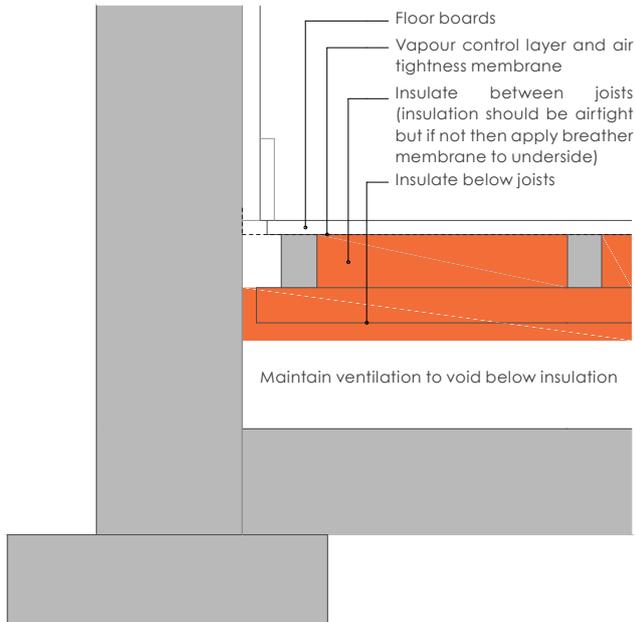


Figure C.5 - Insulation strategy for retained suspended timber floor

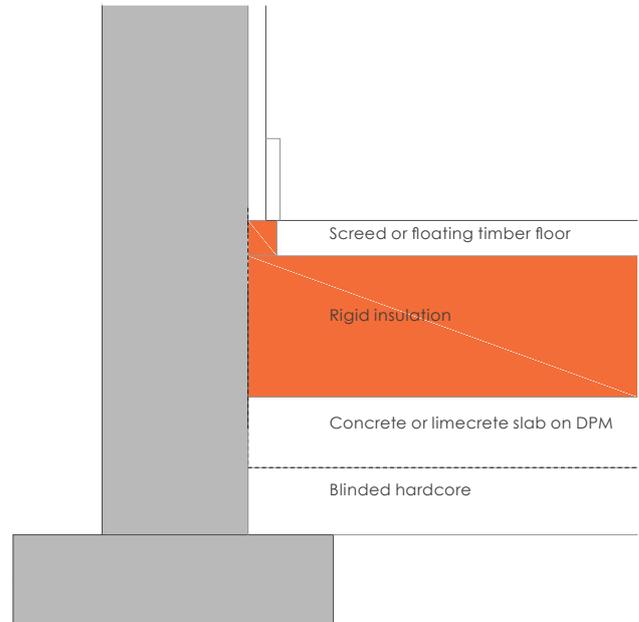


Figure C.7 - Insulation strategy for removed suspended timber floor

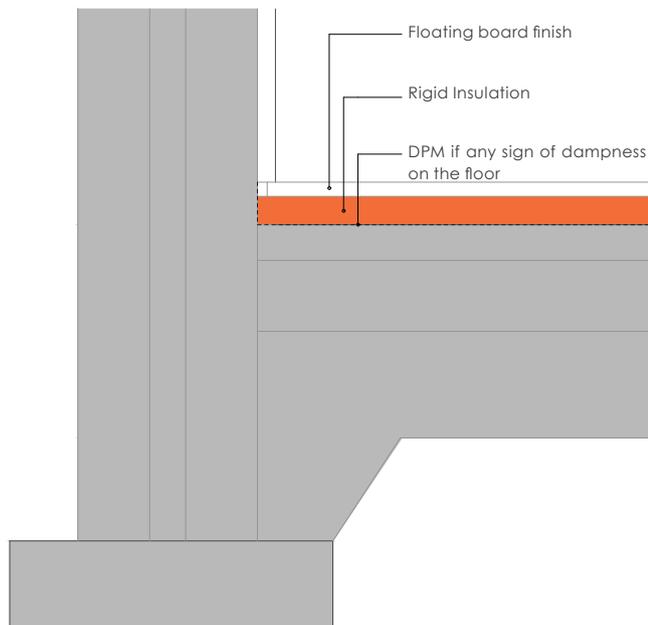


Figure C.6 - Insulation strategy for retained solid floor

C.3 Insulation strategies for walls

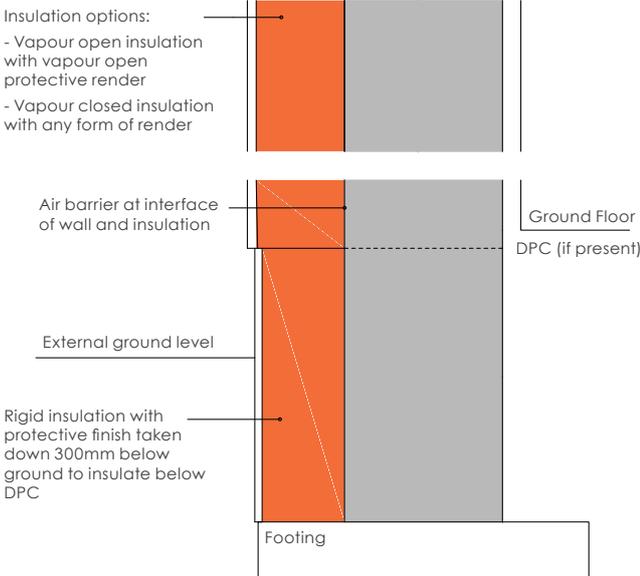


Figure C.8 - Insulation strategy for solid wall - external wall insulation (EWI)

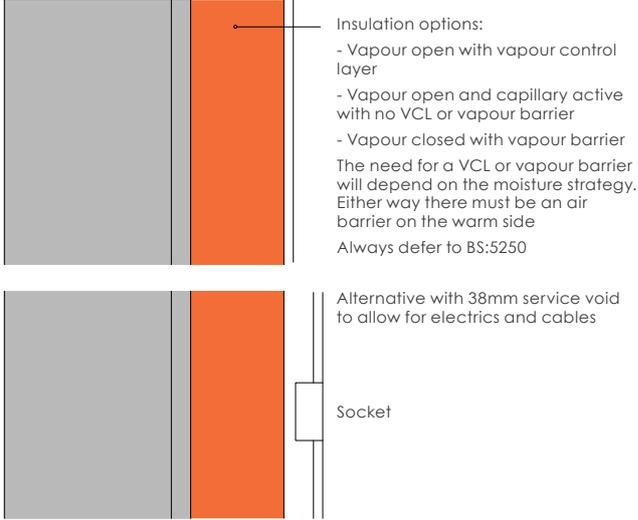


Figure C.10- Insulation strategy for solid wall - internal wall insulation (IWI)

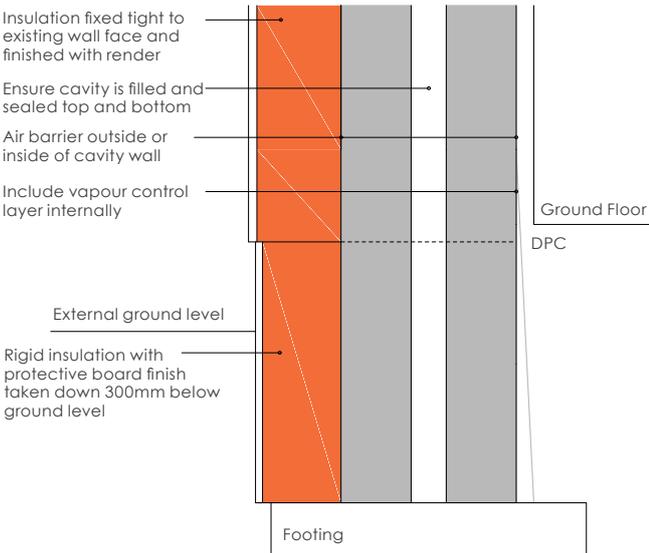


Figure C.9 - Insulation strategy for cavity wall - external wall insulation (EWI)

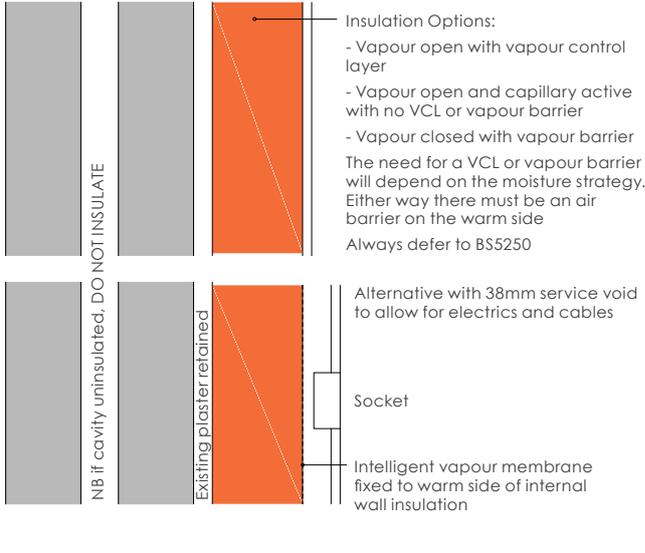


Figure C.11 - Insulation strategy for cavity wall - internal wall insulation (IWI)

C.4 Insulation strategies for roofs

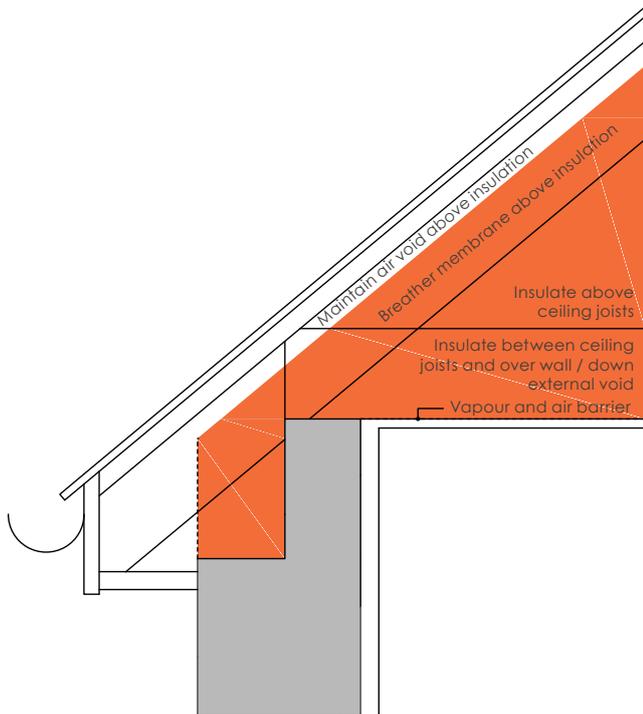


Figure C.12 - Insulation strategy for cold roof insulated between and above ceiling joists

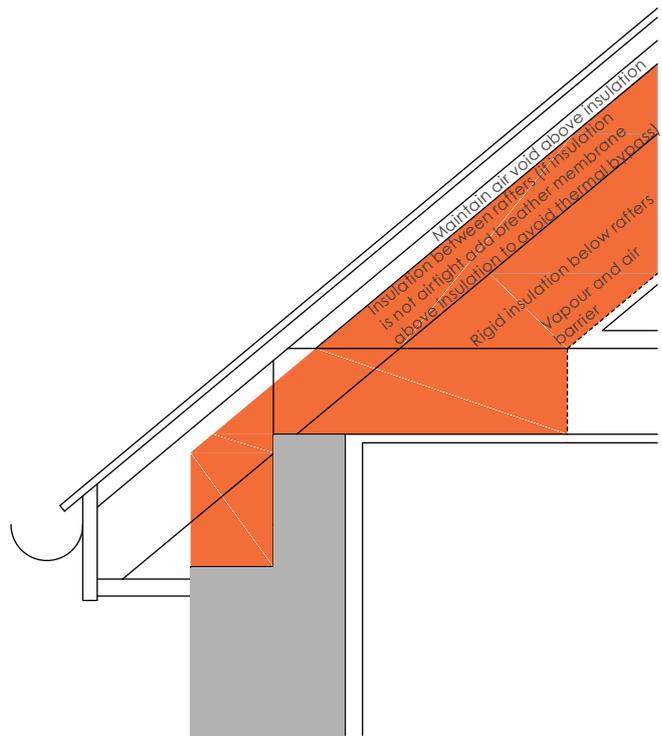


Figure C.13 - Insulation strategy for cathedral roof insulated between and below rafters

Note: a cathedral roof is a scenario where you are removing the outer roof finish (e.g. tiles) and therefore have the opportunity to add insulation above the rafters - thereby preserving more internal space.

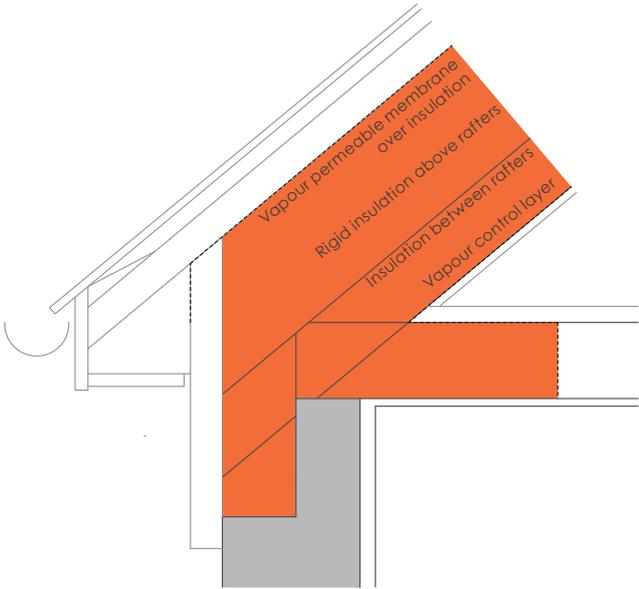


Figure C.14 - Insulation strategy for cathedral roof with removed roof finishes, insulated between and below rafters, refinish roof ensuring ventilation above insulation

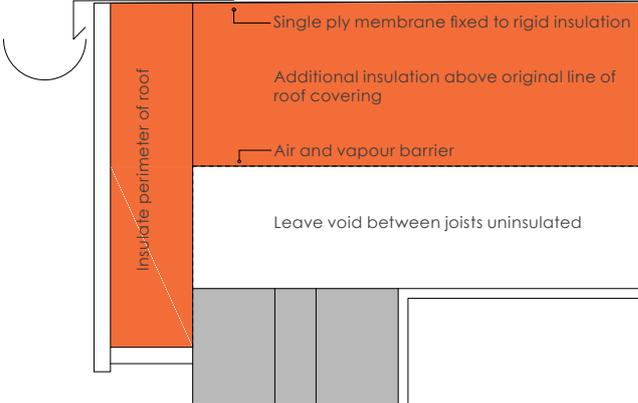


Figure C.15- Flat (warm) roof with additional insulation above roof line

Annex D - Retrofit ventilation strategies

Ventilation is a critical part of retrofit. Done properly it improves air quality and reduces condensation and moisture risk. The ventilation system is often the first thing that is carried out, to enable other works. There are two main strategies that you could use in existing buildings: central whole building ventilation with heat recovery, and a decentralised continuous extract system.

LETI recommends avoiding intermittent extract fans and wholly 'natural' ventilation for building retrofits. This typically results in very un-natural ventilation dead spots that have poor air quality and in many cases result in mould and almost continuous condensation

during winter. The retrofit will change the internal environment, neglecting to update the ventilation at the same time can damage the building.

Improving ventilation can change the characteristics of the home by reducing the humidity of the air. This is mostly a (very) good thing, but in some cases it might be too dry and cause discomfort or drying out of materials and cracking. This can be guarded against by turning the fan down slightly, or by introducing more moisture sources such as house plants.

Pros and cons of retrofit ventilation strategies

	Pros	Cons
Mechanical ventilation with heat recovery (MVHR)	<ul style="list-style-type: none"> → Heat is recovered from the outgoing air, therefore it is energy efficient and no cold draughts as supply air is warm. → Supply air is filtered – eliminating particulates such as soot and pollen. → Runs constantly, so deals with all indoor pollutants – e.g. humidity, VOCs, CO₂ and odours. → Savings made on space heating usually offset the running costs of the ventilation. → Centralised fan unit and good design results in a system which is effectively silent. → No external air vents in habitable rooms, so ingress of external noise is minimised. 	<ul style="list-style-type: none"> → MVHRs don't typically include demand control – so run constantly (albeit very efficiently). → High capital costs. → Invasive to retrofit – ducts required to every room. → MVHRs are complex systems and require expert design and commissioning to ensure correct operation. → Filters need to be changed every 6 months. → Requires a good level of airtightness to ensure most air is exchanged via the central unit.

	Pros	Cons
Centralised continuous demand-controlled extract	<ul style="list-style-type: none"> → Demand control reduces running time of ventilation system making it energy efficient as it minimises heat losses from cold air entering the building. → Moderate capital costs, depending on extent of ductwork required. → Centralised fan unit and good design results in a system which is effectively silent. → Commissioning is quick and straightforward. → Demand control typically linked to humidity – so will maintain optimum humidity levels. → No maintenance required. 	<ul style="list-style-type: none"> → No heat recovery, cold air is introduced to ventilate the home. Potential for cold draughts. → Running costs are not offset by any savings in space heating. → Specialist design and commissioning required. → Incoming air vents will need to be fitted in certain rooms to ensure good ventilation distribution. → Requires a reasonable level of airtightness to ensure air is drawn in via the air vents as intended. → Incoming air is not filtered. → Air vents may contribute to external noise transmission into habitable rooms. → Demand control typically linked to humidity – so may not deal with other pollutants such as VOCs, CO₂ or odours (unless there are additional detectors to control the system).
Decentralised continuous demand-controlled extract	<ul style="list-style-type: none"> → Demand control reduces running time of ventilation system making it energy efficient as it minimises heat losses from cold air entering the building → Low capital costs. → Can replace intermittent extract fans with continuous fans. → Simple design and easy commissioning. → Demand control typically linked to humidity – so will maintain optimum humidity levels. → No maintenance required. 	<ul style="list-style-type: none"> → No heat recovery, cold air is introduced to ventilate the home. Potential for cold draughts. → Running costs are not offset by any savings in space heating. → Continuous fans in every wet room may contribute to noise in homes. → Incoming air vents will need to be fitted in certain rooms to ensure good ventilation distribution → Requires a reasonable level of airtightness to ensure air is drawn in via the air vents as intended → Incoming air is not filtered → Air vents may contribute to external noise transmission into habitable rooms → Demand control typically linked to humidity – so may not deal with other pollutants such as VOCs, CO₂ or odours (unless there are additional detectors to control the system)

	Pros	Cons
Centralised continuous extract from wet rooms and kitchen (no demand control)	→ Moderate capital costs, depending on extent of ductwork required.	→ No heat recovery, cold air is introduced to ventilate the home. Potential for cold draughts.
	→ Centralised fan unit and good design results in a system which is effectively silent.	→ Running costs are not offset by any savings in space heating.
	→ No maintenance required.	→ Runs constantly, so heat losses (and therefore associated energy costs) are likely to be significant.
	→ Will operate continually, so likely to deal with humidity and other pollutants, maintaining good levels of internal air quality.	→ Incoming air/trickle vents may need to be fitted in certain rooms to ensure good ventilation distribution.
	→ Commissioning is quick and straightforward.	→ Specialist design and commissioning required.
	→ Not dependent on high levels of airtightness.	→ Incoming air is not filtered.
Decentralised intermittent extract from wet rooms and kitchen (Building Regulations default)	→ Very low capital costs.	→ No heat recovery, cold air is introduced to ventilate the home. Potential for cold draughts.
	→ No maintenance required.	→ Running costs are not offset by any savings in space heating.
	→ Not dependent on high levels of airtightness.	→ Incoming air/trickle vents may need to be fitted in certain rooms to ensure good ventilation distribution.
	→ Minimal commissioning.	→ Fans in every wet room may contribute to noise in homes.
		→ Incoming air is not filtered.
		→ Trickle/Air vents may contribute to external noise transmission into habitable rooms.
		→ Needs to be augmented by window opening to achieve sufficient levels of ventilation to maintain good indoor air quality.

D.1 Central supply and extract ventilation with heat recovery (MVHR)

This is by far the preferred option and should be used wherever possible. Well designed MVHR brings fresh air into each room and extracts from each wet room with a central fan. It guarantees fresh air throughout the house, recovers more than 80% of the heat from the exhaust air, and massively reduces the risk of moisture issues in other parts of the home. MVHR is also the only domestic ventilation system which filters all incoming air and so is particularly beneficial for situations where there is external pollution. Installing MVHR and having good indoor air quality removes many of the risks of retrofit, particularly in traditional and solid wall properties.

One myth about MVHR is that you need to have a certain level of airtightness before it is worth it. This is not true (see 'The case for MVHR', Passivhaus Trust, April 2020. Link: https://www.passivhaustrust.org.uk/guidance_detail.php?gld=46). It is true that the energy savings from the MVHR are proportional to how airtight the home is, however all the other benefits of good ventilation can still be felt. MVHR also allows you to safely block up most old internal air vents to your home and fully draft proof windows and doors, which quickly improves comfort.

MVHR requires very little maintenance, a filter change once every 6 months, which can be carried out by the residents in most instances. There are two fans which use a small amount of electricity, it typically costs £30-£50/year to run an MVHR for a typical home. At the same time you are saving about 15 times as much heat energy, so even for cheap heating fuel it is normally cheaper to run the fan in winter than not.

The design of the ventilation system is critical, in particular ensuring that the unit and ducts are designed to minimise noise. The ventilation system should be inaudible. It is normally possible to integrate MVHR to an existing home, but you might need to be creative!

D.1 Central supply and extract ventilation with heat recovery (MVHR)

Supply room terminal in living and all bedrooms

Incoming air is warm and almost at room temperature.

Key requirements:

- Air directed into the room along ceiling to avoid cold drafts.

Good locations could be:

- On the wall above the door
- In the ceiling.

Controls and instructions

- Automatic controls, or simple manual controls in an easily accessible location
- Instructions explaining operation and maintenance posted somewhere prominent.

Ventilation unit (MVHR) location.

Key requirements:

- Adjacent to an outside wall or roof
- Accessible for maintenance
- Not in a bedroom or quiet area, they make some noise like a fridge.

Good locations could be:

- Above the hot water tank
- At the end of a row of kitchen cupboards
- At the back of a store cupboard
- In a porch or lean-to against the building but ideally this should be a heated space
- In a heated loft space (cold lofts need careful design).

Ducts to outside

Key requirements:

- As short as possible
- Insulated 20-50mm thick with vapour proof insulation
- Rigid ducting only.

Guidance:

- Use pre-insulated rigid foam ducts for easiest install.

Air terminals outside

Key requirements:

- Two grills/louvres spaced apart by at least 600mm, or specialist combined grill
- Weather proof with drainage
- Away from sources of pollution such as main road, bin stores, compost, smoking areas etc.

Guidance:

- Terminal is typically 1.5 times the size of duct
- Roof tile terminals are available
- Existing properties could use cast iron air bricks.

Duct distribution

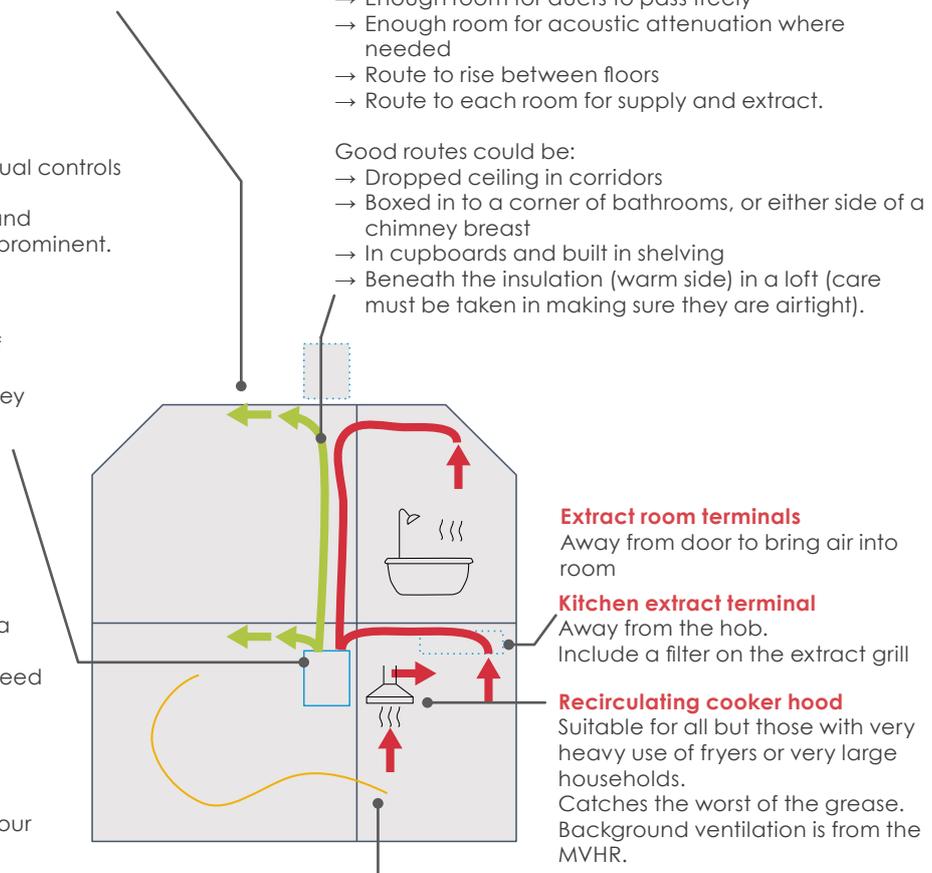
This is the biggest challenge for retrofitting MVHR, but it is nearly always possible.

Key requirements:

- Enough room for ducts to pass freely
- Enough room for acoustic attenuation where needed
- Route to rise between floors
- Route to each room for supply and extract.

Good routes could be:

- Dropped ceiling in corridors
- Boxed in to a corner of bathrooms, or either side of a chimney breast
- In cupboards and built in shelving
- Beneath the insulation (warm side) in a loft (care must be taken in making sure they are airtight).



Extract room terminals

Away from door to bring air into room

Kitchen extract terminal

Away from the hob. Include a filter on the extract grill

Recirculating cooker hood

Suitable for all but those with very heavy use of fryers or very large households. Catches the worst of the grease. Background ventilation is from the MVHR.

Transfer through other rooms

Rooms that are between supply and extract areas may not need their own room terminal.

For example:

- Corridors
- Open plan living areas.

Door undercuts

Air needs to get between rooms. The simplest way is to have a small door undercut, or acoustic or fire damped grills are possible

Key requirements:

- 10mm clear above the floor finish for doors.

Figure D.1 - Central supply and extract ventilation with heat recovery (MVHR)

D.2 Centralised constant extract ventilation with demand control

Where MVHR cannot be fitted (for instance where space for a heat exchanger or the attendant ductwork is not possible) continuous extract ventilation may provide a next best solution. Centralised systems use a single fan and ductwork to the wet rooms only. The fan box is typically approx. 600 mm square by 200 mm deep which is much more compact than with MVHR as no heat exchanger is included and the system is not insulated (as the air streams are all warm).

By extracting from wet (kitchens, bathrooms, utility, WC's) spaces, the house interior is put into modest negative pressure. Inlets (either as window or through the wall vents) allow fresh supply air into the habitable rooms. These vents can be managed by the user but should always allow some air through.

By having continuous extract, better air quality can provide than with intermittent fans and for retrofits aiming for better than 5m³/m²hr continuous extract is recommended to maintain air quality. The primary disadvantage of this type of system is that it is constantly drawing cold external air into the dwelling, whether it is needed or not, which will need to be warmed by the heating system.

Demand control

To counter the inefficiency of a constant extract system many of the MEV systems available now allow for demand control so that air quality and energy efficiency can both be optimised.

Some systems can auto regulate the supply inlets by having humidity sensitive devices that open or close the aperture. Alternatively, users can adjust the trickle vents manually. The central MEV fan control

will monitor pressure and, when there is a drop – i.e. a supply inlet has opened, it will increase flow rate to re-pressurise and thus increase air flow through the room where the supply valve was opened.

The extract flow rates from each wet space can also respond to use, normally by using sensors to detect either presence (in a WC), or humidity (in a shower or kitchen area). The sensor can command the associated extract terminal to open its aperture and/or increase the fan speed, thereby increasing flow rate.

Constraints and considerations

The ductwork runs are normally moderate and the fan box is relatively small meaning that it is possible in most situation to accommodate.

Care does need to be taken to design the duct runs a carefully and to consider any necessary builder's work. In projects where existing windows may be staying in-situ it is also important to ensure that the trickle vent solution for supply is appropriately matched with the system. Special care may be needed to avoid compromising fire separation between spaces such as habitable rooms and escape routes.

For houses where the wet room are especially spread out the duct runs may become problematic. It may make sense to fit two systems in such homes.

As long as the duct runs are kept reasonably short, the noise levels associated with these systems are normally very low. As each wet space has a single duct, then cross talk is also not a problem.

D.2 Centralised constant extract ventilation with demand control

Supply vents

All rooms without extract fans need a supply air path. Incoming supply air is cold. Some systems use trickle vents which respond to humidity in order to control air flow.

Key requirements:

- Vents at high level to avoid low cold drafts
- Can be shut off for comfort, but should not be possible to block completely.

Good locations could be:

- Trickle vents integrated with windows
- Dedicated air brick with internal damper.

Ventilation unit (MEV) location

Key requirements:

- Near to an outside wall or roof
- Accessible for maintenance
- Not in a bedroom or quiet area, they make some noise like a fridge.

Good locations could be:

- Above the hot water tank
- At the end of a row of kitchen cupboards
- At the back of a store cupboard
- In a porch or lean-to against the building but ideally this should be a heated space
- In a heated loft space (cold lofts need careful design).
- Above a washing machine.

Ducts to outside

Key requirements:

- Short-moderate length of duct to outside.
- Rigid ducting only.
- Vertical ducts through roofs should include a drain and outlet to prevent condensate flowing back into machine.

Air terminals outside

Key requirements:

- One grill/louvre of sufficient size to avoid back pressure/noise.
- Weather proof with drainage.

Guidance:

- Terminal is typically 1.5 times the size of duct
- Roof tile terminals are available
- Existing properties could use cast iron air bricks.

Controls and instructions

- Typically fully automatic. Sensors (presence detector or humidistat normally, also sometimes CO₂ levels). When sensor is triggered the extract terminal dilates to allow greater airflow.
- Generally no user interaction if maintenance kept up.

Duct distribution

Compared to MVHR, challenge is much reduced for MEV as number of ducts is at least half.

Key requirements:

- Enough room for ducts to pass freely
- Enough room for acoustic attenuation where needed
- Route to rise between floors
- Route to each wet space for extract.

Good routes could be:

- Dropped ceiling in corridors
- Boxed in to a corner of bathrooms, or either side of a chimney breast
- In cupboards and built in shelving
- Beneath the insulation (warm side) in a loft (care must be taken in making sure they are airtight).

Extract room terminals

Away from door to bring air into room

Kitchen extract terminal

Away from the hob. Include a filter on the extract grill

Recirculating cooker hood

Suitable for all but those with very heavy use of fryers or very large households. Catches the worst of the grease. Background ventilation is from the MVHR.

Transfer through other rooms

Rooms that are between supply and extract areas are ventilated by transfer air.

Door undercuts

Air needs to get between rooms. The simplest way is to have a small door undercut, or acoustic or fire damped grills are possible

Key requirements:

- 10mm clear above the floor finish for doors.

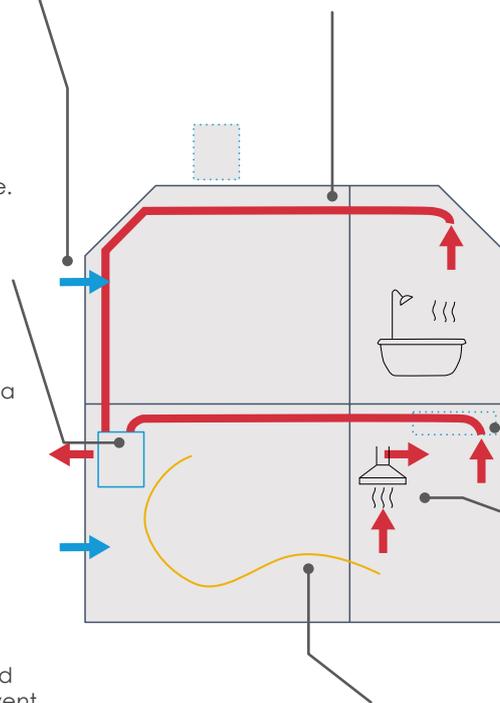


Figure D.2 - Centralised constant extract ventilation with demand control (dcMEV)

D.3 Decentralised constant extract ventilation

For very space constrained properties it is possible to use a decentralised system with extract only. The disadvantages of this are that you can not guarantee where the supply air is coming from, so some rooms may be very under ventilated. Providing air inlets/trickle vents to try and address this may be difficult in some rooms and particularly if there are heritage constraints. There is also no heat recovery, so all the ventilation air is lost heat, although it can be reduced using demand control, this can be as much as 25-50% of the energy needed by the home. However decentralised ventilation does provide good constant ventilation and is a useful and necessary strategy in many locations.

Homes where decentralised ventilation might be necessary:

- Existing flats with very low ceilings and small rooms, where boxing in and duct distribution would be obstructive.
- Listed buildings with internal heritage features that would be damaged by an installation (although balanced supply and extract ventilation is still possible in some cases)

Decentralised fans with heat recovery are available and could be considered in some cases. They would be an improvement over extract only, but they typically do not achieve the same air quality as a central system. Similarly decentralised ventilation with very sophisticated demand control (based on humidity) can also offer benefits by reducing the actual ventilation rate.

Supply vents

All rooms without extract fans need a supply air path. Incoming supply air is cold and there is no control which vent the majority of air is coming from.

Key requirements:

- Vents at high level to avoid low cold drafts
- Can be shut off for comfort, but should not be possible to block completely

Good locations could be:

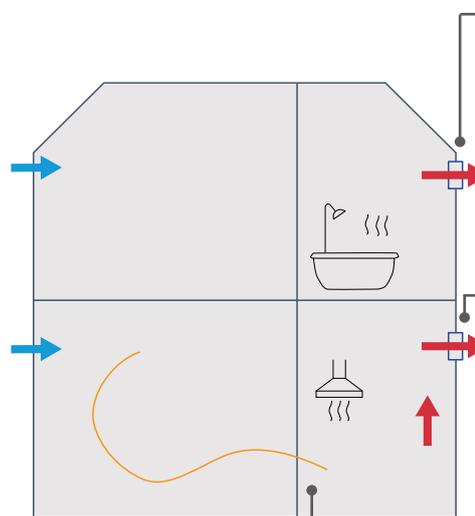
- Trickle vents integrated with windows
- Dedicated air brick with internal damper

Door undercuts

Air needs to get between rooms. The simplest way is to have a small door undercut, or acoustic or fire damped grills are possible.

Key requirements:

- 10mm clear above the floor finish for doors.



Transfer through other rooms

Rooms that are between supply and extract areas are ventilated by transfer air.

Bathroom fans

Key requirements:

- Constant trickle ventilation
- Boost function with humidity sensor or manual timed switch.

Guidance:

- Avoid fans directly boosted from light switch (due to noise)
- Ensure there is constant ventilation even when boost mode is off.

Kitchen extract fan

Can be integrated with kitchen cooker hood, or a separate fan with a recirculating cooker hood.

Key requirements:

- Constant trickle ventilation with user controlled boost setting
- Direct connection to outside.

Air terminals outside

Key requirements:

- Weather proof with drainage
- Typically more external terminals than MVHR.

Guidance:

- Terminal as close to fan as possible (or integrated)
- External dampers should not impede air flow.

Figure D.3 - Decentralised constant extract ventilation

Annex E: Stock modelling method and assumptions

The conclusions drawn in chapter 3 are based on a Great Britain (GB)^{E.1} stock model which predicts the energy consumption of all the UK's domestic dwellings. This annex sets out how this modelling has been undertaken and the associated assumptions.

Step 1 - Creating a Stock Model

There is no detailed single source of housing data for the GB as a whole. The most accurate dataset in the public domain is the 2011 English Housing Survey (EHS) data which is included in the Cambridge Housing Model^{E.2}. Subsequent iterations of the English Housing Survey are published by BEIS in summary form only^{E.3}. A summary of housing data for Scotland and Wales is provided within BRE's The Housing Stock of The United Kingdom report published in February 2020^{E.4}. The baseline 2011 stock model has therefore been extrapolated to 2018 and to include Wales and Scotland by applying the following method and assumptions:

- Summary data from the 2018/19 EHS was used to determine the number of cavity wall insulations, solid wall insulations and double glazing installations between 2011 and 2018.
- These measures were assumed to have occurred proportionally across all the stock that was eligible for those upgrades
- The distribution of dwelling types in Wales and Scotland was assumed to be the same as for England

This process resulted in an updated stock model of 28.2M dwellings which correlates with actual data for 2018.

Step 2 - Standardising and reducing the data

The EHS model has over 14,000 different archetypes. Modelling all these archetypes is very time consuming and does not necessarily lead to more accurate results as some of the parameters that vary between archetypes would not affect the energy demand significantly. LETI therefore reduced the key parameters down to five, and within those five, reduced the possible variations to a minimum. These parameters are summarised in Figure E.1. The total number of possible combinations of the parameters is 1,125. However, some of the combinations result in archetypes which don't actually exist in the EHS and thus, the final number of archetypes was 486.

For each archetype, a set of modelling data was then extracted. Some of this data came directly, or was derived, from the stock model and other data was inferred using the baseline modelling parameters shown in Annex F. For example, where the EHS data indicates an uninsulated cavity wall, a U-value of 1.00 W/m²K is applied. A summary of the full dataset for each archetype is shown in Figure E.4.

Step 3 - Creating an energy model

A modified PHPP model was then created to analyse each archetype. The PHPP was adapted using data tables to insert the data for each archetype in turn into the model and then generate the associated results. The model was set up to run for one of the five retrofit cases each time - i.e. Baseline, Do Minimum, LETI Constrained, LETI Unconstrained and Best Practice. The illustrative output from a single archetype is shown in Figure E.2.

Dwelling age	Dwelling form	Wall construction	Windows	Loft insulation
Pre - 1900	Detached	Solid Uninsulated	Single	Minimal
1900 - 1929	Semi - detached	Cavity Uninsulated	Double	Moderate
1930-1949	Mid - terrace	Cavity Insulated		
1950 - 2002	Bungalow	Solid Insulated	Mixed	Good
Post 2002	Flat	Timber Frame		

Figure E.1 - Key parameters used to define LETI archetypes

Illustrative Archetype Results		
Space Heating Demand	101	kWh/m ² /year
Adjusted Space Heating Demand	96	kWh/m ² /year
Hot Water Demand	63	kWh/m ² /year
Peak Load (Heating)	51	W/m ²
Heating and Hot Water Demand	159	kWh/m ² /year
Space Heating Delivered (Gas)	113	kWh/m ² /year
Heating and Hot Water Delivered (Gas)	187	kWh/m ² /year
Lighting and Unregulated Demand	39	kWh/m ² /year
Overall Demand	197	kWh/m ² /year
Overall Delivered Energy (Gas)	225	kWh/m ² /year
Overheating Percentage	2.22	%

Figure E.2 - Illustrative output from a single archetype for the scenario where heating and hot water is generated with a gas boiler

Baseline Case (GB)		
Gas Peak Load	152	GW
Total Heating Demand	267	TWh / year
Total Hot Water Demand	97	TWh / year
Total Gas Demand for Heating	266	TWh / year
Total Gas Demand for Hot Water	96	TWh / year
Total Gas Demand	362	TWh / year
Total Oil Demand for Heating	14	TWh / year
Total Oil Demand for Hot Water	5	TWh / year
Total Oil Demand	19	TWh / year
Total Electricity Demand for Heating	14	TWh / year
Total Electricity Demand for Hot Water	5	TWh / year
Total Other Demand for Heating	16	TWh / year
Total Electricity Demand Lighting and Unregulated	58	TWh / year
Total Electricity Demand	77	TWh / year
Total Thermal Energy Demand	415	TWh / year
Total Energy Delivered (All Types)	474	TWh / year

Figure E.3 - Nationwide energy data for GB based on the modelled baseline case

The total outputs for each case were then summed to give total GB data. The GB data for the baseline case is shown in Figure E.3 (above). In deriving these outputs, the following assumptions were made:

- 84.5% of GB dwellings have a gas boiler ^{E.5}
- The average gas boiler efficiency is 85%
- The average Seasonal COP (SCOP) for an Air Source Heat Pump is 2.5^{E.6}

Step 4 - Validating and adjusting the model

The initial modelling results showed an overall space heating demand far higher than BEIS consumption figures suggested. This was considered to be for three reasons:

1. Not all dwellings are occupied all the time. An empty homes reduction of 5% was therefore applied to the model.

2. The default PHPP model assumes a constant internal temperature of 20°C throughout the heating season. For a Passivhaus dwelling this is a correct assumption. However, for a more typical dwelling, and especially for a dwelling with a poor fabric, this is not a valid assumption. A typical dwelling will use periodic heating (i.e. heating will be on for periods when the dwelling is occupied and off overnight) and will cool down below the target temperature outside of those periods. The worse the building fabric, the more rapidly it will cool and thus the lower the average temperature. The PHPP model was therefore modified to include the same methodology that is used in SAP. The heat loss parameter of the dwelling is calculated and then used to determine an average monthly internal temperature based on a standard heating pattern. This adjusted temperature is then used for the dwelling's heat loss calculations.

Parameter	Unit	Source
No. of dwellings represented	No.	EHS Direct
External Wall Type	N/A	EHS Direct
Floor type	N/A	EHS Direct
Form	N/A	EHS Derived
Internal Floor Area	m ²	EHS Direct
Loft Insulation	Type	EHS Derived
External Wall Area	m ²	EHS Direct
Heat Loss Floor Area	m ²	EHS Direct
Roof Area	m ²	EHS Direct
Single Glazing Area	m ²	EHS Direct
Double Glazing Area	m ²	EHS Direct
Door Area	m ²	EHS Direct
Property Age	Range	EHS Derived
Original Heating Source	Type	EHS Direct
Original Hot Water Source	Type	EHS Direct
Adult Occupancy	No.	EHS Direct
Child Occupancy	No.	EHS Direct
External Wall U-value	W/m ² K	Modelling parameters (Figures F.1 and F.2)
Roof U-value	W/m ² K	Modelling parameters (Figures F.1 and F.2)
Floor U-value	W/m ² K	Modelling parameters (Figures F.1 and F.2)
Single Glazing U-value	W/m ² K	Modelling parameters (Figures F.1 and F.2)
Double Glazing U-value	W/m ² K	Modelling parameters (Figures F.1 and F.2)
Door U-value	W/m ² K	Modelling parameters (Figures F.1 and F.2)
Thermal Bridging Allowance	W/m ² K	Modelling parameters (Figures F.1 and F.2)
Airtightness	ACH@50Pa	Modelling parameters (Figures F.1 and F.2)
Ventilation Type	Type	Modelling parameters (Figures F.1 and F.2)
Lighting Power	lm/watt	Modelling parameters (Figures F.1 and F.2)
HW Tank Insulation	mm	Modelling parameters (Figures F.1 and F.2)
WWHR Efficiency	%	Modelling parameters (Figures F.1 and F.2)
Primary Pipework Insulation	%	Modelling parameters (Figures F.1 and F.2)
DHW Demand Showering	litres / person . day	Modelling parameters (Figures F.1 and F.2)
DHW Demand Other	litres / person . day	Modelling parameters (Figures F.1 and F.2)
Heating Source	Type	Modelling parameters (Figures F.1 and F.2)
Hot Water Source	Type	Modelling parameters (Figures F.1 and F.2)
Overhang Shading	Y/N	Modelling parameters (Figures F.1 and F.2)
PV	% of roof	Modelling parameters (Figures F.1 and F.2)
Solar Thermal	m ² /person	Modelling parameters (Figures F.1 and F.2)

Figure E.4 - Summary of the dataset for each archetype

3. For dwellings which have a particularly poor fabric, anecdotal evidence suggests that the set-point temperature may not be met during the heating periods and that some areas/rooms may not be heated at all due to fuel cost issues. A correction factor was therefore applied to the space heating demand whereby a tapered reduction of up to 30% was applied to dwellings which had a heat loss parameter (HLP) of more than 3. The parameters and response characteristics of this adjustment are in Figure E.5 and E.6.

The calibrated model was compared against the actual consumption data (for gas and electricity) from 2018^{E.7} to demonstrate that the model was producing accurate results. This is illustrated below and shows a total consumption of 484 TWh versus a modelled total of 474 TWh (Figure E.7).

E.1 References and footnotes

E.1 - Great Britain (GB) in this context refers to mainland UK - i.e. England, Scotland and Wales. This is because the source data available for measured energy consumption is based on this geographical area and thus allowed calibration/validation of the modelling.

E.2 - <https://www.gov.uk/government/publications/cambridge-housing-model-and-user-guide>

E.3 - <https://www.gov.uk/government/collections/english-housing-survey>

E.4 - https://files.bregroup.com/bretrust/The-Housing-Stock-of-the-United-Kingdom_Report_BRE-Trust.pdf

E.5 - Source: https://files.bregroup.com/bretrust/The-Housing-Stock-of-the-United-Kingdom_Report_BRE-Trust.pdf

E.6 - Derived from Heat Pump Retrofit in London, Carbon Trust, August 2020, Page 149 - Field Trial Data.

E.7 - Reported consumption taken from www.gov.uk/government/statistics/energy-consumption-in-the-uk

Cold Homes Adjustment		
Heat loss parameter above which homes are adjusted	3	W/m ² K
Maximum reduction	30	%
Maximum HLP in total population	5.7	W/m ² K

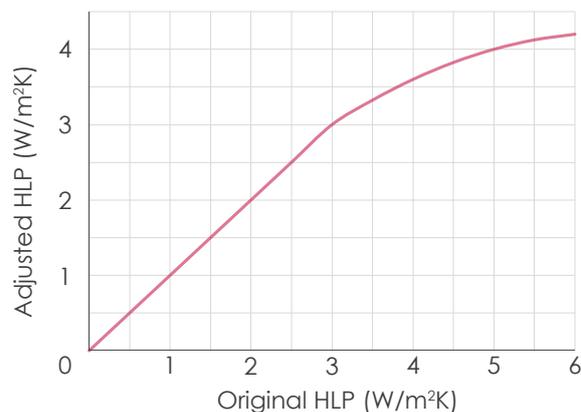


Figure E.5 - Heat Loss Parameter adjustment for cold dwellings

Figure E.6 - Heat Loss Parameter adjustment curve

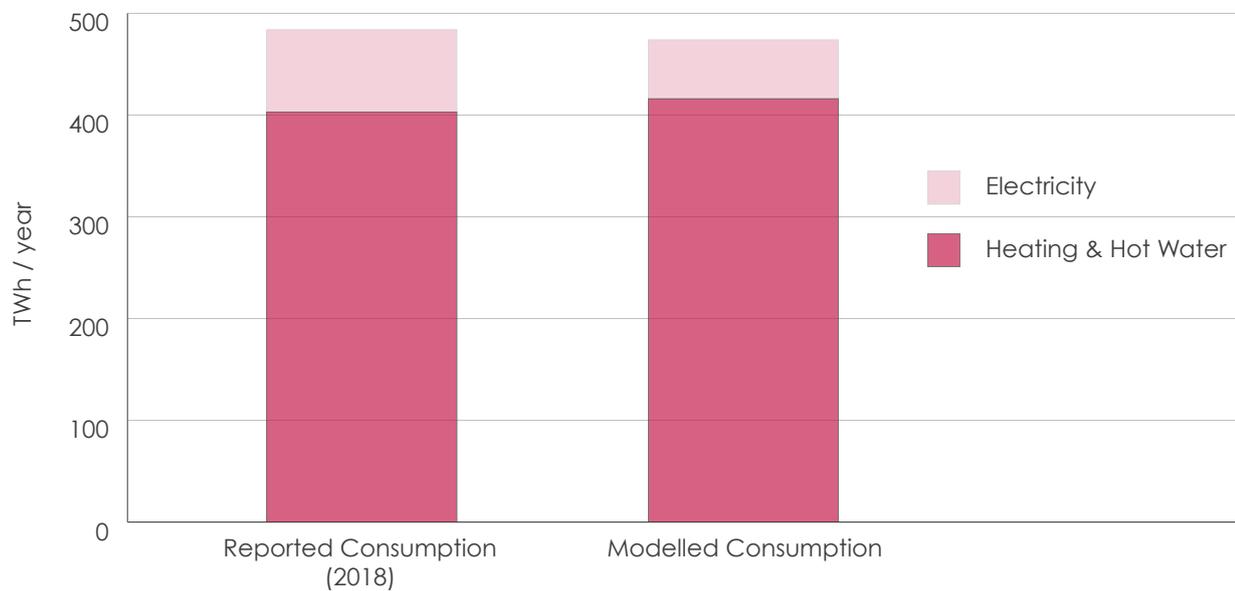


Figure E.7 - Actual national consumption data for 2018 compared to modelled demand

Annex F:

Modelling parameters

The following parameters were used for modelling each retrofit case:

Wall Types	Unit	Baseline	Do Minimum	LETI best practice constrained	LETI best practice unconstr.	LETI exemplar
Cavity Uninsulated	W/m ² K	1	0.7	0.24	0.18	0.15
Cavity Insulated	W/m ² K	0.43	0.55	0.24	0.18	0.15
Solid Uninsulated	W/m ² K	1.35	0.7	0.32	0.18	0.15
Solid Insulated	W/m ² K	0.37	0.3	0.32	0.18	0.15
Timber Frame	W/m ² K	0.5	0.3	0.21	0.18	0.15

Roof Types*	Unit	Baseline	Do Minimum	LETI best practice constrained	LETI best practice unconstr.	LETI exemplar
Good (Insulated at ceiling)	W/m ² K	0.17	0.16	0.12	0.12	0.12
Moderate	W/m ² K	0.25	0.16	0.22	0.12	0.12
Minimal	W/m ² K	1	0.16	0.31	0.12	0.12

Floor Type	Unit	Baseline	Do Minimum	LETI best practice constrained	LETI best practice unconstr.	LETI exemplar
Suspended Timber	W/m ² K	1.04	0.25	0.2	0.18	0.15
Solid Uninsulated	W/m ² K	0.80	0.25	0.8	0.15	0.15

* As defined by the baseline English Housing Survey

Figure F.1 - Modelling parameters (walls, roofs and floors)

Windows and doors	Unit	Baseline	Do Minimum	LETI best practice constrained	LETI best practice unconstr.	LETI exemplar
Glazing Type 1 (single in Baseline)	W/m ² K	4.8	1.6	1.3	1	0.8
Glazing Type 2 (double in Baseline)	W/m ² K	2	1.6	1.3	1	0.8
Doors	W/m ² K	3	1.8	1	0.8	0.8

Other	Unit	Baseline	Do Minimum	LETI best practice constrained	LETI best practice unconstr.	LETI exemplar
Thermal Bridging (γ-value)	W/m ² K	0.2	0.15	0.1	0.1	0.08
Airtightness	ACH	11.5	10	3	2	1.0
Ventilation Type	Type	Natural ventilation with extract fans	Natural ventilation with extract fans	MVHR	MVHR	MVHR
Lighting Power	lm/watt	12	45	50	100	100
HW Tank Insulation	W/K	3	1.5	1.5	1.5	1.5
WWHR	-	None	None	None	None	None
Primary Pipework insulation	%	0	0	90	90	90
DHW Demand Showering	Litres/pers.day	35.5	25	16	16	16
DHW Demand Other	Litres/pers.day	15	15	9	9	9

Figure F.2 - Modelling parameters (windows and doors, other)

Annex G:

U-value sweet spots

Key factors in determining how much insulation is appropriate

In deciding what level of insulation is sufficient for retrofit of existing buildings, there are several factors which may be taken into consideration to arrive at an approximate optimal value:

- **Minimum comfort limit.** Achieving an internal surface temperature of greater than 17°C when outside temperatures are at a minimum will ensure radiant comfort for the occupants.
 - **Achieving significant reductions in heat loss.** As there is an inverse relationship between insulation thickness and heat loss, the amount of heat loss reduction that is achieved decreases proportionally as the insulation thickness increases - i.e. there are diminishing returns for the amount of insulation being applied. This means that chasing the last 20% of heat loss reductions will require significantly thicker insulation. This is illustrated in Figure G.1 which shows that, in the example of a 100m² solid wall with external temperatures at 0°C, the first 150mm of insulation saves 1600W (80%) whereas the second 150mm only saves 220W (11%). This will be similar for most cases and LETI is therefore suggesting that an 80% reduction in heat loss from the baseline construction would be an optimal point. This rule of thumb will be appropriate for a starting point where the construction is poorly insulated. Where there is already a good level of insulation then 80% further reduction may not be economically viable.
 - **Best value.** In contrast to heat loss savings, the cost of applying an increasing thickness of insulation is more linear. In addition, the costs will include what is usually a significant element of fixed costs which are independent of the amount of insulation applied. By merging these two
- functions, we can generate a cost per watt saved index. This will be particular to the construction type being considered and also the proportion of fixed costs. However, in general these indices appear to have the shape shown in Figure G.2. This suggests that there is an optimal cost point, where the cost per watt saved is at its minimum and therefore best value is being achieved. This may not necessarily equate with best practice levels of insulation.
- **Minimises carbon.** Ensuring that we use the optimum amount of insulation from an operational energy perspective often means that we keep the associated embodied carbon to a minimum
 - **Low levels of heat loss.** The actual amount of heat loss through the element will be a key factor in determining the overall level of performance of the building. LETI is suggesting that a heat loss of 3.5 W/m² in the coldest outdoor conditions for the building's location is a good and achievable level which will deliver comfortable low energy buildings.
 - **Practicality.** Large thicknesses of insulation become impractical to apply as there are limitations on supporting materials such as fixings and wall ties. Furthermore, for homes adjacent to pavements, there is a limit on the amount of insulation overhang which would be considered acceptable. There is therefore a degree of informed judgement as to what is practical.

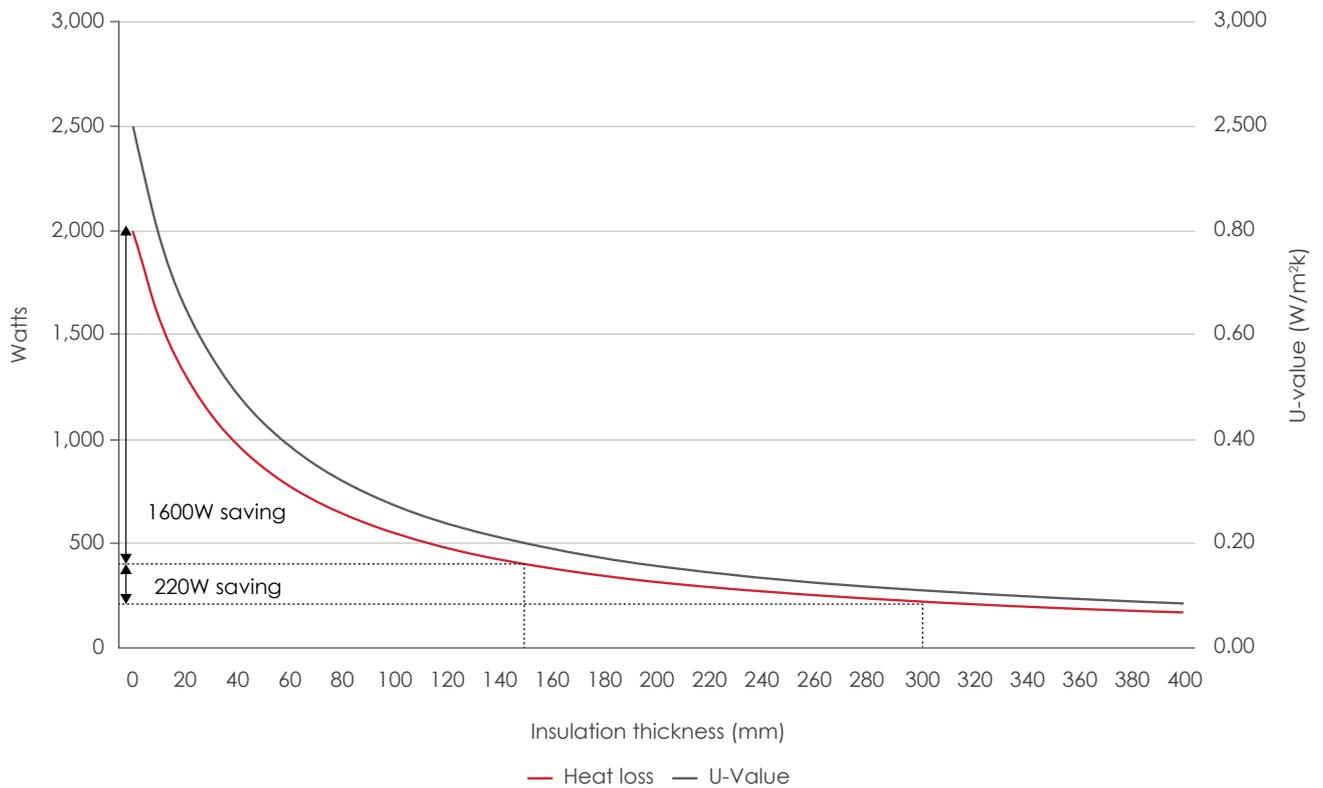


Figure G.1 - Diminishing returns for the amount of insulation being applied to a 100m² solid wall with external temperatures at 0°C

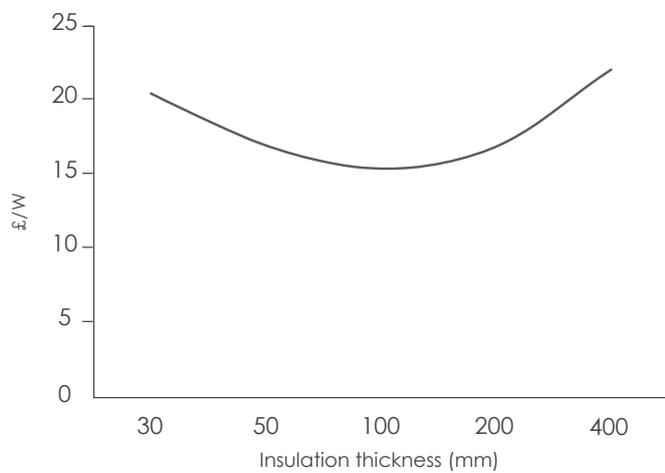


Figure G.2 - Cost per watt index

→ **Minimum external temperatures.** The minimum external temperatures likely to be experienced within a region will drive the level of insulation that is required. LETI have therefore provided indicative insulation thickness and U-values for three different climate conditions:

- **Mild - minimum external temperature 0°C**
- **Moderate - minimal external temperature -5°C**
- **Cold - minimal external temperature -10°C**

To illustrate what LETI believe to be an appropriate range of pragmatic target insulation thicknesses and U-values, we have calculated the required additional thickness of insulation and associated U-value for these baseline construction types from each of the factors set out above - i.e. surface temperatures, heat loss reduction, best value, low heat loss level and external temperatures.

For these illustrative calculations, we have used an insulation with a thermal conductivity of 0.038W/m.K. Whilst higher performance insulation can be used, this figure represents a reasonable level of insulation

performance which is achievable using natural and vapour open materials i.e. these levels of performance should be achievable in any construction type.

If a higher performing but vapour closed insulation is used, then careful attention must be paid to moisture risk. See Annex H for more details.

▶ **SIGNPOST** *Annex H: Moisture risks and how to avoid them*

Note that these illustrations are only applicable to existing buildings and are based on the cost of insulation to the existing fabric only. Therefore where work is already happening in this area (for new construction) the additional cost of more insulation may be lower. The costs are correct relative to one another, however actual market cost of installation may rise and fall, having an impact on the result.

On the following graphs, the suggested range of insulation thickness (for this type of insulation) and associated U-values are denoted by the shaded grey bars.

Baseline construction types

LETI have considered these factors for the following baseline construction types:

No.	Description	Starting U-value (W/m ² K)
1	Cavity Uninsulated Wall	1.00
2	Cavity Insulated Wall	0.43
3	Solid Uninsulated Wall	1.35
4	Cold Roof Uninsulated	1.00
5	Suspended Timber Floor	1.04
6	Solid Uninsulated Floor	2.00

Figure G.3 - Baseline construction types

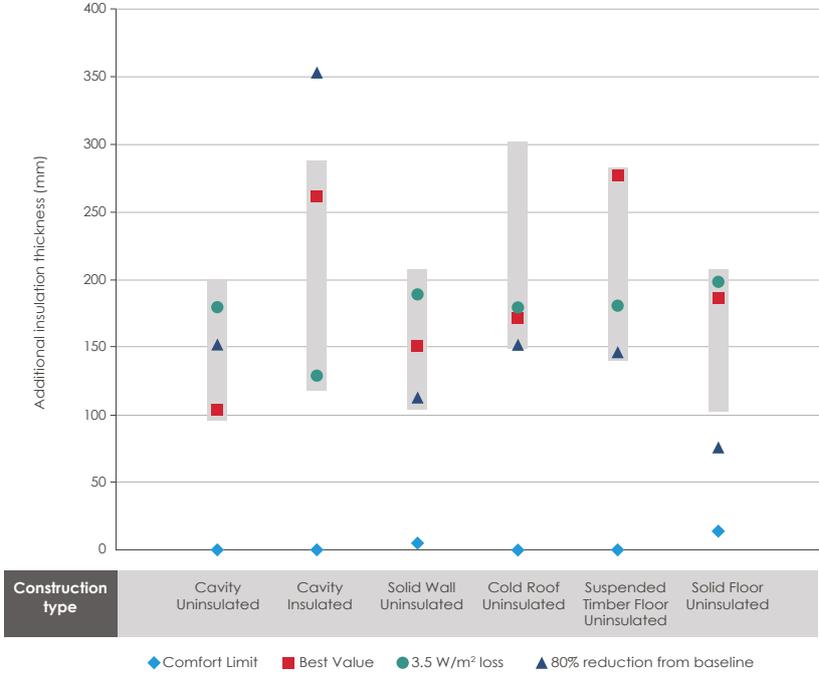


Figure G.4 - Thickness of additional insulation by baseline construction (ext temp 0 Degrees Celsius)

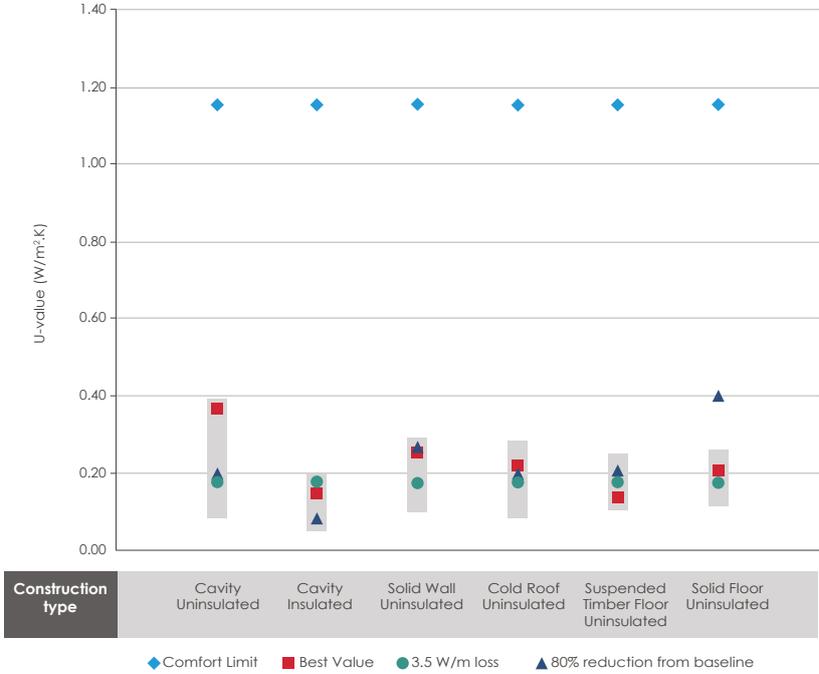


Figure G.5 - Final U-values by baseline construction (ext temp 0 Degrees Celsius)

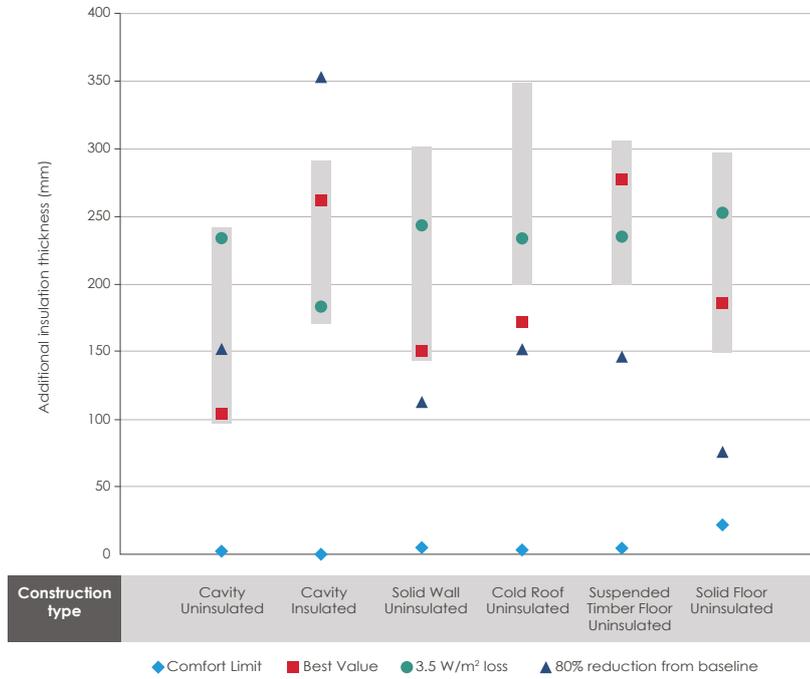


Figure G.6 - Thickness of additional insulation by baseline construction (ext temp -5 Degrees Celsius)

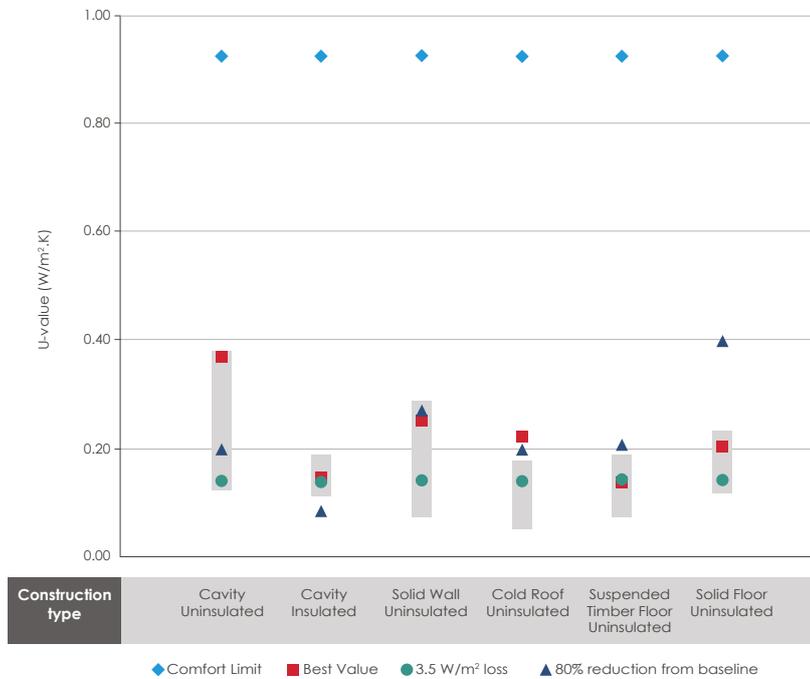


Figure G.7 - Final U-values by baseline construction (ext temp -5 Degrees Celsius)

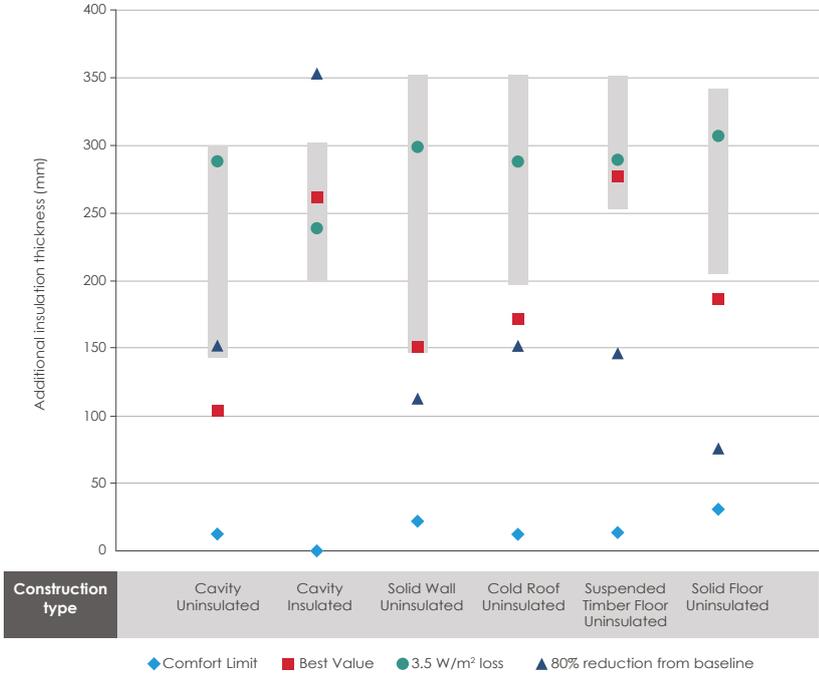


Figure G.8 - Thickness of additional insulation by baseline construction (ext temp -10 Degrees Celsius)

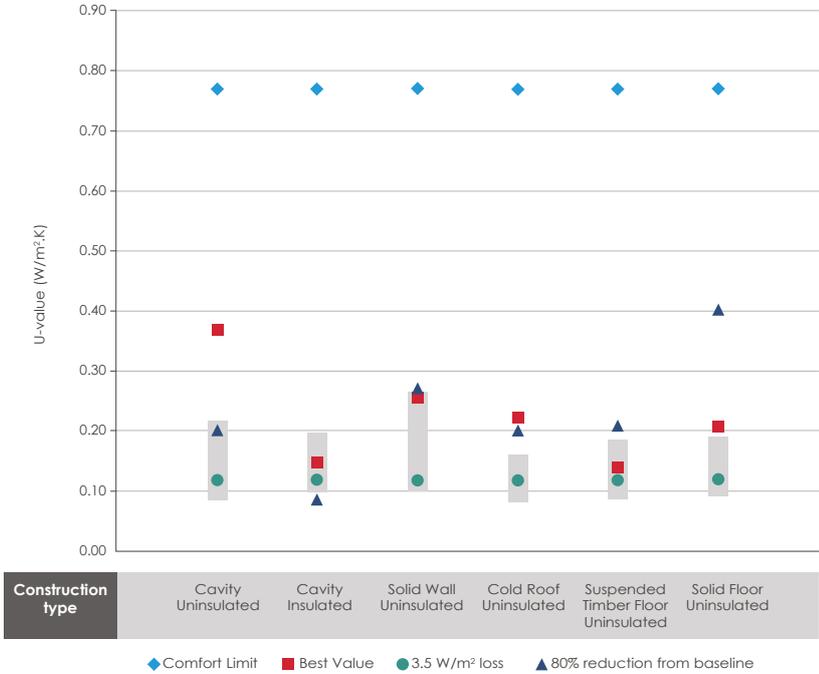


Figure G.9 - Final U-values by baseline construction (ext temp -10 Degrees Celsius)

Annex H:

Moisture risks and how to avoid them

When retrofitting existing buildings, a few key principles must be followed to avoid exacerbating or introducing moisture problems such as excessive indoor humidity, surface condensation and mould, trapped moisture within the building fabric and rot/decay/spalling.

1. Repair and weatherproof well - to prevent (excessive) rainwater ingress.
2. Ensure the building is dry before retrofitting.
3. Ventilate well - to maintain healthy indoor humidity levels and reduce dampness.
4. If the existing construction is vapour balanced (or vapour open), keep it vapour balanced - to avoid moisture becoming trapped within the building fabric.
5. If the existing construction is vapour closed, keep it vapour closed - to minimise moisture entering the building fabric where it will become trapped.
6. Improve airtightness - to minimise water vapour entering the building fabric through air leakage.
7. Ventilate cold roofs/floors - to evacuate humid air and reduce risk of interstitial condensation.
8. Minimise thermal bridges - to prevent internal surface condensation and mould.

These principles as well as the concepts of 'vapour balanced' and 'vapour closed' are illustrated in Figures H.1 and H.2.

Notes:

Note 1: Insulation cannot be very thick - otherwise it overly impedes drying out, even if vapour open. Insulations which are also capillary active and/or hygroscopic will further aid drying out to the inside and are advisable in exposed walls.

Note 2: Where EWI is installed on cavity walls, it is advisable to fill the cavity to avoid thermal bypass within the cavity undermining the performance of the EWI. Extended DPC to ensure ground moisture does not rise up insulation.

Note 3: Whilst not shown in the diagram, vapour closed walls can be insulated internally and vapour balanced walls can be insulated externally. In both cases - the vapour open/balanced nature of the wall should be maintained.

Note 4: Floors can be insulated above or below the floor - below being preferable, if feasible

H.1 Bad retrofit increases moisture risks

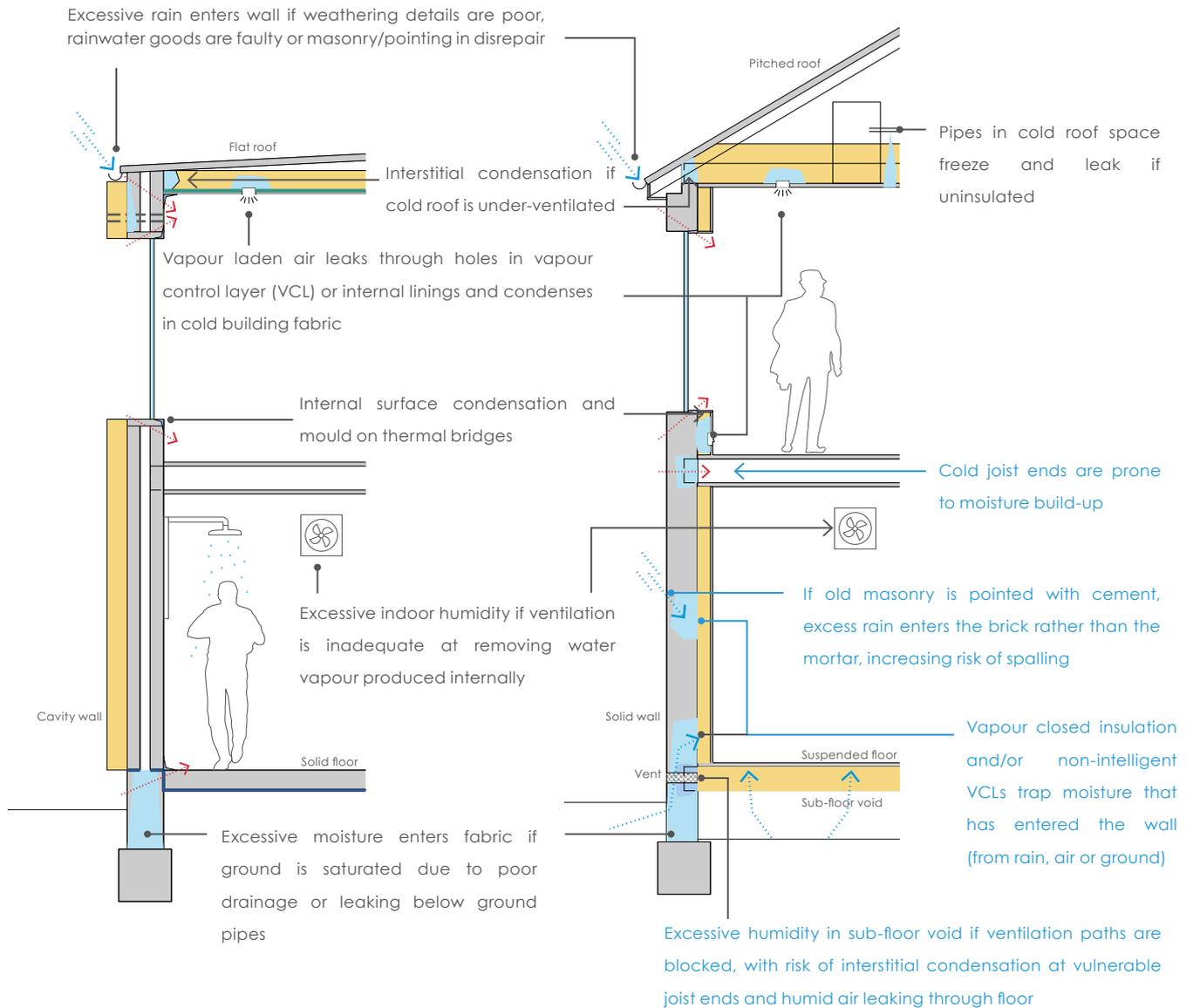
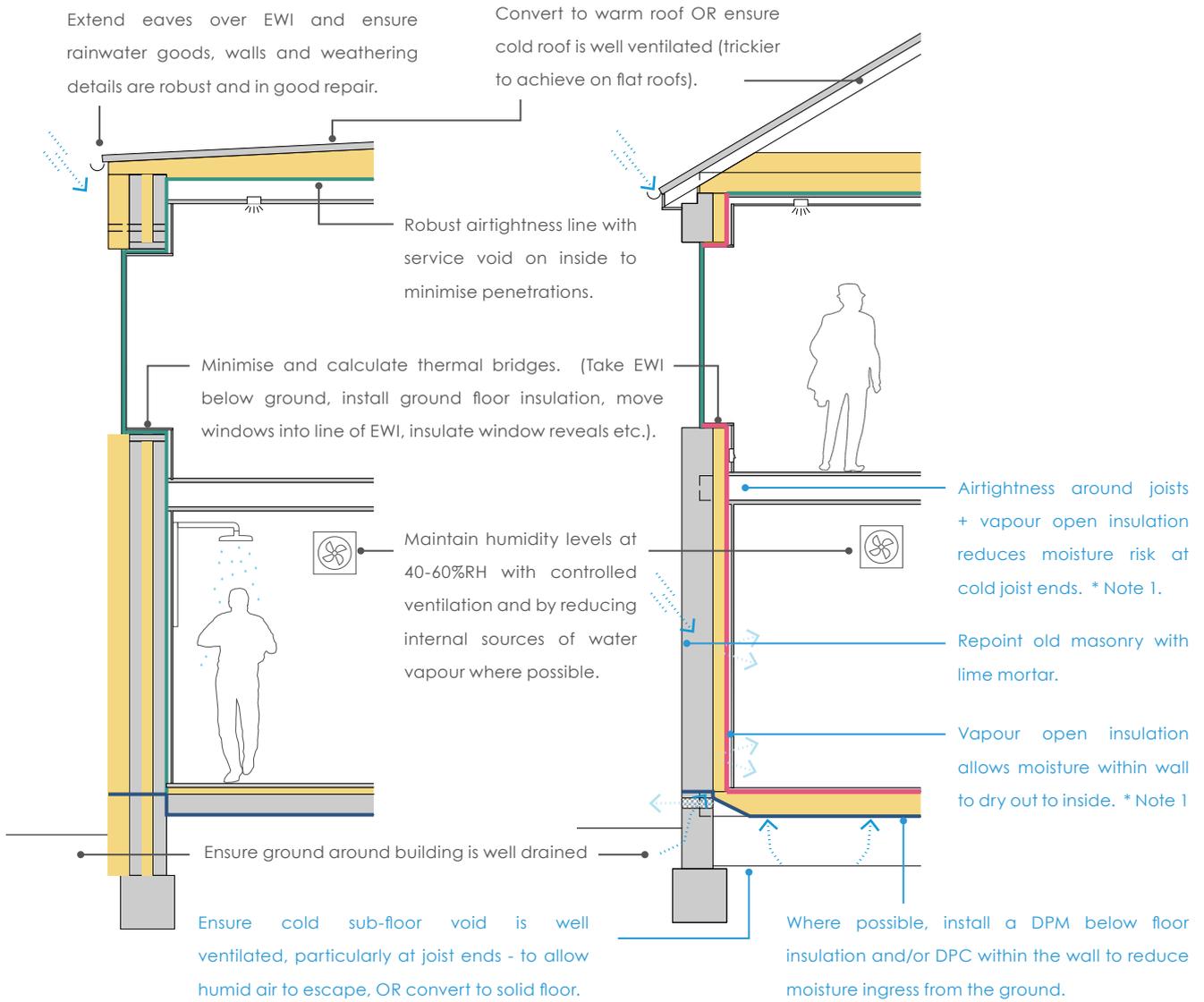


Figure H.1 - Bad retrofit measures increase moisture risk

H.2 Best practice retrofit reduces moisture risks



Key

- ⋯→ Moisture
- ⋯→ Thermal bridge
- Damp Proof Course (DPC) / Damp Proof Membrane (DPM)
- Vapour closed airtightness line
- Vapour open airtightness line

Vapour Closed Walls

If the existing walls are vapour closed, keep them vapour closed. Don't let moisture in.

Vapour Balanced Walls

If the existing walls are vapour balanced, keep them vapour balanced. Moisture will get in - ensure it can get back out again.

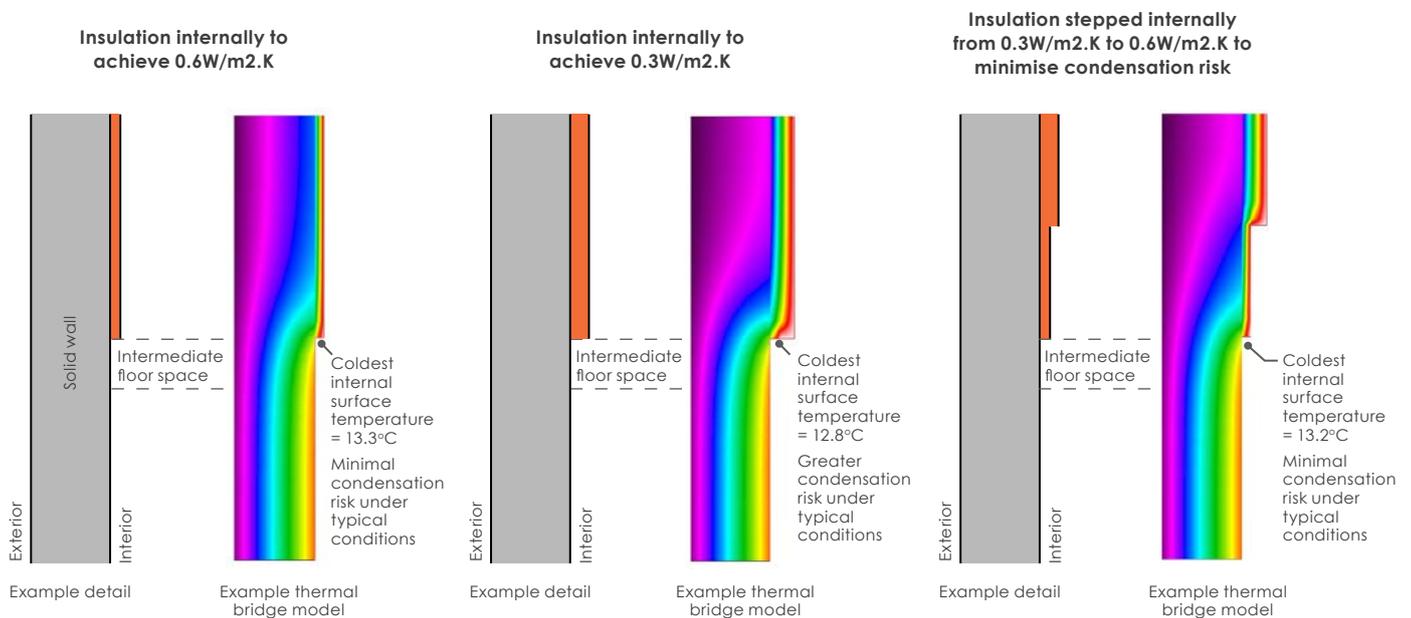
Figure H.2 - Best practice retrofit measures reduce moisture risk

H.3 Internal wall insulation moisture risk

Internal wall insulation presents a risk of interstitial condensation – i.e. condensation when warm, humid internal air meets a sufficiently cold surface within the wall build-up. This risk can be minimised by using vapour open insulation materials which are adhered directly to the original wall – thus, there is no exposed surface for condensation to form, and any moisture that does form, can escape through the insulation layer.

However, in many retrofit situations, it is impossible to fully cover the original walls with insulation (e.g.

in intermediate floor spaces), so there is a boundary where the original wall becomes exposed to the internal warm air. In these areas, the temperature of the external wall may be low enough to result in condensation. Thus, approaching these areas, it would be prudent to increase the U-value of the insulated wall from 0.3 W/m².K to around 0.6 W/m².K to reduce this risk. In these situations LETI suggest that detailed condensation risk and hygrothermal modelling is undertaken to confirm construction details and levels of insulation.



Modelling parameters: 0°C externally, 20°C internally. Brick conductivity 0.77W/m.K; insulation conductivity, 0.04W/m.K

Figure H.3- Example solid wall internal wall insulation details to reduce interstitial condensation

Annex I:

LETI Retrofit Process and PAS 2035

'PAS 2035 Retrofitting Dwellings for Improved Energy Efficiency–Specification and Guidance' is a framework and guidance document for delivering retrofit projects, published by the British Standards Institute (BSI). It promotes a fabric-first, whole house approach with particular concern for ventilation. It focuses on proper retrofit planning and quality assurance and requires the appointment of accredited professionals - including a Retrofit Coordinator - to oversee the retrofit project. PAS 2035 does not set energy efficiency targets or define how 'deep' one should go. Its aim is to avoid the unintended consequences, defects and performance gap of poor retrofit.

All retrofit projects receiving central government funding will be required to be PAS 2035 compliant from June 2021.

PAS 2035 uses a risk classification system to identify the potential riskiness of the retrofit project. The risk grade (grade A = low risk, grade B = medium risk, grade C = high risk) depends on the scale of the project, the number and types of measures being introduced and the construction and built form of the building. Carry out risk assessment to determine 'risk grade' (grade A, B, or C), then following the corresponding path through the PAS 2035 process (path A, B, or C). If grade A criteria cannot be met on a project, then the project is grade B, if grade B criteria cannot be met, then the project is grade C. See Figure I.1.

Once the grade is known the corresponding path and implications on requirements for responsible retrofit is chosen. High rise buildings, listed buildings, and homes

Risk grade	No. of dwellings to be improved	No. of measures per dwelling	Technical risk of highest risk measure	Highest risk combination of measures	Construction and built form
A (low risk)	1-10	1-2	1	Green	Conventional, (not high rise or protected)
B (medium risk)	11-30	3-5	2/3	Orange/ yellow	Traditional or system built (not high rise or protected)
C (high risk)	>30	>5			High rise or protected building of any construction

Technical risk = graded risks between 1 and 3. E.g. riskier measures such as internal solid wall insulation, flat roof insulation, floor insulation are grade 3. See PAS 2035 for details.

High rise >= 12m or >4 storeys above ground

Protected = listed, conservation area, world heritage site

Conventional = masonry cavity wall with/without render/cladding

Traditional = solid brick/stone walls or timber framed walls with infill

System built = timber/steel/concrete frame and pre-fab panel or timber frame walls and brick/stone cladding

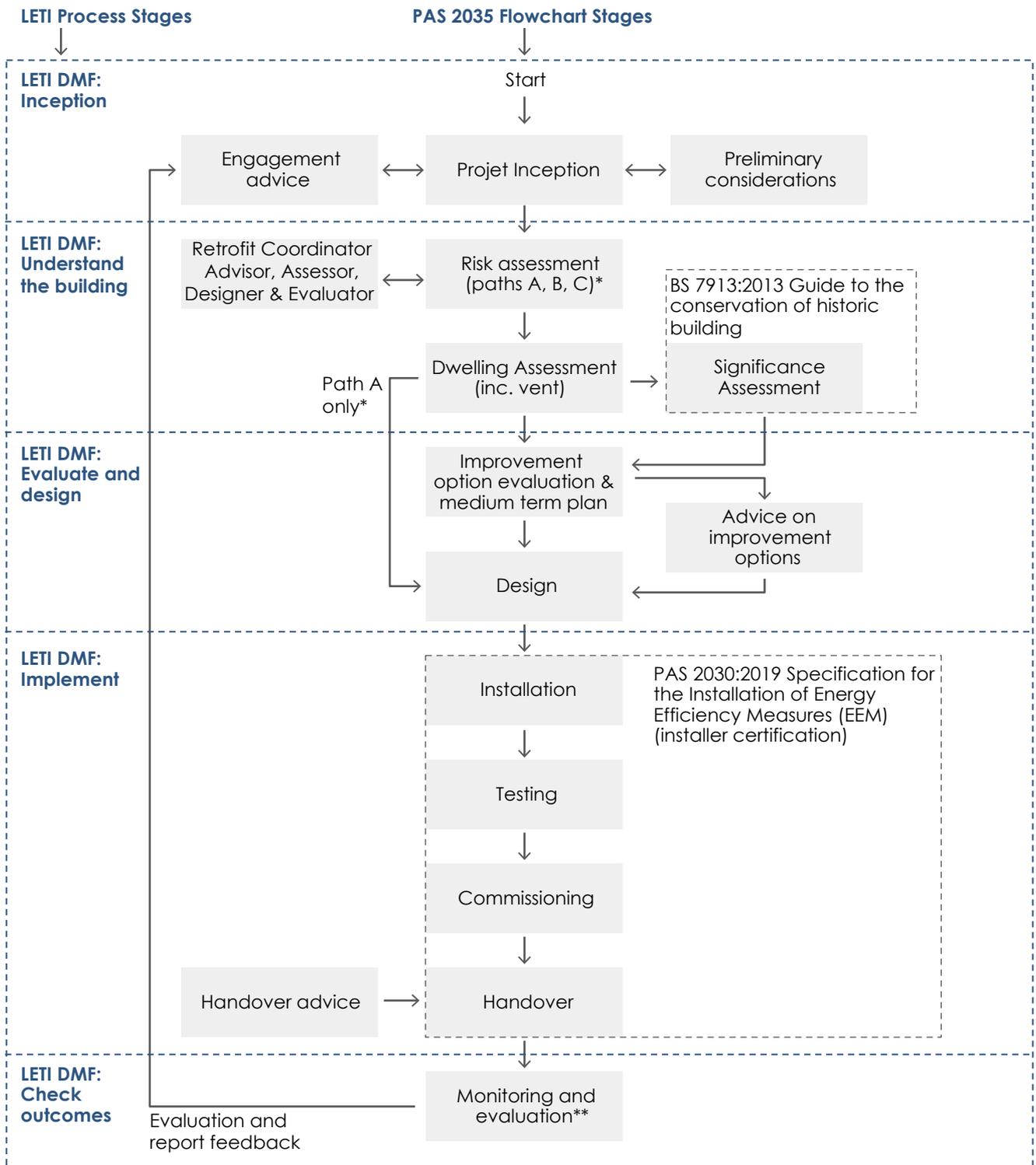
Figure I.1 - PAS 2035 Risk Classification of Building Retrofit

in conservation areas will always be considered risk grade C. The riskier the project, the more onerous the design, implementation and monitoring requirements. For example: on path C projects, an airtightness test will be required. Also, Retrofit Designers working on heritage buildings must have a heritage qualification.

PAS 2035 requires some post occupancy evaluation but this is primarily to identify problems rather than evaluate building performance. An occupant survey 3 months post retrofit is required, but no ongoing monitoring, unless serious problems have been identified that need further assessment to be resolved.

PAS 2035 works in tandem with 'PAS 2030 Specification' for the installation of energy efficiency measures in existing dwellings and insulation in residential park homes. Crudely speaking, PAS 2035 addresses the overall retrofit design and PAS 2030 deals with the installation. Also, in 2020, the BSI published their draft PAS 2038 Retrofitting non-domestic buildings for improved energy efficiency – Specification.

The LETI Retrofit Process is designed to map onto and complement PAS 2035 - broadly mirroring the PAS 2035 process/flow through inception, risk assessment and inspection, design, implementation, monitoring and evaluation. It does not make reference to path A as this is essentially only for single-measure works, which will not achieve the depth of retrofit promoted by LETI.



* LETI does not support Risk Path A, which is for single measure works and therefore does not meet LETI's definition of retrofit.
 ** PAS 2035 refers to this stage as 'monitoring and evaluation' however LETI does not consider PAS 2035's very light touch minimum requirements at this stage to be thorough/robust enough.

Figure 1.2 - LETI Retrofit Process mapped onto the PAS 2035 process. The diagram above overlays the stages of the LETI Retrofit Process over the PAS 2035 flowchart process from PAS 2035:2019, page V: 'Figure 0.1 – A diagrammatic overview of the domestic Retrofit Process required by PAS 2035 and PAS 2030' and 'Figure 0.1 illustrates the broad overall process that users of PAS 2035 are expected to follow in order to comply with its requirements.'

Annex J:

References and further information

Unfortunately, there is a huge retrofit knowledge gap between best-practice and the understanding of many in the construction industry, particularly with regard to traditional buildings. This is exacerbated by poor or inaccurate guidance - in particular insulation manufacturers' guidance that fails to address moisture properly.

Trusted sources for good information about retrofit are:

- AECB - Association for Environment Conscious Building
- STBA - Sustainable Traditional Buildings Alliance (Guidance Wheel illustrating the interaction of retrofit measures)
- EH - English Heritage
- HES - Historic Environment Scotland
- Passivhaus EnerPhit
- The Green Register (Trains and educates construction professionals across the UK)
- The Retrofit Academy (Trains Retrofit Coordinators)
- Retrofit.Support website
- UKCMB - the UK Centre for Moisture in Buildings

The reference sources for the Benefits of retrofit infographic in Chapter 1 are as follows:

Water

- Existing Water Usage <https://waterwise.org.uk/wp-content/uploads/2019/10/WWT-Report-.pdf>
- RIBA target - RIBA Climate Challenge <https://www.architecture.com/-/media/files/Climate-action/RIBA-2030-Climate-Challenge.pdf?la=en>
- AECB Water Standard (<https://www.aecb.net/aecbwater-standard/>)

Energy Bills

The statistic on fuel poverty is an amalgamation of individual stats for the home nations (note that definition of fuel poverty is different for England than for Wales, Scotland and N.Ireland)

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882404/annual-fuel-poverty-statistics-report-2020-2018-data.pdf
- <https://www.gov.scot/publications/scottish-house-condition-survey-2018-key-findings/pages/6/>
- <https://gov.wales/fuel-poverty-estimates-wales-2018>
- <https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-2016-Infographic-Summary.aspx>

Energy Demand Control

- LETI Climate Emergency Design Guide

Air Quality

- Air pollution deaths - <https://www.gov.uk/government/news/public-health-england-publishes-air-pollution-evidence-review>
- NOX emissions - <https://eciu.net/news-and-events/press-releases/2020/analysis-gas-boilers-and-nox-the-hidden-emitter>
- Children with Asthma - POSTNote 366, 2020, Houses of Parliament
- https://www.parliament.uk/globalassets/documents/post/postpn366_indoor_air_quality.pdf
- 1million homes with damp - Housing with Damp Problems, 2020, MHCLG
- <https://www.ethnicity-facts-figures.service.gov.uk/housing/housing-conditions/housing-with-damp-problems/latest>

Heritage

- <https://historicengland.org.uk/content/docs/research/valuing-carbon-pre-1919-residential-buildings/>

Acoustics

- <https://www.euro.who.int/en/health-topics/environment-and-health/noise/data-and-statistics>

Thermal Comfort

- <https://www.ukgbc.org/wp-content/uploads/2017/12/Healthy-Homes-Full-Report.pdf>

Climate Resilience

- Heat Related Deaths - <https://www.theccc.org.uk/wp-content/uploads/2016/07/CCRA-Ch5-People-and-the-built-environment-fact-sheet.pdf>
- 20% of homes at risk of overheating - <https://www.zerocarbonhub.org/sites/default/files/resources/reports/ZCH-OverheatingInHomes-TheBigPicture-01.1.pdf>

UK Average Home Energy Consumption

- Calculated for a 60m² home
- Uses LETI Stock Model data average for UK homes energy use
- Calculated using PHPP Modelling software

UK Average Home Emissions

- Uses annual energy consumption figure calculated from LETI Stock Model
- Uses cumulative grid and gas carbon factors from 2021 to 2050 taken from the Treasury Green Book

UK Average Energy Bills

- Taken from UK Power average gas and electricity bills 2020

Peak Demand

- UK Grid Peak Capacity for 2030 and 2050 taken from National Grid Future Energy Scenarios 2020
- UK peak heat demand taken from: <https://www.sciencedirect.com/science/article/pii/S0301421518307249>

Comfort Section

Excess winter deaths over 28,000, source:

- <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/esswintermortalityinenglandandwales/2019to2020provisionaland2018to2019final>

Proportion due to cold homes up to 10,000, source:

- <https://www.nea.org.uk/articles/what-is-fuel-poverty/?parent=about-us>

Annual cost to NHS of excess cold is £0.85 Bn, source:

- <https://www.bre.co.uk/filelibrary/pdf/87741-Cost-of-Poor-Housing-Briefing-Paper-v3.pdf> Table 2

Excess Summer deaths source:

- MHCLG, Research into overheating in new homes Phase 1 report, Sep 2019

Annex K: Definitions

AECB New Build: The AECB standard for new-build dwellings. See <https://aecb.net/aecb-building-certification/>

AECB Retrofit: The Retrofit standard proposed by the AECB. See <https://aecb.net/aecb-retrofit-standard/>

Air source heat pump: An energy efficient heating or cooling system that transfers heat to or from the air, typically to generate hot water and space heating or cooling.

Airtightness: A measure of the permeability of a building - i.e. how much external air enters or leaves the building in an uncontrolled fashion. Also called infiltration. This is measured either in $\text{m}^3/\text{m}^2\cdot\text{h}$ - i.e. what volume of air escapes per hour for every m^2 of the external envelope, or in Air Changes per Hour (ACH) i.e. what proportion of the volume of air in the building escapes every hour.

Archetype: In the context of this document, one of four building typologies used as a means of modelling certain design criteria and targets to determine specific recommendations.

Biomass boiler: A form of direct combustion, heating and/or electricity derived from biomass (agricultural, forest, urban or industrial residues as opposed to fossil fuel).

Building Regulations new build 2021: In the context of this document, it refers to Approved Document Part L. Following a two-stage consultation on the Future Home Standard and Future Building Standard. The government has committed to an interim uplift to Part L of Building Regulations. Details will be published in Dec 2021 and the new standard will come into force in June 2022.

Carbon factor: The factor that is applied to electricity that is consumed by buildings, to understand that

carbon emissions associated with the electricity use. The carbon factor of the UK grid changes throughout the day and the seasons depending on how much renewable energy is being generated.

Coefficient of Performance: As for Seasonal Coefficient of Performance, but relating to a particular instant or condition, rather than over the course of a year. For example, a heat pump could be rated as delivering a COP of 3.5 when the external temperature is 20°C . However, over the course of a year, the SCOP will be less.

Cold roof: A pitched roof construction where the insulation layer is at joist level above the ceiling of the top floor. Thus, the roof space itself is not heated.

Deep retrofit: A retrofit which has included work to the vast majority of the building fabric as well as changes to the building's heat source and ventilation systems. This type of retrofit would typically occur at the same time as major renovations or extension and could be expected to realise around a 70% reduction in energy demand.

Demand response: The ability of a system to reduce or increase energy consumption for a period of time in response to an external driver (e.g. energy price change, electricity grid availability). Refer to the LETI Climate Emergency Design Guide, Chapter 4.

Embodied carbon emissions: The carbon emissions of an asset are the total GHG emissions and removals associated with materials and construction processes throughout the whole life cycle of an asset (Modules A1-A5, B1-B5, C1-C4). This includes emissions associated with the extraction and processing of materials and the energy and water consumption used by the factory in producing products and constructing the building. It also includes the 'in-use' stage (maintenance, replacement, and emissions

associated with refrigerant leakage) and 'end of life' stage (demolition, disassembly, and disposal of any parts of product or building) and any transportation relating to the above.

Energy Performance Certificate: A certificate (now provided online) produced for new-build and existing dwellings which provides an A-G rating indicating the relative energy cost for that home

EnerPHit: The Passivhaus retrofit standard. See <https://passipedia.org/certification/enerphit>

EUI: Energy Use Intensity - the amount of energy (in kWh/m²/year) that needs to be delivered to a building to provide for all its requirements - both regulated and unregulated energy. The EUI is not the sum of space heating and hot water demand. The actual energy used by the building for these purposes will be reduced by the coefficient of performance of the heat pump (consumption).

Fabric first: The concept of focussing on the building fabric before trying to reduce emissions using more efficient heat sources, or using renewable energy systems. The building fabric includes walls, floors, roofs, windows, doors and the ventilation system.

Fossil fuel: A natural fuel such as petroleum, coal or gas, formed in the geological past from the remains of living organisms. The burning of fossil fuels by humans is the largest source of emissions of carbon dioxide, which is one of the greenhouse gases that allows radiative forcing and contributes to global warming.

Fossil fuel free home: A home that does not use fossil fuels on site e.g. for heating, hot water or cooking.

Fuel poverty: Households who need to spend more than 10% of their income on heating their home (note: exact definitions vary across the UK nations).

Gross Internal Area: The internal area of a dwelling taken from the internal surface of the walls that define the boundary to outside and ignoring all internal arrangements. Measured on all habitable floors.

Ground source heat pump: An energy efficient heating or cooling system that transfers heat to or from the ground, typically to generate hot water and space heating or cooling.

Heat pump: Heat pumps transfer heat from a lower temperature source to one of a higher temperature. This is the opposite of the natural flow of heat. Heat pumps can be used to provide space heating, cooling and hot water. A refrigerant fluid is run through the lower temperature source (ambient air, ground, water, etc.). The fluid 'absorbs' heat and boils, even at temperatures below 0°C (although the coefficient of performance (COP) decreases with lower temperature). The resulting gas is then compressed, which further increases its temperature. The gas is passed into heat exchanger coils, where it condenses, releasing its latent heat. The process then repeats. (Adapted from https://www.designingbuildings.co.uk/wiki/Heat_pump).

Indoor air quality: The quality of air inside a home. This could be affected by: CO₂ levels, Volatile Organic Compounds (VOCs), particulates, odour, humidity, combustion products/fumes.

LETI Best practice constrained retrofit: Best practice level of safe retrofit which can be applied to a building which may have external appearance and/or internal space constraints.

LETI Best practice unconstrained retrofit: Best practice level of safe retrofit which can be applied to a building without any significant appearance or internal space constraints.

Annex K: Definitions

LETI exemplar retrofit: Aligned with EnerPhit retrofit standard, and achieves further reductions in terms of retrofit ambition. As we are unlikely to be able to achieve a consistent level of retrofit across all our housing stock, we will need some retrofits to be in this exemplar category, both to achieve the required reduction in demand across the country, but also to drive innovation and demonstrate what can be achieved.

Low and zero carbon technologies: Technologies which provide heat energy whilst producing no or little carbon emissions.

Mechanical ventilation with heat recovery (MVHR): MVHR, heat recovery ventilation (HRV) or ventilation heat recovery (VHR) uses a heat exchanger to recover heat from extract air that would otherwise be rejected to the outside and uses this heat to pre-heat the 'fresh' supply air. (https://www.designingbuildings.co.uk/wiki/Thermal_bridging_in_buildings) As a result, MVHR is more energy efficient than natural ventilation, whilst also providing air quality and acoustics benefits.

Operational emissions: The carbon dioxide and equivalent global warming potential (GWP) of other gases associated with the in-use operation of the building. This usually includes carbon emissions associated with heating, hot water, cooling, ventilation, and lighting systems, as well as those associated with cooking, equipment, and lifts (i.e. both regulated and unregulated energy uses).

Overheating: The condition where the internal temperature of a dwelling, typically in summer, spends a certain amount of time above what is considered comfortable. Exact limits vary depending on the standard, but typically anything above 25°C could be considered overheating.

Part F: The Building Regulations Approved Document for England which sets out the regulations for ventilation in new and existing dwellings.

Part L: The Building Regulations Approved Document for England which sets out the regulations for conservation of fuel and power in new and existing dwellings.

Passivhaus new build: The Passivhaus standard for new-build dwellings. See <https://passipedia.org/basics>.

Peak demand: Refers to the times of day when our electricity consumption is at its highest which, in the UK, occurs between 5-30pm to 6pm each weekday evening.

Performance gap: This term refers to the discrepancy between energy predictions at design stage, compared to in-use energy consumption of buildings.

Permeability: See airtightness

Primary energy: Primary energy is energy that has not undergone any conversion or transformation. As a common example, each kWh of grid electricity used in a UK building requires 1.5 kWh of primary energy; this accounts for the energy required for power generation (including fuel extraction and transport to thermal or nuclear power stations), transmission and distribution.

Primary pipework: The pipework between the hot water source (e.g. heat pump) and the hot water tank. This pipework will tend to be of a large diameter and will be used whenever the tank needs to be brought back up to temperature.

Regulated energy: Energy used by the fixed building services to provide heating, hot water, ventilation and lighting.

Retrofit: The retrospective upgrading of a building to enable it to respond to the imperative of climate change.

Seasonal Coefficient of Performance (SCOP): The ratio of input to output energy that a heat pump is able to deliver, on average, across the course of a year. For example, a SCOP of 2 means that, on average, a heat pump will deliver 2kWh of heat energy for every 1kWh of electrical energy it draws from the grid.

Shallow retrofit: A retrofit involving several, relatively minor interventions (e.g. loft insulation, cavity wall insulation) which may also include a change to the heat source and ventilations systems. This type of retrofit could be expected to realise no more than a 30% reduction in energy demand.

Space heating demand (SHD): The amount of energy per m², over the course of an average year, which is needed to maintain a comfortable internal temperature. This is directly related to the thermal performance of the building and is therefore a good proxy for fabric efficiency.

Standard Assessment Procedure (SAP): A government-approved methodology for calculating regulated energy demand (heating, hot water, lighting) in homes.

Step-by-step: The concept of planning a retrofit in a series of stages – perhaps over several years. This approach goes alongside the whole house approach to ensure that the final result is a dwelling which has been retrofitted to its full potential without adverse impact on the building fabric or the internal living environment.

Thermal bridge: A discontinuity in the insulation layer which results in additional heat loss. If the bridge is particularly bad, then condensation could occur internally.

Thermal comfort: The maintenance of a dwelling's internal environment to ensure an appropriate range of internal temperatures throughout the year. This is typically between 20 and 25°C.

Treated Floor Area (TFA): The internal area of a dwelling less the footprint of internal walls and other uninhabitable spaces. Measured on all habitable floors. Typically this is around 90% of the Gross Internal Area.

U-value: The rate of transfer of heat through a structure (which can be a single material or a composite), divided by the difference in temperature across that structure. The units of measurement are W/m².K. A lower U-value indicates a structure which conducts less heat.

Unregulated energy: Energy consumed by a building that is outside of the scope of Building Regulations, e.g. energy associated with equipment such as fridges, washing machines, TVs, computers, lifts, and cooking.

Warm roof: A pitched roof construction where the insulation layer is in line with the roof rafters, just below the outer layer of tiles/slates. Thus the roof space is heated and can be occupied.

Whole house approach: The concept of treating the whole house as a system when planning a retrofit and thus ensuring that any action taken does not preclude another action at a later date. It also means that actions which may affect other aspects of the dwelling's performance are properly considered to ensure that they do not result in any unintended consequences.

Whole house Retrofit Plan: A coherent plan which sets out the proposed retrofit measures for a particular house. In creating the plan, the effect and interaction of the measures will have been considered to ensure that there is no adverse effect on the building fabric or the internal living environment. The plan could be staged over several years (see also whole house approach and Step-by-step).

Annex L: Abbreviations

A/C	Air Conditioning	IWI	Internal Wall insulation
ACH	Air changes per hour	IPCC	Intergovernmental Panel on Climate Change
AHU	Air Handling Unit	LCOE	Levelised Cost of Energy
ASHP	Air-source Heat Pump	LETI	London Energy Transformation Initiative
BSI	British Standards Institute	MEV	Mechanical Extract Ventilation
CCC	Committee on Climate Change	MVHR	Mechanical Ventilation with Heat Recovery
CCS	Carbon Capture and Storage	NLA	Net Lettable Area
CHP	Combined Heat and Power unit (usually gas-fired)	NPV	Net Present Value
CIBSE	Chartered Institution of Building Services Engineers	OECD	Organisation for Economic Co-operation and Development
CLT	Cross Laminated Timber	PH	Passivhaus
CO ₂	Carbon Dioxide	PHPP	Passivhaus Planning Package
COP	Coefficient of Performance	PIR	polyisocyanurate insulation
DHW	Domestic Hot Water	POE	Post Occupancy Evaluation
DiBt	Deutsche Institut für Bautechnik	ppm	Parts per million
DNO	Distribution Network Operator	PUR	polyurethane insulation
EAHP	Exhaust air source heat pump	PV	Photovoltaic panels
EC	Embodied Carbon	RIBA	Royal Institute of British Architects
EHA	English Housing Survey	RICS	Royal Institute of Chartered Surveyors
EHS	English Housing Survey	RRWP	The Notting Hill's Residents Repairs Working Party
EPC	Energy performance Certificate	SCOP	Seasonal Coefficient of Performance
EUI	Energy Use Intensity	SHD	Space heating demand
EWI	External Wall insulation	SFP	Specific Fan Power
GB	Great Britain	SHQS	Scottish Housing Quality Standard
GHG	Greenhouse Gases	TFA	Treated Floor Area
GIA	Gross Internal Area	UK	United Kingdom
GWP	Global Warming Potential	VCL	Vapor Control Layer
HACT	Housing Associations' Charitable Trust	WHO	World Health Organisation
HHSRS	Housing Health and Safety Rating System	WLC	Whole Life Carbon
HLP	Heat Loss Parameter	WSHP	Water Source Heat Pump
HVAC	Heating Ventilation and Air Conditioning	WWHR	Waste water heat recovery
IEA	International energy Agency	ZC	Zero Carbon

Annex M: Acknowledgements

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Dr Zachary Gill - SOAP Retrofit

This is a climate emergency

We urgently need to retrofit our existing buildings to reduce energy consumption and carbon emissions. All too often, poor retrofits can result in damage to the building fabric and a worsening of the living environment, with perhaps even damp and mould.

But with deep retrofitting of the building fabric and the inclusion of a heat pump the average energy demand of a home can be reduced by up to 75%.

LETI have developed this Climate Emergency Retrofit Guide to provide practical solutions for the built environment - setting out best practice and exemplar targets for retrofit, which we believe are achievable in the vast majority of UK dwellings.

www.leti.london

 [@LETI_London](https://twitter.com/LETI_London)
admin@leti.london

Section 1: Identifying details
Your function, service area and team: Planning Directorate
If you are submitting this EqlA on behalf of another function, service area or team, specify the originating function, service area or team: N/A
Title of policy or decision: (1) EFDC Sustainability Guidance and Checklist Volume 3
Officer completing the EqlA: Merve Anil Email: manil@eppingforestdc.gov.uk
Date of completing the assessment: 26 January 2022

Section 2: Policy to be analysed	
2.1	Is this a new policy (or decision) or a change to an existing policy, practice or project? No
2.2	<p>Describe the main aims, objectives and purpose of the policy (or decision):</p> <p>The EFDC Sustainability Guidance and Checklist Volume 3: Refurbishment and Extensions is to act as a practical and technical guide on sustainability principles as they apply to householder applications to ensure development of existing homes within the District meets sustainability targets. It sets out the EFDC policy context as it relates to sustainable development, provides best practice sustainable design principles that can be implemented by homeowners and signposts to other relevant guidance documents. The document also refers to the London Energy Transformation Initiative (LETI) Retrofit Guide (providing best-practice advice from industry experts, published in October 2021) which is included as an Appendix.</p> <p>What outcome(s) are you hoping to achieve (ie decommissioning or commissioning a service)?</p> <p>The adoption of the Sustainability Guidance Volume 3 as a material planning consideration in the determination of planning proposals</p>
2.3	<p>Does or will the policy or decision affect:</p> <ul style="list-style-type: none"> • service users • employees • the wider community or groups of people, particularly where there are areas of known inequalities? <p>The report is to provide an overview of the EFDC Sustainability Guidance Volume 3 to be approved as a material planning consideration – it is a guidance document to support policies in the emerging Local Plan in relation to sustainability and high-quality design.</p>

	<p>Will the policy or decision influence how organisations operate?</p> <p>Following consultation, if the guidance document is agreed, then it will be used to inform the consideration of planning proposals within the District.</p>
2.4	<p>Will the policy or decision involve substantial changes in resources?</p> <p>No</p>
2.5	<p>Is this policy or decision associated with any of the Council's other policies and how, if applicable, does the proposed policy support corporate outcomes?</p> <p>The work being undertaken is required to support policies in the emerging Local Plan in relation to sustainability and high quality design. If endorsed to be a material planning consideration, the guidance document will inform development management processes to ensure delivery of high-quality and sustainable growth in the District.</p>

Section 3: Evidence/data about the user population and consultation¹

As a minimum you must consider what is known about the population likely to be affected which will support your understanding of the impact of the policy, eg service uptake/usage, customer satisfaction surveys, staffing data, performance data, research information (national, regional and local data sources).

3.1	<p>What does the information tell you about those groups identified?</p> <p>The current position affects the District as a whole.</p>
3.2	<p>Have you consulted or involved those groups that are likely to be affected by the policy or decision you want to implement? If so, what were their views and how have their views influenced your decision?</p> <p>The Council undertook informal engagement prior to the development of the EFDC Sustainability Guidance and Checklist Volume 3. This early engagement included whole-document reviews with the Local Plan Implementation Forum as well as specific topic-focused workshops with relevant officers across the Council, including Planning, Housing and Development Management. Following approval at Cabinet on 11 March 2021 and the publication of the LETI guidance in October 2021, the EFDC guidance document was published for formal consultation for a six-week period from 10 January 2022 to 21 February 2022.</p> <p>The formal consultation was undertaken in accordance with the Council's adopted Statement of Community Involvement (SCI). It involved both digital and non-digital means. All those on the Council's planning policy database as well as the general public were notified. Information including the document and an online survey/questionnaire has been made available on the Council's website and by notification to statutory consultees.</p>
3.3	<p>If you have not consulted or engaged with communities that are likely to be affected by the policy or decision, give details about when you intend to carry out consultation or provide reasons for why you feel this is not necessary:</p> <p>Consultation that has already been undertaken with regards to the EFDC Sustainability Guidance and Checklist Volume 3 has been outlined above.</p>

Section 4: Impact of policy or decision

Use this section to assess any potential impact on equality groups based on what you now know.

Description of impact	Nature of impact Positive, neutral, adverse (explain why)	Extent of impact Low, medium, high (use L, M or H)
Age	Neutral – no impact	L
Disability	Neutral – no impact	L
Gender	Neutral – no impact	L
Gender reassignment	Neutral – no impact	L
Marriage/civil partnership	Neutral – no impact	L
Pregnancy/maternity	Neutral – no impact	L
Race	Neutral – no impact	L
Religion/belief	Neutral – no impact	L
Sexual orientation	Neutral – no impact	L

Section 5: Conclusion

		Tick Yes/No as appropriate	
5.1	Does the EqlA in Section 4 indicate that the policy or decision would have a medium or high adverse impact on one or more equality groups?	No <input checked="" type="checkbox"/>	
		Yes <input type="checkbox"/>	If ' YES ', use the action plan at Section 6 to describe the adverse impacts and what mitigating actions you could put in place.

Section 6: Action plan to address and monitor adverse impacts

What are the potential adverse impacts?	What are the mitigating actions?	Date they will be achieved.

Section 7: Sign off

**I confirm that this initial analysis has been completed appropriately.
(A typed signature is sufficient.)**

Signature of Head of Service: Nigel Richardson

Date: 26 January 2021

Signature of person completing the EqIA: Merve Anil

Date: 26 January 2021

Advice

Keep your director informed of all equality & diversity issues. We recommend that you forward a copy of every EqIA you undertake to the director responsible for the service area. Retain a copy of this EqIA for your records. If this EqIA relates to a continuing project, ensure this document is kept under review and updated, eg after a consultation has been undertaken.

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Report to the Cabinet

Report reference: C-045-2021/22

Date of meeting: 07 March 2022



**Epping Forest
District Council**

Portfolio: Environment and Technical Services

Subject: Covid 19 Development Projects - Travel Local Demand Responsive Transport (DRT) trial

Responsible Officer: Stephen Lloyd Jones 01992 564000 ext 2414

**Democratic Services
Officer: Adrian Hendry (01992 564246).**

Recommendations/Decisions Required:

- 1) **Continue service in its current form and cost, adding a trial of EV vehicles and accepting that better opportunities may arise to deliver a full DRT app-based zonal service elsewhere;**
- (2) **To note that we have delivered an important ‘service of last resort’ in 21/22 for key workers, some regular commuters/users and a rural community otherwise left with almost no bus service;**
- (3) **Further funding merited due to extreme challenges posed by Covid-19 conditions – as one third of interest has been from Harlow residents, Harlow’s (and ECC’s) financial support should also be sought in 22/23.**

Executive Summary:

DaRT87 launched Jan 2021 as emergency ‘hybrid’ Demand Responsive Transport (DRT) following the cessation of subsidy by Essex CC of Arriva’s 87 bus service. The Arriva 87 saw a 60%+ drop in passengers during 2020 and was costing EFDC £100k per year subsidy alongside ECC. A decision was taken to run a twelve-month, low cost DRT trial @£85k, minus returned fare revenue, using Epping Forest Community Transport minibuses.

Very difficult trading conditions in 21/22 due to: Lockdowns and slow recovery of bus usage; lack of confidence in buses among concessionary pass holders; major reduction in 5 day per week tube commuting; school/college disruptions; marketing reach. Recovery of fare revenue has been low at 2-3% of costs and whilst reasonable level of interest was achieved (1000+ online registrations), conversion to actual usage has been very low due to prevailing conditions.

Nevertheless, an important corridor type service has been delivered adopting some aspects of DRT (pre-booked journeys online or by phone, fully contactless fares) and in a lower carbon way than running empty conventional buses. A further year’s funding will enable a chance to prove something closer to financial viability and to justify ECC’s

return to supporting journeys in this corridor. This may also unlock ECC funding from any successful 'Rural DRT' bid they make to DfT's 'Bus Back Better' programme (outcome TBC), given the clear demand from Epping Green residents.

Other Options for Action:

Shorter Route

Most demand has come between Harlow (SW), Epping Green and Epping. Focusing mainly on this section including the station, would increase efficiency of operation and allow more runs with a semi-set timetable once post-pandemic demand is understood. The sections between Debden and Epping are covered by reasonably frequent buses and the Central Line. Any trips south of Epping could be pre-booked by-demand only. There is little evidence of demand for trips to EF Shopping Park but that is caveated by the fact that elderly and other concessionary bus pass holders have simply not been travelling much in 21/22.

Trial EV minibuses

Viable EV minibuses adapted to the needs of Community Transport operators have become available. Within current cost, we can accommodate up to three months' trial use to cover different weather conditions and to test real world operation. 100% EV operation could be a good marketing message, but we would need full confidence in performance first.

Report:

Positives: 1,096 viewers of [website](#) leading to 178 online registrations of interest ytd (16%). Examples of 'lifeline' users (NHS staff/users & others). Postcode targeted social media activity in SW Harlow by HGGT comms exceeded online norms. Good/reliable service. We provided a 'supplier of last resort' solution in a lower carbon way than running empty conventional buses.

Negatives: conversion of 'interest' to actual usage is low; fare revenue returned to EFDC is well below estimates @2%-3% of running costs per month; EFCT are constrained on vehicles, driver availability (incl covid impacts) and due to covid bus regulations had max occupancy of 6 passengers for long periods; two stage registration process (EFDC online registration form and then separate EFCT form) caused some to fall out of the process.

Learnings: 33%+ of interest is from SW Harlow residents (desire to get to our tube stations and educational sites); Epping Green shows highest % residents expressing interest (rural isolation); Unclear whether elderly are comfortable with approach (no evidence of others having problems except pre-booking disliked); biggest prompt to explore the website was the climate change consultation, but little new patronage came as a result due to the Omicron phase of pandemic.

The service in 21/22 has not conformed to the full industry definition of a Demand Responsive Transport service, especially in terms of operating only within a defined corridor rather than a larger zone with multiple vehicles. It has also not tested app-based booking and payment which commercial services like Arriva Click or D(igital)DRT trials such as [hertslynx](#) (which received £1.4m from DfT's Rural Mobility Fund + HCC funds) are deploying. There are still relevant learnings for Essex CC's DRT strategy and the service has offered an important lifeline/stopgap service in a crisis which we can build on for post-Covid conditions. Otherwise, better opportunities for Digital DRT services may emerge during 22/23 with developer funding.

Resource Implications:

It is recommended that further ongoing financial commitment of £85,000 be made to EFCT to extend the DRT service for a further year from 1st April to 31st March 2023.

Ongoing operating cost:

Operating cost per Driver/Bus route (2 drivers covering a 12hr shift)	£77,328 (£6,444 per month)
EV Minibus hire (LDV EV80)	£3,000
Marketing (including paid digital/print media)	£5,000
Total costs:	£85,328
Income from fares (est):	£5,000 - £10,000
Net cost (from)	£80,328

Some extra officer/IT resource is required to make the registration a one-stop process.

Legal and Governance Implications:

DaRT 87 has been approved by the Traffic Commissioner under a Section 22 license under the Transport Act 1985. These permits allow the holder to operate transport services for hire or reward without the need for a full public service vehicle operator's (PSV 'O') licence. Section 22 does allow ad hoc pickup of passengers at bus stops, although this was not done or promoted during Covid to ensure no overloading took place. Relaxing this would increase awareness and usage, especially amongst those less likely to be online.

Safer, Cleaner and Greener Implications:

EFCT's minibuses remain lower emission Euro 6 standard diesel. As previously mentioned, viable EV minibuses have come on the market, including some approved for Community Transport use with full accessibility features. Costs above include at least three months' trial of a vehicle across different seasons, but committing to a full 12 months upfront could be risky. By April, we should also see a wider range of suitable EV charging opportunities, both public (eg Oakwood Hill East rapid chargers) and within the EFDC estate for our fleet.

Consultation Undertaken:

EFCT, ECC (Integrated Passenger Transport Unit),

Background Papers:

Covid 19 Development Projects Update

Risk Management:

If the usage of the service, as a result of continuing Covid-19 restrictions or lack of confidence among users does not increase, then the estimated income will again not materialise.

There is a reputational risk for the Council if the service is unable to perform at the expected level of service. This will be mitigated by Officers liaising closely with EFCT, ECC and other stakeholders.

Equality Impact Assessment

As per C-075-2020/21 Report (11/3/21)

Appendix 2. Equality Impact Assessment

1. Under s.149 of the Equality Act 2010, when making decisions, Epping District Council must have regard to the Public Sector Equality Duty, ie have due regard to:
 - eliminating unlawful discrimination, harassment and victimisation, and other conduct prohibited by the Act,
 - advancing equality of opportunity between people who share a protected characteristic and those who do not,
 - fostering good relations between people who share a protected characteristic and those who do not, including tackling prejudice and promoting understanding.
2. The characteristics protected by the Equality Act are:
 - age
 - disability
 - gender
 - gender reassignment
 - marriage/civil partnership
 - pregnancy/maternity
 - race
 - religion/belief
 - sexual orientation.
3. In addition to the above protected characteristics you should consider the cross-cutting elements of the proposed policy, namely the social, economic and environmental impact (including rurality) as part of this assessment. These cross-cutting elements are not a characteristic protected by law but are regarded as good practice to include.
4. The Equality Impact Assessment (EqIA) document should be used as a tool to test and analyse the nature and impact of either what we do or are planning to do in the future. It can be used flexibly for reviewing existing arrangements but in particular should enable identification where further consultation, engagement and data is required.
5. Use the questions in this document to record your findings. This should include the nature and extent of the impact on those likely to be affected by the proposed policy or change.
6. Where this EqIA relates to a continuing project, it must be reviewed and updated at each stage of the decision.
7. All **Cabinet, Council, and Portfolio Holder reports must be accompanied by an EqIA**. An EqIA should also be completed/reviewed at key stages of projects.
8. To assist you in completing this report, please ensure you read the guidance notes in the Equality Analysis Toolkit and refer to the following Factsheets:
 - Factsheet 1: Equality Profile of the Epping Forest District
 - Factsheet 2: Sources of information about equality protected characteristics
 - Factsheet 3: Glossary of equality related terms
 - Factsheet 4: Common misunderstandings about the Equality Duty
 - Factsheet 5: Frequently asked questions
 - Factsheet 6: Reporting equality analysis to a committee or other decision making body

Section 1: Identifying details

Your function, service area and team: **Environmental and Technical Services**

If you are submitting this EqlA on behalf of another function, service area or team, specify the originating function, service area or team: No

Title of policy or decision: Development of Licensing arrangements for Pavement Licence applications

Officer completing the EqlA: Tel: 4055 Email: qdurrani@eppingforestdc.gov.uk

Date of completing the assessment: 16/02/2021

Section 2: Policy to be analysed

2.1	<p>Is this a new policy (or decision) or a change to an existing policy, practice or project?</p> <p><i>Yes a new policy</i></p>
2.2	<p>Describe the main aims, objectives and purpose of the policy (or decision):</p> <p><i>To agree to fund a trial Demand Responsive Transport (DRT) service along the current Bus Route 87</i></p> <p>What outcome(s) are you hoping to achieve (ie decommissioning or commissioning a service)?</p> <p><i>Work with Essex as a Transport Authority and Epping Forest Community Transport to trial a Demand Responsive Transport (DRT) service which will link some of the current Bus Route 87 communities. Provide a sustainable travel alternative to NHS, key workers, EFDC staff as well as residents. Route 87 in its current form will be ceasing at the end of 2020 as ECC feel they cannot justify subsidising it on grounds of low and declining usage.</i></p>
2.3	<p>Does or will the policy or decision affect:</p> <ul style="list-style-type: none">• service users – <i>yes local bus route users</i> <p>Will the policy or decision influence how organisations operate?</p> <p><i>No</i></p>
2.4	<p>Will the policy or decision involve substantial changes in resources?</p> <p><i>No</i></p>
2.5	<p>Is this policy or decision associated with any of the Council's other policies and how, if applicable, does the proposed policy support corporate outcomes?</p> <p><i>Yes it is linked to the Covid 19 Development Projects</i></p>

Section 3: Evidence/data about the user population and consultation¹

As a minimum you must consider what is known about the population likely to be affected which will support your understanding of the impact of the policy, eg service uptake/usage, customer satisfaction surveys, staffing data, performance data, research information (national, regional and local data sources).

3.1	<p>What does the information tell you about those groups identified?</p> <p><i>Bus Route 87 offers connectivity between Harlow Town, Epping Green, Epping Town, Theydon Bois, Debden and Loughton. Unfortunately due to Covid 19 restrictions it has not been possible to get qualitative data on bus users. It is likely that residents could be using the service for visit to Princess Alexandra Hospital, Harlow as well as students heading for Harlow College, New City College or East 15 acting school. SW Harlow commuters heading for Epping tube station appear another significant element of usage. Similarly it is likely that students and visitors from Harlow could be using the bus route to visit Epping Forest District or to travel beyond.</i></p>
3.2	<p>Have you consulted or involved those groups that are likely to be affected by the policy or decision you want to implement? If so, what were their views and how have their views influenced your decision?</p> <p><i>Due to Covid restrictions and time limitations it has not been possible to carry out a wider consultation. It is intended that the trial will enable Epping Forest Community Transport to carry out impact assessment. Cessation of the current service 87 would leave many residents heading for Harlow needing to change buses at Epping, unless the proposed DRT service is launched.</i></p>
3.3	<p>If you have not consulted or engaged with communities that are likely to be affected by the policy or decision, give details about when you intend to carry out consultation or provide reasons for why you feel this is not necessary:</p> <p>N/A</p>

Section 4: Impact of policy or decision

Use this section to assess any potential impact on equality groups based on what you now know.

Description of impact	Nature of impact Positive, neutral, adverse (explain why)	Extent of impact Low, medium, high (use L, M or H)
Age	<p>Neutral</p> <p>This service should make a positive impact on the elderly if they wish to travel within and out of District to Harlow. Concessionary passes will be accepted at all times where allowed on the public bus network.</p> <p>The aim for cashless operation and the use of online and smartphone booking has been considered. Journey booking by phone will still be allowed by those without internet access and concessionary pass use is cashless.</p>	L
Disability	Neutral (wheelchair-accessible vehicles)	L
Gender	<p>Neutral</p> <p>This service will operate on the same policy and guidelines for customers of all gender</p>	L
Gender reassignment	<p>Neutral</p> <p>This service will operate on the same policy and guidelines for customers of all gender</p>	L
Marriage/civil partnership	<p>Neutral</p> <p>This service will operate on the same policy and guidelines for all customers</p>	L
Pregnancy/maternity	Neutral	L

Race	Neutral This service will operate on the same policy and guidelines for all customers	L
Religion/belief	Neutral This service will operate on the same policy and guidelines for all customers	L
Sexual orientation	Neutral This service will operate on the same policy and guidelines for all customers	L

Section 5: Conclusion

		Tick Yes/No as appropriate	
5.1	Does the EqIA in Section 4 indicate that the policy or decision would have a medium or high adverse impact on one or more equality groups?	No	
			If ' YES ', use the action plan at Section 6 to describe the adverse impacts and what mitigating actions you could put in place.

Section 6: Action plan to address and monitor adverse impacts

What are the potential adverse impacts?	What are the mitigating actions?	Date they will be achieved.

Section 7: Sign off

**I confirm that this initial analysis has been completed appropriately.
(A typed signature is sufficient.)**

Signature of Head of Service: Qasim (Kim) Durrani

Date: 27/10/2020

Signature of person completing the EqlA: Qasim (Kim) Durrani

Date: 27/10/2020

Advice

Keep your director informed of all equality & diversity issues. We recommend that you forward a copy of every EqlA you undertake to the director responsible for the service area. Retain a copy of this EqlA for your records. If this EqlA relates to a continuing project, ensure this document is kept under review and updated, eg after a consultation has been undertaken.

Report to the Cabinet

Report reference: C-046-2021-22

Date of meeting: 7th March 2022



Portfolio: Housing Services – Cllr H Whitbread

Subject: Review of the Housing Allocations Scheme

Responsible Officer: Jennifer Gould Director of Community and Wellbeing (Tel: 07548145639)

Democratic Services: Adrian Hendry (01992 564246)

Recommendations/Decisions Required:

- (1) That Cabinet considers and agrees the 5 major changes and 11 minor changes to the current Allocations Scheme contained within this report**
- (2) That Cabinet approves the publication of the proposed revised Housing Allocations Scheme for 2022 – 2027 at Appendix 1 on 4 April 2022 with an effective date of 12 September 2022**
- (3) That Cabinet considers the outcome and approves the publication of the Stage 2 Public Consultation Report on the Allocations Scheme at Appendix 2B**
- (4) That the Allocations Scheme for 2022 -2027 is reviewed no later than 5 years after the date of publication.**

Executive Summary:

Cabinet is being asked to agree that the recommendations set out in this report are included in the revised Housing Allocations Scheme for 2022- 2027.

As a Local Housing Authority, Epping Forest District Council has a statutory duty to publish a Housing Allocations Scheme (the scheme) for determining priorities - and the procedure to be followed - when selecting a household to be offered a tenancy of Council owned accommodation or to be nominated for an offer of housing from another registered provider with stock in the district.

The Council is required to review the scheme at least once every five years.

The current scheme became effective in July 2018 and is due for renewal by April 2022 along with the Homelessness and Rough Sleeping Strategy, the Tenancy Policy and the overarching Housing Strategy.

A review of all four strategies and policies commenced in May 2021 including a co-ordinated 2-stage statutory consultation exercise.

The proposals for the Tenancy Policy 2022 – 2027 and the Homelessness and Rough Sleeping Strategy 2022- 2027 are also being presented to this Cabinet and the proposals for the overarching Housing Strategy are due to be presented to Cabinet in July 2022.

The issue is a key decision.

Reasons for Proposed Decision:

To enable the Council to publish and implement the Allocations Scheme 2022-2027 and associated material.

Other Options for Action:

- (i) Not to agree the recommended changes to the draft Housing Allocations Scheme
- (ii) To make alternative changes to the draft Housing Allocations Scheme (subject to further consultation where appropriate).

Report:

1. The current Allocations Scheme was published in 2018 and offers choice-based lettings for most applicants on the housing register. Qualifying eligible applicants are placed in one of three bands A, B or C depending on their assessed need. The applicants' bands and registration dates are used to prioritise expressions of interest, or 'bids' for vacant properties that are advertised on a weekly basis. The purpose of a choice-based lettings Policy is to enable applicants to exercise some degree of choice as to where they live (albeit entirely limited by supply and demand).
2. Under the current Policy some households are unable to bid for properties that are advertised. Rather, they receive a direct offer of accommodation. These households include but are not limited to:
 - homeless single people and families to whom the Council has accepted a main housing duty under part 7 of the Housing Act 1996
 - existing social housing tenants who qualify for a priority transfer
 - applicants living in supported housing
3. The Social Housing Annual Lettings Report 2020 –2021 at Appendix 3 highlights that the demand for affordable rented housing in Epping Forest District continues to outweigh the supply of suitable accommodation.
4. The private rented sector is becoming increasingly unaffordable for many low to middle income families and single people who would have previously been able to secure their own accommodation without approaching the Council for help. This is largely in keeping with the national trend. Covid 19 has brought into sharp focus the need for key workers to ensure the local economy and local services continue to function. Many key workers have families with young children or are single people, often on low incomes, at the start of their career or are returning to work and need affordable local housing to sustain employment and deliver essential services.
5. Studies have consistently found that housing, health, wellbeing and life-chances are inextricably linked. A comprehensive, fair, transparent and flexible allocations scheme enables the Council to manage expectations, make the best use of current housing stock and plan for future housing supply across all tenures to meet the needs and aspirations of its current and future residents.
6. The full review of the scheme began in May 2021 along with simultaneous reviews of the Tenancy Policy, the Homelessness and Rough Sleeping Strategy and the overarching Housing Strategy which are all due for renewal in 2022.

Defining the priority bands

The current choice-based lettings scheme awards qualifying applications one of three priority Bands A, B and C. The proposal is to attribute a clearly defined category to each Band i.e. Band A is emergency need, Band B is urgent need and Band C moderate need with the following guiding principles:

- Band A Emergency Need – Band A will be awarded where an imminent move to alternative suitable accommodation is required to mitigate a serious and immediate risk to an applicant's life or a serious and immediate risk of a lifechanging detrimental effect on their mental or physical wellbeing or that of a member of their household.

The applicant will usually be offered a direct allocation as soon as something suitable becomes available, although the applicant can still bid for accommodation should an appropriate property be advertised in advance of the direct allocation.

It is anticipated that very few households will be awarded Band A, and those who do, will have their applications reviewed most frequently to ensure this band is only reserved for emergencies and does not become silted.

- Band B Urgent Need – Band B will be awarded where an applicant is living in unsuitable accommodation that is having or is likely to have a detrimental and long-term impact on their mental or physical wellbeing or that of a member of their household, and there are insufficient grounds to warrant an emergency move ahead of other applicants with an urgent need to move.

The applicant will usually be expected to secure an offer by bidding for advertised properties. Automated bidding or a direct allocation may be made (for homeless households) if the applicant fails to bid and/or secure an offer within a given timescale.

- Band C Moderate Need – Band C will be awarded where an applicant is living in undesirable accommodation, but they do not have an urgent need to move.

The applicant will be expected to pursue an offer by bidding for advertised properties and advised to maximise their limited prospects of securing an offer by considering the widest possible choice of suitable properties.

Five proposed major changes

Major changes are considered to be those which may affect the relative priority of a large number of applicants or a significant alteration to procedures. The following five major changes are being proposed

Medical priorities

The current scheme considers two medical priority categories; urgent medical need which places an applicant in Band A or moderate medical need which places an applicant in Band C.

These two categories do not account for those households with serious and/or progressive long-term medical conditions that are being exacerbated by their living conditions or would improve or stabilise by moving to more suitable accommodation, but do not require emergency rehousing.

The proposal is to replace the two existing medical priorities with three medical categories that accord with the three priority bands. i.e. Band A - emergency medical need, Band B - urgent medical need, Band C - moderate medical need.

With the applicant's consent the Council's medical advisor will be asked to review all live applications that have an existing medical priority. The proposal is for applicants to retain their original banding date unless they have other circumstances that have changed.

Examples of emergency, urgent and moderate medical needs for moving include, but are not limited to:

Emergency - life-threatening condition where the current housing circumstances are severely affecting their health e.g. home dialysis insufficient space to store dialysis equipment or unable to be discharged from hospital into current accommodation because it is unsafe and cannot be adapted.

Urgent - serious illness or disability where the current conditions are seriously affecting an individual's health to a marked degree and a move is recommended to improve health or slow down the deterioration of health of the individual e.g. mid-stage multiple sclerosis - applicant becoming increasingly immobile because they are effectively housebound or cannot access toilet, bathroom kitchen etc without substantial pain and property cannot be adapted, or a family with a severely autistic child with challenging behaviour who is sharing a bedroom with a sibling and has no outside space.

Moderate - illness or disability of a moderate nature which is adversely affected by their living condition and where a move is recommended to alleviate the condition, symptoms or the effects on the household. e.g. a person with arthritis who finds it uncomfortable to get up and down the three steps to the property during a flare-up or in and out of the bath/shower, and a wet-room cannot be fitted; or a couple in a 1 double bedroom property and one applicant has night-time incontinence.

Under occupiers

Under the current policy under-occupiers who wish to downsize can only be considered for properties of the right size and type based on their needs, and only qualify for the incentivised payment of £1,000 per room if they have a lifetime tenancy or in the case of fixed term tenants, have five or more years remaining on their tenancy.

It is recommended that:

- Under-occupiers wishing to downsize from a house with four or more bedrooms who are giving up two or more bedrooms can be considered for a flat or a house with a spare bedroom with or without a garden (i.e. a couple or single person can move from a 4-bed house to a 2-bed house or flat or a 1-bed house or flat with or without a garden).
- Under-occupiers wishing to downsize from a house to a flat where they are giving up one or more bedrooms, can be considered for a flat with a spare bedroom (i.e. a couple or single person can move from a 3-bed house to a 2-bed flat or a 1-bed flat) with or without a garden.
- Incentive payments are made to downsizers with fixed term tenancies with at least 6 months remaining on their tenancy (rather than 5 years) given the relative value of releasing a family-sized home to another household in need and the limited number of households whose fixed term tenancies this concession is likely to apply to 11 properties in 2023 and 22 properties in 2024.
- Incentive payments reflect the benefit to the Council of the size and type of property being surrendered relative to the size and type of property that the under-occupier is seeking to move to.

- The standard payment of £1,000 per room released will be adjusted to account for the relative demand for 2-bedroom properties and the surplus of sheltered housing units.
- Downsizers will typically be offered £1,000 per room they release . This will be reduced to £500 for those moving from a 3-bed if they opt for a 2- bed and only have a 1-bed need.
- Applicants aged 60+ who move from general needs accommodation into sheltered accommodation will receive an additional £1,000 top-up incentive payment regardless of whether they are downsizing.

Homeless households

Where the Council has accepted a duty to provide settled accommodation to a homeless household under part 7 of the Housing Act 1996 it is required to give reasonable preference to their application for housing.

Appendix 4 point 1.2 of the current scheme sets out the policy for housing homeless applicants. However, it is silent on the reasonable preference that the Council gives to homeless households and this cohort is not listed under any of the priority bands. They receive a direct offer of accommodation (this is usually flatted accommodation unless they have been waiting for more than 2 years for an offer) and cannot currently bid for properties that are advertised.

The absence of banding and therefore lack of clarity over the reasonable preference given to part 7 homeless households puts the Council at risk of challenge. Solely relying on the Council to make a direct offer may inadvertently promote dependence whereas enabling homeless households to bid for houses and flats encourages them to proactively maximise opportunities to move out of temporary accommodation.

In addition, this reasonably allows for the removal of the option for applicants living in flats to re-join the housing register after a qualifying period, and be awarded priority band B to bid for houses

It is recommended that homeless households to whom the Council has accepted a duty to rehouse under part 7 of the Housing Act 1996 are :

- awarded Band B under the scheme; and
- able to bid for suitable properties in accordance with their priority banding (on the understanding that if they fail to secure an offer via choice-based lettings within a reasonable timescale then they will also be considered for auto bidding and/or made a direct offer - which may be into the private sector - to enable the Council to discharge its duty).

Local lettings plans

The Housing Act 1996 enables housing authorities to agree local plans – allocating particular accommodation to people of a particular description - which may differ from the overall allocations policy. This is specifically to promote mixed communities and address crime hot-spots, economic regeneration and local skills shortages.

Examples may include:

- prioritising medical staff, blue light emergency officers or teachers on low incomes for affordable housing that is close to new or understaffed medical centres, stations or schools etc. ;or
- not allocating properties to vulnerable applicants in areas where there is a significant risk of being targeted by drug dealers seeking to take over their flat to supply drugs, otherwise known as cuckooing.

It is recommended that the scheme makes provision for introducing local lettings plans (LLPs) in exceptional circumstances where :

- there is an identified need to promote cohesion
- it is generated by the community
- is politically led rather than based solely on officer recommendation
- is approved by Cabinet
- is reviewed periodically; and
- the allocations do not affect overall compliance the scheme.

Serious unacceptable behaviour including rent arrears

Point 14.12 of the current Policy states that “any person or member of their household who within the past 7 years has been guilty of serious unacceptable behaviour...that would give sufficient grounds to issue possession proceedings if they were a secure, assured or fixed term tenant” will not qualify.

The 7-year disqualification rule also applies to serious rent arrears (including housing benefit and court cost arrears).

Point 18.4 of the current scheme states that an offer of accommodation will not be made to (anyone) who has rent arrears in excess of four weeks.

The 7-year rule does not take account of the cause of the arrears or behaviour (which may have been an isolated incident, and/or through no fault of the individual and/or triggered by a mental or physical health condition and/or has since been or is being resolved). The rule may also be counterproductive relative to the negative consequences of preventing a household in need access to the housing register.

The 7-year rule has largely been subsumed by recent legislation to protect vulnerable individuals from homelessness. Examples include but are not limited to the recognition of economic abuse as defined in the Domestic Abuse Act 2021; and mental or physical ill health, redundancy and addiction which could potentially trigger a Mental Health Crisis Breathing Space or Standard Breathing Space introduced by the Debt Respite Scheme Regulations 2020.

It is recommended that the 7-year rule for all unacceptable behaviour including rent arrears is replaced with a prescribed risk-based approach to determining whether a history of unacceptable behaviour is serious enough to warrant exclusion from the Housing Register.

The risk- based approach will look at patterns and severity of behaviour, cause and effect, recent history and support mechanisms that the applicant has or will engage with to prevent reoccurrence, including but not limited to income maximisation, debt management and payment plans and clinical and or social support.

Eleven recommended minor changes

The following minor changes are recommended which either relate to the above major changes or are standalone proposals which may not ordinarily warrant widescale public consultation but have been included for completeness.

Priority Date

Under the current scheme when applicants bid for advertised properties, whoever is in the highest band and has been on the housing register the longest will be considered first - regardless of how long they have been in that priority band.

This means that they will be housed ahead of other households that may have been waiting in the higher band (due to having a greater need to move) for longer.

It is recommended that the applicant's priority date will be the date that they join the housing register - unless or until they move up a band - in which case their priority date will be the date they join that band. If, however the applicant then moves down a band their priority date will revert to the date they originally joined the housing register (or previously joined that lower band as appropriate).

Direct offers and auto-bidding for priority Band A

Given the emergency nature of Band A it is recommended that where applicants have not been submitting bids for suitable properties, or the properties they need rarely become available the options should be made available to make a direct offer and/or set up auto-bidding

Downsizers and the refusal of offers

At present downsizers in Band A who bid for and then subsequently refuse 4 offers of accommodation are prevented from bidding for 12 months in order to reduce the burden of processing arbitrary bids.

This penalty may well be counterproductive as it is in the Council's interest to promote and support downsizing, and reasonable to expect a tenant who is downsizing through choice to be selective about where they decide to move to.

It is recommended that the policy is amended to stipulate that applicants who repeatedly bid for and then refuse offers of suitable properties will have their application suspended for six months - to allow for discretion based on individual circumstances, and act as a deterrent for casual bidders.

Domestic Abuse

The Domestic Abuse Act 2021 places a duty on the Local Authority to provide support to victims and children in safe accommodation and award all eligible homeless victims of domestic abuse a priority need for housing. The current scheme already makes provision for victims of domestic abuse that are conducive to the requirements of the Domestic Abuse Act 2021 and the pursuit of Domestic Abuse Housing Alliance (DAHA) accreditation is being proposed as part of the overarching Housing Strategy for 2022-2027.

It is recommended that the scheme makes explicit reference to the Council's compliance with the requirements of the Domestic Abuse Act 2021.

Offer Policy

Existing tenants living in sheltered housing wishing to move to alternative sheltered accommodation within their own scheme and existing council tenants living in 1- bedroom general needs accommodation afforded Band B priority should be considered for bungalows on the scheme as well as flats.

Homeless applicants will be considered for all dwelling types in accordance with their need and priority banding (including houses where applicable) whether their suitable offer is made by way of choice based letting, auto bidding or a direct offer.

Applications from staff or Members of the Council or their relatives

The current scheme does not require applicants to disclose whether they are staff or Members of the Council or related to, partner of or living with staff or Members of the Council. It is recommended that this requirement be introduced to protect the Council's interest and that of its employees and elected Members. Their status will be flagged on the Council's computer system, and failure to disclose this information may result in the application being suspended or cancelled as determined by the designated manager

Definition of Household

The current definition of household is 'either one person or two persons or more who are intending to live together at the same property offered. Applicants should only include dependants as part of their household or persons who have been part of their household for at least a two-year period and shall occupy the accommodation offered as their only or principal home'. It is proposed that the definition of household for the purposes of the scheme is aligned to that which is used when assessing a homelessness application as set out on the homelessness legislation which reads: An applicant or any other person who usually lives with the applicant as a member of their family or someone who might reasonably be expected to reside with them.

Priority transfers and management transfers

Appendix 3 to the current Policy refers to 'Priority Transfers' as an umbrella term to capture a range of unrelated reasons that a household may need to move from one Council property to another although there is limited detail about the offer policy that applies to each ground for transfer (i.e. like-for like, direct offer or bidding, single or multiple offers etc.)

It is recommended that Appendix 3 of the current scheme is deleted and replaced with relevant sections in the main body of the scheme that define the offer policy for management transfers, overcrowding and welfare grounds. And that the policy on temporary and permanent decants are addressed in a separate policy document regarding asset management.

Priority Bands

The reclassification of the Bands including all proposed major and minor changes are highlighted in the table at Appendix 5

Data Protection and Sharing of Information

The sharing of information shall be updated to reflect the amendments in the Department for Levelling Up Housing and Communities Allocation of Accommodation: Guidance for Local Authorities 2012 (as amended) following the introduction of the Domestic Abuse Act 2021, and the guidance that was issued on 26 January 2022.

Improving access to Social Housing for victims of Domestic Abuse

The wording of the Allocations Policy will be amended slightly to make clearer the obligations placed on local authorities and housing associations by section 79 of the Domestic Abuse Act 2021 on secure tenancies following the guidance that was issued on 26 January 2022.

Resource Implications:

The implementation of the revised scheme shall be managed within existing staff resources and is anticipated to result in short term additional burden on officer time in the Housing Needs team which may impact on other administrative functions during this period.

The proposed changes to the medical priority shall require a review of all applicants with medical priority (currently 30 applicants in Band A and 141 in Band C).The additional fee for the medical advisor is anticipated to be 171 cases at £15 = £2,565

The changes shall require modifications to the software applications for the allocations scheme and an indicative charge is being sought

Finance have provided the following comments:

The report is fundamentally concerned with process changes to allocations and therefore the Financial consequences are limited. There are just a few comments to make:

1. The process change will be absorbed by current staffing levels and therefore there are no pressures on staffing costs.
2. The changes to Medical Priority will result in an increase of £2,565. There is a budget for this expenditure and it is felt that this could be absorbed within the service.
3. The changes to the computer system – the budget for Locata equates to the current quarterly charge of £5,250 so if there is an increase to this or a change to the system used, then there may be a budget pressure. Further information is required to determine the budget position when the cost have been received.
4. The change to the 7-year rule may have an effect on rent/benefit /court cost arrears and this is mentioned in the report. Unfortunately, I am not able to project what that might be and therefore whether this will have an impact on arrears levels. Hopefully it will be minor and only applicable to a minority of cases under the new risk-based assessment methodology.

Legal and Governance Implications:

The Scheme enables the Council to fulfil its duties under the Housing Act 1996 as amended ('the 1996 Act') specifically Part 6 of the 1996 Act ('Part 6'); and complies with associated legislative requirements.

The review of the Scheme pays regard to The Allocation of Accommodation: Guidance for Local Housing Authorities in England 2012, and additional statutory guidance where appropriate.

The modifications to the scheme are consistent with the proposals being submitted to Cabinet in respect of the draft Tenancy Strategy 2022-2027 and draft Homelessness and Rough Sleeping Strategy 2022-2027 (s.166A (12)).

A copy of the draft scheme and proposed alteration has been sent to every Private Registered Provider with which the Council has a nomination agreement along with an invitation to a workshop to provide a reasonable opportunity to comment on the proposed major changes and minor changes to the policy before altering the scheme (s.116A (13)).

All applicants on the Housing Register shall receive a letter giving 6 weeks advanced notice of the modifications and what this means for them. The information shall also be published on the established digital channels and emailed to partner organisations to ensure those likely to be affected by the changes have the affect brought to their attention within a reasonable time (s.168(3))

Legal Services considered the report and confirmed that they had no further comment.

Safer, Cleaner and Greener Implications:

Climate change is expected to disproportionately affect those in more vulnerable positions such as those in urgent need of affordable housing. This is because they are generally less able to protect themselves from the effects of climate change expected in the area, which are more extreme temperatures, flooding and drought.

Climate change is also likely to have a greater effect on those on low incomes and who have existing health conditions again as they will be less able to mitigate against the effects of climate change

Consultation Undertaken:

The recommendations within this review have all been subject to a comprehensive 2-stage public consultation exercise which included; bite-size briefings, webinars, workshops, surveys, on-line questionnaires, small meetings and one to one conversation.

In total 325 people were directly invited to participate in both stages of the consultation including:

- Council tenants, leaseholders and residents
- Partner agencies and community groups with an interest in housing
- Private registered providers of social housing
- EFDC staff and other statutory services
- Members of the Council
- Clerks of parish and town councils to forward to their respective elected members
- District, borough and city councils in the county

A full report on the outcome of the consultation can be found at Appendix 2A and 2B

Risk Management:

A number of significant risks are associated with the review of an allocations scheme :

The Council has a statutory duty to review the scheme within the timescales and parameters set out in the Allocation of Accommodation : guidance for local housing authorities in England 2012 as amended. Failure to pay due regard to this statutory guidance risks reputational damage and regulatory penalties.

A fair robust transparent and up to date allocations scheme enables the Council to make the best use of available housing stock for the benefit of applicants in need of affordable housing and mitigates the risk of judicial review and intervention by the Social Housing Ombudsman and other regulatory bodies for non-compliance with statute and regulation.

The provision of an efficient cost-effective scheme mitigates the financial pressure that inadequate housing can have on other statutory services, for the benefit of all residents. (particularly temporary accommodation, adult and children's social care, health and community safety).

Responding to stakeholder consultation feedback mitigates the risks of dissatisfaction and failure demand.

Failing to make the best use of available housing stock through assessed need and pre-determined priorities risks the immediate health and wellbeing of applicants in housing need and the wider community.

Disregarding the requirements to undertake and respond to a robust equalities impact assessment risks the provision of an unequitable housing service which may disproportionately affect vulnerable residents and those with protected characteristics.

Background Papers:

- Appendix 1 - Draft Housing Allocations Scheme 2022 – 2027
- Appendix 2A –Stage 1 Consultation and Feedback Report October 2021
- Appendix 2B - Stage 2 Consultation and Feedback Report February 2022
- Appendix 3 - Social Housing Lettings Annual Report 2020-2021
- Appendix 4 – Reclassification of Bands
- Appendix 5 – Schedule of under- occupation incentive rates
- Appendix 6 - Equality Impact Assessment February 2022

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Housing Allocation Scheme

2022 – 2027

DRAFT

If you would like this document in an accessible format then please contact:
The Housing Strategy Team
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Telephone 01992 564214

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FORWARD

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SECTION ONE: EXECUTIVE SUMMARY

1. Introduction

This is Epping Forest District Council's proposed Housing Allocations Scheme ("the Scheme") for determining priorities and for the procedures to be followed when allocating social housing within the District between 2022- 2027.

The scheme covers all aspects of the allocations process and is intended to replace previous Housing Allocations Schemes (subject to Cabinet approval in March 2022) in respect of current and future applications.

1.1 Fair access to social housing

The demand for affordable rented housing in the District far outweighs the supply of social housing that becomes available every year.

The Council maintains a Housing Register ("the Register") of applicants who qualify and are eligible to be allocated social housing under the scheme.

We are committed to ensuring everyone has fair access to social housing. Every eligible applicant who makes a request to join the Register shall be considered by the authority.

We shall offer assistance to applicants who may have difficulty applying without help, and the policies described in the Scheme shall be applied consistently to all applications to join the Register.

Applicants who in the Council's opinion have sufficient funds to enable them to meet their own housing costs (currently £76,000) shall not qualify to join the register. For joint applicants (or more) then their combined funds shall be considered.

1.2 Health wellbeing and social recovery

Many people who approach the Council for help with housing also have concerns about their health and wellbeing or that of their families.

Although the Council cannot offer a settled home to everyone who approaches us, or even to those applicants in urgent housing need as quickly as we would like to, we aim to make every contact count towards improving the mental and physical health and wellbeing of our residents.

As well as assessing individual application for housing we will also let applicants know what free opportunities are available to promote positive mental health, positive activities and positive community initiatives for all residents as part of our road map toward social recovery from the impact of the pandemic.

1.3 Options

The Council shall support applicants to choose and access the most suitable housing options and shall provide information and advice on the range of alternatives to joining the Register including mutual exchange, low cost home ownership, and accessing accommodation within the private rented sector.

The Council shall promote independent living for all applicants who are seeking assistance to meet their housing related support needs. Options shall include providing information and free advice about aids and adaptations, floating support, improved security, befriending and mobility schemes.

The Council shall very occasionally arrange a Landlord Management Transfer to alternative social housing outside of the scheme where it considers there is an emergency (or urgent) need to do so.

1.4 Managing the Housing Register

The Council shall not accept applicants onto the Register if it is evident that they have little or no prospect of being allocated accommodation. The Council considers this to be the fairest way of managing expectations.

1.4.1 Downsizers

Existing Council and Housing Association tenants who want to downsize shall be actively supported to do so. This may include financial incentives and allowing applicants who want to give up a larger family sized home to move to a smaller property with one spare bedroom for guests etc.

1.4.2 Removing Barriers

Where existing barriers to moving are shown to have unintended consequences alternative solutions will be proposed. Examples include easing the current restriction on the number of offers to downsizers and replacing automatic sanctions for rent arrears with repayment agreements where it is appropriate to do so.

1.5 Housing needs and priority Bands

The Council shall only allocate accommodation to people on the Register in accordance with this scheme and shall give reasonable preference to specified categories of people based on their assessed need for affordable housing.

Qualifying applicants who have been accepted on to the scheme shall be placed in one of three priority bands.

Band A - Emergency Need, Band B - Urgent Need, Band C - Moderate Need

1.6 Choice

The scheme aims to ensure that the accommodation offered meets the needs, circumstances, and wherever possible the preferences of the applicants and their households who are eligible and qualify to join the Housing Register.

The majority of allocations shall be via the Councils Choice Based Lettings Scheme for properties that are advertised on the [HomeOption](#) website.

Housing staff can arrange assisted bidding for applicants on request if they would experience difficulty without this help.

As far as reasonably possible all applicants shall be offered:

(a) a choice of housing accommodation; or

- (b) the opportunity to express preference about the housing accommodation to be allocated to them.

Some applicants may receive a direct offer of suitable accommodation or placed on the auto-bidding system depending on their assessed housing need and bidding history.

1.7 Preventing homelessness

Everyone who is homeless or at risk of becoming homeless and approaches the Council for assistance under the Homelessness Reduction Act 2017 shall be encouraged to apply to join the Housing Register.

The Council reserves the right to discharge its main homelessness duty under Part 7 of the Housing Act 1996 to homeless households either by making an offer of settled social housing via the scheme, or by securing an offer of settled accommodation for at least six months in the private rented sector.

This option only applies to Part 7 offers to Homeless Households and shall be determined by the availability of suitable accommodation. An equivalent power does not apply for applicants that have been accepted onto the Register under the provisions of Part 6 of the Housing Act 1996. All Part 6 allocations will be for social housing.

1.8 Best use of social housing

In order to make the best use of all available housing the Council will continue to work closely with a number of private registered providers (also known as housing associations) to secure nomination rights for the homes that they own and manage in the District.

Registered providers agree to work in partnership with the Council by advertising vacant properties through the Choice Based Lettings Scheme and accepting nominations for vacant properties from applicants on the Register under part 6 of the Housing Act 1996 in accordance with the scheme.

Similarly, registered providers assist the Council with discharging its main duty to homeless households under part 7 of the Housing Act 1996 by accepting nominations for settled accommodation from homeless applicants on the Housing Register.

Registered providers shall also consider direct allocations for vacancies (including those both inside and outside of the scheme) in accordance with nominations agreements and all local lettings policies and plans.

1.9 Stable settled mixed communities and local lettings plans

Occasionally the Council may consider introducing local lettings policies and plans in response to specific issues such as local skill shortages, community cohesion and economic regeneration. Any recommendations will be subject to an equalities Impact Assessment and Cabinet approval.

1.10 Scope of the Allocations Scheme

- (a) An allocation of accommodation for the purpose of the Scheme means
- (b) Selecting a person to be a secure or introductory tenant of accommodation held by the council

- (c) Nominating a person to be a secure or introductory tenant of accommodation held by another housing authority
- (d) Nominating a person to be an assured tenant of accommodation held by a Private Registered Provider

1.10.1 The Scheme applies to the allocation of accommodation to existing secure or introductory tenants of the local housing authority and existing assured tenants of private registered providers only in the following circumstances:

- (a) the allocation involves a transfer;
- (b) the application for transfer is made by the tenant; and
- (c) the housing authority is satisfied that the tenant is to be given reasonable preference under the statutory framework.

1.10.2 The Scheme **does** apply to the following:

- (a) existing tenants who occupy an adapted property and no longer require those adaptations, but the Council requires the property for an applicant who does need them; and existing tenants who are under-occupying their accommodation.

The scheme **does not** apply to the following:

- (a) mutual exchanges between secure tenants (see Section 9);
- (b) mutual exchanges between secure and assured tenants, and those with flexible/fixed term tenancies see Section 9);
- (c) assignments (see Tenancy Policy);
- (d) renewals/extensions of fixed term/flexible tenancies (see Tenancy Policy);
- (e) transfers to existing tenants where the Council is satisfied that the tenant does not have reasonable preference (see Section 9);
- (f) transfers to existing tenants that the Council initiates for management purposes, including temporary decants (see Section 9);
- (g) conversion of introductory tenancies to secure tenancies (see section 9);
- (h) successions under section 89 of the Housing Act 1985 (see Section 9);
- (i) allocations to persons who lawfully occupy accommodation let on family intervention tenancies (see Tenancy Policy);
- (j) provision of non-secure temporary accommodation in discharge of any homelessness duties or powers (see Homelessness and Rough Sleeping Strategy);
- (k) transfer of tenancies by court order under family law or under the provision of the Civil Partnerships Act 2004 (see Tenancy Policy);
- (l) re-housing due to being displaced from previous accommodation by the Council or being re-housed by the Council pursuant to the Land Compensation Act 1973 (see draft Decant Policy)
- (m) temporary decants to allow property repairs to be carried out (see draft Decant Policy); and
- (n) Accommodation based care and support extra care or residential care for vulnerable adults or children which shall fall under the remit of Essex County Council.

SECTION TWO: THE LEGAL FRAMEWORK

2. Housing Legislation and Regulation

This draft Housing Allocations Scheme has been developed to comply with the provisions of:

- (a) The Housing Act 1996 as amended by the Homelessness Act 2002 and the Localism Act 2011
- (b) The Code of Guidance on Allocations of June 2012, and the Supplementary Guidance of December 2013 Providing social housing for local people, of March 2015 Right to Move, of November 2018 Improving Access to Social Housing for Victims of Domestic Abuse in Refuges November 2018 and of the Allocation of Housing and Homelessness (Eligibility) (England) (Amendment) Regulations June 2021
- (c) Other relevant legislation and guidance listed at Appendix G

The review of the Scheme coincides with simultaneous reviews of the Council's Homelessness and Rough Sleeping Strategy, the Tenancy Policy, and the Overarching Housing Strategy.

2.1 Equality and diversity

The Council is committed to upholding the provisions of the Equality Act 2010 and fulfilling its duty to:

- (a) eliminate unlawful discrimination;
- (b) advance equality of opportunity; and
- (c) foster good relations between persons who share a relevant protected characteristic and those who do not.

The recommended changes to the Allocations Scheme 2022 – 2027 that will be presented to Cabinet for approval shall be appended with the results of this consultation and an Equalities Impact Assessment.

2.2 Data protection and freedom of information

Some or all of the information that an applicant provides is likely to be personal and sensitive and/or fall within special categories of data as defined under the General Data Protection Regulations and Data Protection Act 2018.

Data shall usually only be shared with a third party with the applicant's permission and then only for the purposes of assisting with their re-housing. Applicants shall be asked to sign a consent form as part of their housing application to enable the authority to share their information. Personal data will also be handled in accordance with the Electronic Communications Act 2000.

Members of the public shall not be informed that a person is an applicant for an allocation of housing accommodation without the applicant's consent.

Personal information may be shared without consent if a lawful basis can be identified, for example if an individual's safety is at risk. Further conditions apply where there is a need to share special category data.

The Council shall consider whether it is appropriate to share information regarding safeguarding concerns, including, but not limited to concerns about domestic violence and abuse, with other agencies (such as housing associations and GP surgeries).

The Council is responsible for determining whether data sharing is lawful under UK data protection law, and this shall be determined on a case-by-case basis.

Applicants shall have the right under the General Data Protection Regulation and Data Protection Act 2018 to see all information held regarding their application for housing.

Individuals shall have the right under the Freedom of Information Act 2000 to see information on how the Scheme has been prepared and approved by the Council.

Requests for information under the Freedom of Information Act 2000 must be made in writing, state the applicants name and address for a response and describe the information requested.

2.3 Prevention of fraud and false statements

Where an applicant provides false information in connection with their application and this subsequently comes to the Council's attention, the designated manager may reject the application on the grounds of fraud and/or arrange for further investigation including a referral to the Council's fraud team .

Any rejection from the Register on the grounds of fraud may be treated as a permanent exclusion (including subsequent applications from the same applicant) even if the application is made from a different address.

The applicant shall be advised of the terms of and the reasons for the exclusion. "Fraudulent Information Provided" will be recorded on their casefile.

It is a criminal offence for any applicant and/or anyone providing supporting information to knowingly or recklessly make a false statement or knowingly to withhold reasonably requested information relevant to the housing application.

If there is evidence that a criminal offence has been committed, the Council may take proceedings that could result in a criminal record, a fine or imprisonment. The Council may also seek possession of any home obtained as a result of fraud.

2.4 Exceptional circumstances

Any provision in the Scheme may be waived in exceptional circumstances and at the discretion of the appropriate senior officer with delegated authority (as stated in the department's Scheme of Delegations). The application of such discretion will normally require a full report of the circumstances of the individual case to be prepared by the Team Manager for the consideration of the delegated officer (currently the Director of Communities and Wellbeing).

SECTION THREE: THE HOUSING ALLOCATIONS POLICY

3. Free advice and assistance

Choice based lettings scheme typically requires housing applicants to be actively involved in seeking accommodation and the Council understands that some applicants may require help with this. The Housing, Community and Wellbeing staff aim to ensure that no person is disadvantaged by the way the Scheme operates.

Advice and information shall be made freely available about the right to make an application for housing; including the ability to request any necessary assistance when completing an application and expressing an interest in advertised properties, specifically for those applicants who would normally have difficulty in doing so without assistance.

Applicants shall also be given information to enable them to assess how long it is likely to be before accommodation appropriate to their needs may become available for allocation. The details shall be published on the HomeOption website and provided to applicants in an alternative accessible format on request at no charge.

A list of general information and advice that shall be available and how to access it is listed at Appendix F

3.1 Alternative housing options

As there are likely to be many more applicants for social housing than properties available, the Council shall also provide information about other options, including but not limited to advice on:

- (a) aids and adaptations
- (b) security measures
- (c) renting in the private rented sector
- (d) available low-cost home ownership options
- (e) key worker housing schemes
- (f) mutual exchanges
- (g) floating support

3.2 Positive health and wellbeing

Often when people apply to the Council for help to find somewhere suitable and affordable to live they or other members of their household are experiencing a wide range of difficulties which may be having a serious effect on their health and wellbeing or that of their families.

We understand that for most applicants when they first register for housing their sole focus is to find out how the Council can help with their housing needs.

It is evident from the many applications that we receive each year that lots of households are struggling with social, emotional or health related issues such as loneliness, mental health difficulties, weight management, or beating an addiction.

Applicants are being encouraged to use the on-line housing registration process as an

opportunity to have a look (in their own time if and when they want to) at the many free activities that are available across the district specifically designed to help establish positive mental health, positive activities and positive community as part of our road map to social recovery following the pandemic.

Applicants can also ask housing, community and wellbeing staff for free confidential advice on what services are available and what may be suitable for them.

3.3 Choice based lettings

The Council has adopted HomeOption choice based letting scheme which advertises available Council and housing association properties on-line and gives applicants on the Register the opportunity to express an interest in suitable properties either on the website or by telephone. This is usually referred to as submitting a “bid” to be considered for the property.

In general terms, the property shall be offered to the applicant in the highest band, who bids for the property and has been in that band for the longest time.

Details on how the scheme operates shall be included in the letter that is sent out to applicants that are accepted onto the Register.

3.4 Assisted bidding

The Council can provide assisted bidding for applicants who need help and do not have the facilities or anyone else to support them. There are computer kiosks at all receptions and housing staff at the Civic offices are also available if required, depending on the type of assistance the applicant requires. With assisted bidding the applicant chooses which properties they would like to bid on and receive assistance to submit the bid.

3.5 Auto- bidding and direct offers

Although the majority of applicants shall be allocated a property that they have self-selected via choice-based lettings the Council may from time to time arrange auto-bidding or make a direct offer of accommodation.

Auto-bidding can be set up to automatically generate bids for suitable properties based on the applicants assessed need. The applicant does not make the selection.

The Council may also directly offer a property to an applicant rather than selecting an applicant from bids or auto-bidding for advertised properties.

Auto-bidding and direct offers will only usually be considered where the applicant has been unsuccessful in their bidding – or if the applicant has not been bidding, and then usually only after a period of at least 6 months for the following categories of applicants;

3.5.1 Band A – Emergency Housing Need:

- Households with an emergency need to move on medical, disability or welfare grounds as determined by the Council’s Medical Officer,
- Other emergency housing need situations where applicants are failing to bid on suitable properties, or it would be unreasonable to rely solely on waiting to secure something suitable via choice-based lettings.

3.5.2 Band B – Urgent Housing Need:

- Households who are in Temporary Accommodation and the Council has accepted a main duty to house them under Part 7 of the Housing Act 1996.

*Applicants who are or could be considered for auto-bidding or a direct offer are usually still expected to bid for suitable properties via HomeOption.

All auto-bidding arrangements and direct offers of accommodation shall be authorised by the designated manager.

If an applicant refuses an auto-bid or direct offer and exercises their right to request a statutory review as to the suitability of the offer then, if the review finds that the offer was unsuitable, the applicant shall be able to continue to bid until they are successful or have been made another direct offer of suitable accommodation.

3.6 **Eligibility to join the Housing Register**

In considering applications to join the Register the Council shall first ascertain: Whether an applicant is eligible for an allocation of accommodation; and If they qualify for an allocation of accommodation.

3.6.1 Persons from abroad

The Government sets the rules for which persons from abroad are eligible to join a Housing Register.

In general, persons from abroad who need leave to enter or remain in the UK will only be eligible under certain circumstances the current regulations are summarised at Appendix B

The regulations are quite complex and subject to change by “statutory instruments” and subject to amendment during the lifetime of the scheme.

The Council shall not allocate housing to an ineligible person by granting them a joint tenancy with another, eligible person.

The rules do not apply to an applicant who is already a secure or introductory tenant or an assured tenant of accommodation in which case the applicant can apply for a transfer regardless of their immigration status.

Any part of a household who is not a qualifying person shall be disregarded when assessing the need and size of accommodation.

The Council has also set some local criteria to determine who does and does not qualify to join the Housing Register.

3.7 **Qualifying to join the Housing Register**

Applicants must qualify under each of the local eligibility criteria and not be disqualified under any of the grounds listed at paragraph 3.10

An applicant’s eligibility or qualification to join the Register shall be kept under review during the application process. Applicants who cease to be eligible and/or qualifying may be removed from the Register at any time.

3.8 Local eligibility criteria

3.8.1 Age

The Register shall be open to applicants of 18 years and over.

3.8.2 Residency criteria

To meet the residency criteria applicants are required to have lived in the District for seven continuous years or more immediately prior to the date of their application.

Any resident who moved out of the District for less than two years, but has lived within the District for at least seven continuous years immediately prior to moving out of the District, will be treated as an applicant who has lived in the District for more than seven continuous years prior to application.

3.9 Exceptions to the residency criteria

The following exceptions to the seven-year residency criteria shall apply:

3.9.1 Armed Forces

Through the Military Covenant, the Government has made clear its responsibility to support the British Armed Forces in return for the important contribution they make to the country. Therefore, in accordance with the Allocation of Housing (Qualification Criteria for Armed Forces) (England) Regulations 2012, the Residency Criteria shall not apply to the following applicants;

Applicants who:

- (a) are serving in the regular forces and are suffering from a serious injury, illness or disability which is attributable (wholly or partly) to the person's service;
- (b) formerly served in the regular forces where the application is made within 5 years of discharge;
- (c) are divorced or separated spouses or civil partners of service personnel who live in accommodation provided by the Ministry of Defence;
- (d) have recently ceased, or will cease to be entitled, to reside in accommodation provided by the Ministry of Defence following the death of that person's spouse or civil partner who has served in the regular forces and whose death was attributable (wholly or partly) to that service; or
- (e) are serving or have served in the reserve forces and is suffering from a serious injury, illness or disability which is attributable (wholly or partly) to the person's service where the application is made within 5 years of discharge.

The "regular forces" and the "reserve forces" have the meanings given by section 374 of the Armed Forces Act 2006.

3.9.2 Households who are homeless or at risk of homelessness

Households who are owed a homelessness duty by the Council under Part 7 S193 of the Housing Act 1996 as amended:

who have already met the residency provisions in accordance with this legislation;

where there is a requirement to afford reasonable preference on the ground of homelessness, and the Council does not owe a full homelessness duty.

3.9.3 Move-on from supported housing

Applicants who are leaving supported housing schemes where a lesser residency criterion of 2 years shall apply as set out at appendix x of this Scheme.

3.9.4 Victims of domestic abuse

Applicants who are living in a refuge or other form of safe temporary accommodation in the district having escaped domestic abuse from within the district or from another local authority area.

3.9.5 Social housing tenants with specific employment needs

Applicants who are existing local authority or housing association tenants with a good tenancy record who are seeking to transfer from another local housing authority area in England.

They must provide appropriate evidence that they are in long-term work in the District, or have a genuine intention of taking up an offer of work in the District (work does not including short-term, occasional, ancillary, voluntary, marginal or economically insignificant employment), comprising a minimum of 16 hours each week or an apprenticeship.

They must also demonstrate that they are experiencing hardship as a result of the above due to one or more of the following factors:

- (a) they live in excess of 50 miles from their current or intended place of work
- (b) they have a return journey time on public transport which is generally in excess of 3 hours based upon Internet Journey Planners
- (c) the availability of transport is restrictive causing similar difficulties set out in (a) and (b) above
- (d) transport is unaffordable when taking into account earnings
- (e) there are medical and child-care factors which would be affected if the tenant could not move
- (f) the failure to move would result in the loss of an opportunity to improve an applicant's job prospects or in the opinion of the designated manager some other hardship factor not covered by this Scheme

3.9.6 Looked after children

Where an applicant has been placed outside of the District by Essex County Council's Children Services Department, but Epping Forest District is the location they would normally live in, then they will be considered to fulfil the Residency criteria.

3.9.7 Leaving secure accommodation

Where an applicant has been moved to secure accommodation outside of the District for example due to detention in prison or in hospital under the Mental Health Act, then the applicant shall retain the local eligibility afforded immediately before their detention.

Other exceptional circumstances

Applicants who in the opinion of the designated manager are entitled to a reasonable preference under Part 6 of the Housing Act 1996 as amended and can demonstrate an exceptional need to either leave their current local authority's area or move to the Epping Forest District to escape violence or harm.

3.10 Non- Qualifying Applicants

Every application shall be assessed on its own merits. Any applicant rejected as ineligible or non-qualifying shall be provided with a written explanation by the designated officer giving clear grounds for the decision, based on the relevant facts. The applicant shall have the right to request a review of the decision.

The following grounds shall disqualify an applicant from joining the Housing Register:

3.10.1 Housing need

Any applicant who does not have an assessed housing need, as listed within at least one of the priority Bands criteria detailed at Section 7 of the Scheme shall not qualify.

3.10.2 Financial resources

Any applicants who, in the opinion of the Council, have sufficient funds either individually or collectively to enable them to meet their housing costs shall not qualify. At present the total upper threshold is set at £76,000.

Total income and assets shall be determined by calculating the total combined annual gross taxable income added to any residential property equity, savings, shares or any other assets. All applicants shall be required to provide evidence of income and capital.

Where the designated manager is satisfied with the evidence that applicants have disposed of assets by means of wilful deprivation within the six years directly prior to making the application the applicant shall be disqualified.

Any lump sums received, as compensation for an injury or disability sustained on active service by either, members of the Armed Forces, former Service personnel, bereaved spouses and civil partners of members of the Regular Forces, or serving or former members of the Reserve Forces, shall be disregarded from the calculation.

3.10.3 Deliberately worsening housing circumstances

Any applicant who in the view of the designated manager is found to have deliberately worsened their circumstances in order to qualify to join the Housing Register shall be disqualified. Examples include but are not limited to:

- (a) selling a property that is affordable and suitable for the applicant's needs;
- (b) moving from a secure tenancy or settled accommodation to insecure or less settled or overcrowded accommodation;
- (c) requesting or colluding with a landlord or family member to issue them with a Notice to Quit; or
- (d) deliberately overcrowding a property by moving in friends and/or other family members who have never lived together with the applicant previously, and who then request rehousing to larger accommodation.

3.10.4 Serious unacceptable behaviour

The Council may decide that an applicant is ineligible for social housing if it is satisfied that:

they, or a member of their household, has been found to be responsible for unacceptable behaviour (such as non-payment of rent, causing a nuisance or annoyance, or domestic violence/ abuse, harassment, threats of harassment, or violence) serious enough to make them unsuitable to be a tenant of the Council; and

at the time their application is considered, they are unsuitable to be a tenant of the Council by reason of that behaviour.

Acts of violence and aggression to employees will not be tolerated by the Council and any applicant who threatens or uses violence towards any Council employee or contractor will be removed from the Register immediately.

3.10.5 Rent arrears

Applicants with rent arrears shall be disqualified from joining the Register if they wilfully and persistently fail to pay their rent and show disregard for advice and assistance to address the arrears where it would be reasonable to expect them to do so (e.g. the behaviour is not attributable to an underlying vulnerability). The individual circumstances shall be considered every case and a proportionate risk-based assessment shall be taken to whether the applicant should be disqualified from:

- (a) Joining the Register; or
- (b) Being considered for a property if they are already on the Register

Generally, applicants are unlikely to be disqualified if they can evidence that:

- (a) They have made an arrangement with the landlord for paying arrears, kept to the arrangement for at least three months are continuing to make the payments and give an undertaking to continue to pay the debt if they are rehoused.
- (b) The arrears accrued due to an unavoidable life event for example health reasons, a period of unemployment, furlough, caring responsibilities or other crisis, and reasonable measures have been and/or are being taken to address the debt and the underlying cause where possible for example debt counselling.
- (c) The arrears accrued as a result of third-party financial abuse or deception.
- (d) The applicant has been granted a Mental Health Breathing Space or Standard Breathing Space and the appropriate support plans are in place or being pursued to ensure a longer terms solution.
- (e) The arrears amount to less than 1/12 of the annual rental charge.

Where appropriate applicants shall be invited to consider pursuing free local support (otherwise known as social prescribing) as part of the social recovery programme for the District.

3.11 **Future applications**

If a non-qualifying applicant considers that he/she should be treated as a qualifying person in the future, they may make a fresh application at that time.

3.12 **Reasonable preference**

The Council shall give reasonable preference to specific categories of people when prioritising applicants on the Register in accordance with Part 6 of the Housing Act 1996 as amended.

3.12.1 Reasonable preference shall be given to applicants:

- (i) who are homeless within the meaning of Part 7 of the Housing Act (including those who

are intentionally homeless and those not in priority need)

- (ii) who are owed a particular statutory duty by any local housing authority under section 190(2), 193(2) or s195(2) of the 1996 Act or under section 65(2) or 68(2) of the Housing Act 1985) or who are occupying accommodation secured by any housing authority under section 192(3)
- (iii) occupying unsanitary, overcrowded or otherwise living in unsatisfactory housing
- (iv) who need to move on medical or welfare grounds (including grounds relating to a disability); and
- (v) who need to move to a particular locality within the district; where failure to meet that need would cause hardship (to themselves or others)

3.13 Determining priority

The Council shall determine priority between applicants with reasonable preference by:

- (a) assessing the level of housing need and categorising it as either Emergency, Urgent or Moderate; and
- (b) prioritising bids from or making direct offers to applicants who have been in the highest band for the longest time

3.14 Under-occupation and downsizing

The Council shall run targeted incentive schemes (which may from time to time include published financial incentives subject to resources being available) to encourage and support tenants with spare bedrooms to transfer or mutually exchange into smaller properties, in accordance with the Property Size and Type criteria (Appendix A).

3.15 Incentives and support for downsizing

Financial incentives

Where a lifetime tenant of the Council is under-occupying accommodation and

- (a) is downsizing accommodation and moves or
- (b) enters into a mutual exchange to any property with fewer bedrooms than their current property and
- (c) both properties are owned by the Council,

they shall be offered £500 to cover removal costs a payment of £500 to meet decoration costs (in addition to the amount paid under the Council's decorations allowance scheme) and £1,000 for each bedroom "released", subject to the tenant having a housing need for the downsized property, and a maximum payment of £4,000 being made.

If a Secure (fixed-term) Tenant wishes to transfer (or mutual exchange) to smaller accommodation, the financial incentives to downsize set out under this section of the Scheme shall apply, but only if they have more than 5 years remaining on their fixed-term tenancy.

The Council's incentive payments made to existing tenants who downsize accommodation

shall be made (subject to paragraph 3.14 above) to any of the Council's tenants who downsize accommodation by way of mutual exchange, providing all parties to the mutual exchange are tenants of the Council and are adequately housed as a result, in accordance with the Scheme.

Any tenant wishing to enter into this arrangement whose rent account is in arrears, must be prepared to accept that the arrears shall be deducted from the amount paid.

3.15.1 Size and type of offer

A lifetime tenant of the Council wishing to downsize from a house to a flat where they are giving up one or more bedrooms can be considered for a flat with a spare bedroom (e.g. a couple or single person can move from a 3-bedroom house to a or a 2-bedroom flat or a 1-bedroom flat) either with or without a garden.

A lifetime tenant of the Council or a fixed term tenant of the Council with more than x years remaining on their fixed term tenancy wishing to downsize from a 4-bedroom house or larger where they are giving up 2 or more bedrooms can be considered for a flat or a house with a spare bedroom (e.g. a couple or single person can move from a 4-bedroom house to a 2-bedroom house or flat or a 1 bedroom house or flat) either with or without a garden.

3.15.2 Exceptions to incentives

Where an under-occupier opts to downsize to a property with a spare bedroom, they shall not be eligible for the £1,000 incentive for any of the rooms they release.

Where a tenant of the Council is downsizing accommodation, they shall be considered for a bungalow if they wish provided, they are over 60 years of age.

The financial criteria shall be disregarded where a tenant of the Council is under-occupying accommodation and is downsizing accommodation and moves or enters into a mutual exchange to any property with less bedrooms than their current property and both properties are owned by the Council.

The Council's incentive payments shall not apply to all those downsizing in accordance with this paragraph where the financial criteria has been disregarded for this reason.

3.16 **Insanitary, overcrowded housing or unsatisfactory conditions**

The definition of insanitary, overcrowded or unsatisfactory conditions for the purpose of the Scheme is:

Where the Permitted Number, in accordance with the provisions of S. 326 of the Housing Act 1985 is exceeded, or in accordance with the legislation, the property is in a serious state of disrepair, of poor internal or external arrangement, or is lacking one or more of the following; kitchen facilities, inside W.C. or utility supplies.

3.17 **Medical and welfare needs**

The Housing Act 1996 states that reasonable preference on the Housing Register should be given to applicants who have a need to move on medical or welfare grounds (including grounds relating to a disability and access needs and/or learning disability)

The medical and welfare category includes applicants, or members of the applicant's household, whose health is being affected by their current property, and where a move to another more suitable property would alleviate their condition or make it easier to manage.

3.18 Medical grounds (including disability)

Where it appears that there is a need to make enquiries into an applicant's medical condition, the designated officer shall refer the case to the Council's medical advisor or a company commissioned by the Council to provide medical advice on written evidence and taking into account all known facts relating to the application.

It is important to note that reasonable preference shall not be awarded based upon the medical condition itself, rather upon the impact the condition has upon the applicant's housing requirements and whether the applicant's current accommodation is directly contributing to the deterioration of the applicant's health.

Both reasonable preference and the associated priority awarded shall be determined by the extent to which the medical advisor considers alternative accommodation will assist with stabilising or improving the condition and the urgency with which alternative accommodation is required. The applicant can provide their own medical evidence if appropriate along with a medical/welfare assessment form, which will be sent to the Council's medical advisor.

If in the opinion of the medical adviser reasonable preference should be granted, then they shall recommend that the application is awarded the following priority:

- 3.18.1 Emergency medical need where it can be demonstrated that, due to an illness or disability, it would be unacceptable for the applicant to remain in their current dwelling;
- 3.18.2 Urgent medical need where it can be demonstrated that - due to a serious or chronic illness or disability - the health of and therefore quality of life of an applicant (or member of their household) is; significantly affected by their current dwelling; and, is likely to significantly improve (or any deterioration is likely to stabilise or slow down significantly) if they move.
- 3.18.3 Moderate medical need when it can be demonstrated that due to an illness or disability the applicant finds living in their current dwelling difficult and it is clear that remaining in that dwelling would contribute to deterioration in their health; or it would be beneficial for the applicant to move to alternative accommodation but, at present, the applicant can manage in their present dwelling.

The medical adviser shall also recommend the type of property most appropriate to the household's medical needs.

The medical award will determine the Band the applicant is placed in. Where two or more members of a household would qualify for medical priority, only the highest priority will be awarded.

3.19 Reassessment of medical priority

Any applicant who is awarded Band A or Band B on medical grounds shall have their medical position re-assessed if they refuse a suitable offer of a property that they have expressed an interest in, or have been selected for via auto-bidding or of a direct offer.

A re-assessment shall also be required if an applicant in Band A or B fails to fully participate in the Choice Based Lettings Scheme for more than 12 months.

If an applicant with reasonable preference on medical grounds moves from their existing accommodation but remains on the Register, then they shall require a new medical assessment.

3.20 Welfare grounds

Welfare grounds shall be assessed on written evidence by the designated manager in consultation with the Council's medical adviser.

Welfare issues shall encompass:

- (a) providing or receiving ongoing care and care and support needs for those who could not be expected to find their own accommodation such as young adults with a learning disability who wish to live independently in the community; and
- (b) social needs, for instance, where a secure base is required for a care-leaver or any other vulnerable person to build a stable life.

Those who are active foster carers or those who are adopting who need to secure larger accommodation in order to look after a child who was previously looked after by local authority will be considered for a Flexible (fixed-term) Tenancy (in accordance with the Council's Tenancy Policy) where additional priority is justified.

3.21 Hardship grounds

Hardship grounds shall be assessed on written evidence by the designated manager in consultation with the Council's Medical Adviser.

Hardship may include a need to move to give or receive care that is substantial or ongoing as well as for access to specialist medical treatment where there are severe mental health, medical or welfare issues and there are exceptional reasons why this support cannot be made available through a reliance on public transport or on the applicants own transport.

If the medical and welfare priority assessment was completed more than 12 months prior to the point of offer, then the designated officer shall arrange for it to be reviewed before the offer is made to ensure that the recommendations still apply.

3.22 Sheltered housing supplementary waiting list

The Council operates a separate Supplementary Waiting List for non-qualifying applicants over 60 years of age who do not meet certain aspects of the Local Eligibility Criteria.

Applicants shall generally only be able to bid on one-bedroom Council or Housing Association properties in sheltered accommodation or grouped dwelling schemes (not bungalows) for older people under the HomeOption Scheme. However, qualifying persons on the Council's Register who have submitted bids shall be given priority.

Any offers of tenancies made to applicants on the Supplementary Waiting List shall be prioritised in registration date order.

Prior to any offer, the Council shall undertake an in- depth assessment of the applicant to determine if the accommodation is suitable for the applicant. The following aspects of both the Local Eligibility Criteria set out within section xxx above and the provisions under Section xxx of the Scheme shall still apply when determining if the applicant is eligible for inclusion on the Supplementary Waiting List:

- (a) False statements or withholding information
- (b) A financial assessment
- (c) Serious unacceptable behaviour

SECTION FOUR: LOCAL LETTINGS PLANS

4. Local lettings plans

Occasionally the Council may propose a local lettings plan to allocate particular accommodation to applicants of a particular description (whether or not they fall within the reasonable preference categories listed under paragraph xx of the scheme) in an area that has specific issues, in order to promote stable, settled, safe communities.

The need for the plan shall be clearly defined in relation to the area, the type of property and affected applicants or potential applicants.

An Equalities Impact Assessment shall be carried out and explicit reference shall be made to how the community will benefit from the proposal. The decision whether to introduce a local lettings plan shall be subject to Cabinet approval and shall not affect overall compliance with the requirements of the Scheme.

Examples may include but are not limited to:

Lettings on a specific development to key workers where a shortage of other available affordable housing in the locality is having a serious impact on the ability of a particular statutory service to recruit and retain essential staff.

Temporarily halting allocations to vulnerable applicants in specific localities with social issues that are likely to leave them open to exploitation , whilst the Community Safety Partnership tackles the issues.

Restricting the allocation of high-density housing developments with minimal green space (such as commercial premises with permitted development rights) to households without young children.

Local Lettings Plans shall be kept under periodic review to determine whether they are fulfilling the need for which they were originally intended and are still required.

SECTION FIVE: JOINING THE HOUSING REGISTER

5. How to apply to join the Housing Register

Applicants are required to complete the on-line application form at [Home Option](#) and submit the relevant supporting documents by the means specified on the application form.

Applicants who require advice or assistance can

Email rehousing@eppingforestdc.gov.uk
Telephone 01992 564716
Visit The Community Hub
Civic Offices
323 High Street
Epping
CM16 4BZ

5.1 Applications from Members of the Council, staff, or their relatives.

Any housing applicant (including existing council tenants) must tell the Council when they apply to the Register if they are:

- (a) An elected member of the Council: or
- (b) A council employee: or
- (c) Related to any of the above
- (d) Partner of any of the above
- (e) Living with any of the above

The application from any of the above shall be flagged on the Council's computer system to show their status.

Where an applicant fails to disclose the above information and this subsequently comes to the Council's attention, the housing application may be suspended or cancelled, as determined by the designated manager.

5.2 Application forms

Application forms shall only be accepted by the Council as complete once all correct and relevant information and supporting documents have been received and verified.

5.3 Supporting information

An application shall not be progressed until applicants provide the necessary information. If the information is not supplied within the specified timescales (typically 14 days) then the application will usually be cancelled, and the applicants advised to reapply at a later stage when they are able to provide the necessary details in the required format.

However, if the applicants have made a homelessness application to the Council under Part 7 of the Housing Act 1996, then their application to join the Register shall still be processed. It will only be cancelled if the Council subsequently decides that no duty is owed to the applicants under the homelessness legislation, and the applicants fail to provide all of the relevant supporting documentation.

5.4 Proof of identity

Applicants and other members of the household shall, at the point of application, be required to provide documentary proof from two official sources of;

- (a) their identity; and
- (b) their residency.

Applicants shall be required to provide an original full birth certificate, a current passport and any other appropriate documents as determined by the designated manager.

If there is a valid reason why the required documents cannot be provided, then the designated manager may agree to accept alternative forms of evidence.

5.5 Proof of residency

Applicants shall be required to provide satisfactory evidence of residency. The Council reserves the right to validate the residency of the applicants and other members of the household by seeking information from other Council services and relevant statutory bodies as appropriate.

Eligibility may be reviewed before or when an applicant is considered for an offer of a particular property and the evidence required may be more extensive than was requested at the point of being accepted onto the Register.

Usually, if an applicant fails to provide the required evidence then they will not be offered the property.

5.6 Registration date

The registration date shall be the date that a fully completed application is received by the Council.

5.7 Household

A household is either one person or two persons or more who are intending to live together at the same property offered. Applicants should only include dependants as part of their household or persons who have been part of their household for at least a two-year period and shall occupy the accommodation offered as their only or principal home.

5.8 Residence and contact with children

Where applicants have children subject to residence and contact issues, the Council shall usually consider the children as permanent household members of the partner with the primary residence and control of the child/children. Where the other partner applies to join the Housing Register, it will not always be possible to consider the child/children as part of their household.

Documentary evidence detailing residence and contact arrangements such as a court order or solicitor's letter, and who receives the Child Benefit will be required to determine the property size that applicants will be considered for.

5.9 Change of circumstances

Applicants shall be required to report any change in circumstances that may affect their application by emailing the details to rehousing@eppingforestdc.gov.uk and providing the necessary supporting documents.

The onus shall be on the applicant to inform the Council when there is a change in their circumstances that may affect their application.

The designated officer shall inform the applicant in writing whether the change in circumstances affects the status of their application or priority status within 10 working days of receiving the details of the change in circumstances.

Where an applicant's change in circumstances results in a higher priority Band being awarded to their application then the date of moving to the higher Band shall become the priority order date for consideration within that Band.

5.10 Offers and refusals

5.10.1 Band A Emergency need

With the exception of downsizers, applicants in Band A who refuse one ~~two~~ offers of suitable accommodation for which they have expressed an interest (and/or received a direct offer if appropriate) shall have their application cancelled. Disqualified applicants will be able to re-apply and their application will be assessed on their current circumstances. If accepted they will receive a new registrations date and may be awarded a different priority.

5.10.2 Downsizers

The Council is keen to encourage downsizing, however administering refusals of suitable offers causes delays for other applicants waiting to move. If it becomes apparent that an applicant continually places bids and then refuses suitable offers and in the opinion of the designated manager this is placing a disproportionate burden on the service, then the downsizer may be suspended from bidding for six months.

5.10.3 Band B Urgent need

Any applicant in Band B who is owed a main housing duty under part 7 of the Housing Act and refuses one offer of suitable accommodation for which they have submitted a bid or been offered as a result of auto-bidding or received a direct offer in discharge of the duty shall have their application cancelled or reassessed if the applicant wants the change of circumstances to be reconsidered.

SECTION SIX : DECISIONS AND REVIEWS

6. Decisions

Applicants shall be notified of all decisions in writing and other formats on request. All correspondence notifying applicants of ineligibility or non-qualification for joining the Register, or about the Band that they have been awarded, or about any other decision concerning the facts of their case, shall state that the applicants have a right to request a review of the decision including how to request a review and given the opportunity for the information to be explained to them verbally.

6.1 Right of review

If an applicant considers they have been unfairly or unreasonably treated having regard to the provisions of the Scheme, they shall have 21 days of the date of the original decision letter within which to exercise their right to request a review.

In the first instance, applicants shall be required to seek a review by either writing to the designated manager, or by notifying the designated team by any convenient method and shall receive a written response within 8 weeks of the date the request is received. Upon request, the decision letter may be collected by the applicant within a reasonable period. If it is necessary to extend the deadline then the applicant shall be notified of the extension and the reasons for doing so.

The review shall be undertaken by the designated officer or manager who shall inform the applicant of any further rights of appeal as appropriate.

The review shall be undertaken by a person senior to the person making the original decision and who has had no significant involvement in the original decision.

In cases where the Council considers that an applicant may have difficulty in understanding the implications of a decision on ineligibility or disqualification, then the designated officer shall make arrangements for the information to be explained to the applicant verbally.

6.2 Periodic review of the Housing Register

Applicants shall not be required to annually re-register after first applying to join the Register, although they will be required to inform the Council of any changes in their circumstances, which may affect their housing application.

The Council may monitor the bidding patterns of applicants. In addition to the clauses at paragraph xxx if an applicant in any Band fails to submit a bid for 12 months or longer then the Council may cancel their application.

The Council shall inform the applicant of this decision in writing. The letter shall also advise the applicant that they can request a statutory review of the decision.

All applicants will have already been informed of this condition in the confirmation letter that they received when their application was originally accepted.

SECTION SEVEN: PRIORITY BANDS

Priority Bands shall be based on the following assessed needs

BAND A

	Band A – Emergency Need	Proposal
i	Any member of the Armed Forces, or former Service personnel, or serving or former members of the Reserve Forces who joins the Council's housing register, where they are assessed by the Council's Medical Advisor as suffering from a serious injury, illness or disability which is wholly or partly attributable to their service, where the application is made within 5 years of discharge are given priority above all other applicants within Band A.	No change
ii	Bereaved spouses or civil partners of those serving in the Regular Forces where the bereaved spouse or civil partner has recently ceased, or will cease to be entitled, to reside in Ministry of Defence accommodation following the death of their spouse or civil partner and the death was wholly or partly attributable to their service.	No change
iii	Applicants with an assessed need to move on emergency medical grounds or emergency grounds relating to disability.	Change "urgent"
iv	Applicants with an assessed need to move on emergency welfare grounds.	Change "urgent"
v	On the recommendation of the Council's Medical Advisor applicants with specific accommodation requirements will be given priority for suitable properties as they become available above other applicants in the Band (e.g. adapted or ground floor properties etc) regardless of the date they joined the Band. Home seekers with mobility problems will be given priority for ground floor flats and bungalows above other home seekers in this Band [with the exception of Band A (i)], regardless of their waiting time, on recommendation of the Council's Medical Advisor.	Replace
vi	Applicants with a Council or housing association tenancy in the District wanting to move to accommodation with fewer bedrooms than the property they currently occupy.	No change

BAND B

	Band B – Urgent Need	Proposal
i	Applicants occupying insanitary or overcrowded housing which poses a serious health hazard, or otherwise living in unsatisfactory conditions (in accordance with housing legislation)* but not as a result of the introduction of a further household.	Change of Band from Band A
ii	Applicants with an assessed need to move on urgent medical grounds or urgent grounds relating to disability including learning disabilities	New
iii	Applicants with an assessed need to move on urgent welfare grounds.	New
iv	Applicants needing two or more additional bedrooms compared to their current accommodation.	Change of Band from Band A
v	Applicants who can demonstrate they would otherwise be one household, but are having to live apart from other members of their household because of a lack of accommodation, which would lead to statutory overcrowding if they occupied accommodation available to	No change

	Band B – Urgent Need	Proposal
	them individually but not for other personal reasons (i.e. family disputes).	
vi	Applicants with an assessed need to move to a particular locality within the District where failure to meet that need would cause hardship to themselves or to others.	No change
vii	Applicants who have an agreed fostering or adoption agreement in place with Essex County Council, who need to move to a larger home in order to accommodate a looked after child. Special guardians, holders of a residence order, and family and friend carers who are not foster carers but who have taken on the care of a child because the parents are unable to provide care shall also be included in this category.	New
viii	Applicants accepted by the Council as being statutorily homeless and owed the main housing duty under section 193 of the Housing Act 1996 (as amended).	New
ix	Existing tenants living in sheltered accommodation, who are wishing to move to alternative sheltered accommodation within their own scheme or to another sheltered scheme within the District (including sheltered bungalows).	Change: include “bungalows”
x	Existing tenants of the Council aged over 60 years, living in 1-bedroom Council accommodation wishing to move to sheltered accommodation regardless of their need (including sheltered bungalows).	Change include “bungalows”
xi	living in 2 or 3 bedroom flatted accommodation (including maisonettes) who meet the Local Eligibility Criteria under Paragraph 14 of the Scheme (apart from the Housing Need element), making expressions of interest for houses that meet with their housing need, with their registration date being the tenancy commencement date of their current property.	Delete

BAND C

	Band C – Moderate Need	Proposal
i	Any member of the Armed Forces or former Service personnel or serving or former members of the Reserve Forces who have no housing need, and the application is made within 5 years of discharge.	No change
ii	Spouses and children (including step-children) of existing and former Armed Forces personnel (where the application is made within 5 years of discharge) seeking accommodation in their own right, provided that one of their family members (as defined by Section 113 of the Housing Act 1985) has lived within the District for at least 3 years immediately prior to the date of application.	No change
iii	Applicants with an assessed need to move on moderate medical grounds or moderate grounds relating to disability.	No change
iv	Applicants with an assessed need to move on moderate welfare grounds.	No change
v	Applicants needing one additional bedroom compared to their current accommodation.	Change from Band B
vi	Applicants defined as a household, who are sharing accommodation with another household for a minimum of 2 years, which is resulting in a lack of at least one bedroom.	Change of Band from Band B

	Band C – Moderate Need	Proposal
vii	Applicants with an assessed need to move to be nearer to their place of work or to take up an offer of permanent employment or an apprenticeship (in accordance with Paragraph 14.3 (f) of this Housing Allocations Scheme).	No change
viii	Applicants placed in interim accommodation by the Council awaiting their homelessness decision under S.184 of the Housing Act 1996 as amended.	No change
ix	Applicants to whom the Council does not owe a full homelessness duty, where there is a requirement under Part 7 of the Housing Act 1996 as amended to afford reasonable preference on the ground of homelessness.	No change
x	Applicants who are entitled to a reasonable preference under Part 6 of the Housing Act 1996 as amended and can demonstrate an exceptional need to either leave their current local authority's area or move to the Epping Forest District.	No change

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SECTION EIGHT: ALLOCATIONS & NOMINATIONS

8. Social housing providers

The statutory register of social housing providers includes local authority providers and private non-profit and profit-making registered providers. Most private non-profit providers are also known as housing associations.

The Scheme operates in accordance with section 170 of the Housing Act 1996. At the Council's request, private registered providers with social rented housing stock in the District have a duty to co-operate to such extent as is reasonable in the circumstances in offering accommodation to people with priority under the Scheme.

8.1 Nominations agreements

The Council and those private registered providers with stock in the District shall have formal agreements in place to ensure that a negotiated percentage of lettings shall go to applicants on the Housing Register.

The District's private registered provider partners shall participate in the Council's common Housing Register and advertise their properties through HomeOption.

All nominations to private registered providers shall be prioritised in accordance with the Scheme.

The Government is proposing to introduce a new Duty to Collaborate to the Homelessness Reduction Act and any requirement shall be incorporated into the Scheme as it applies to Part 6 Allocations.

8.2 Available properties (voids or empty properties)

Void (empty) properties affect the Council in terms of a loss of rental income, the continuing provision of temporary accommodation for homeless families, the possible deterioration of the property, increased risks of squatting and vandalism, and a poor public image. It is therefore essential that void properties are let quickly and without unnecessary delay.

8.3 Advertising available properties

The type of properties that are advertised are likely to vary (sometimes considerably) from week to week, depending on what becomes available.

Adverts may include Council and private registered landlord properties for social rent or affordable rent.

8.4 Links to other available affordable housing

The Council may also provide links to schemes advertising other types of affordable housing in the locality that applicants may wish to consider including; key worker schemes, help to buy, mutual exchange and private rented accommodation.

8.5 The bidding and nominations process

Eligible applicants can make bids for properties up until the advertised deadline for that bidding round. Bids can be made by telephone online via the website, or at the Community Hub at the Civic offices

Full details of the bidding process are available on the HomeOption website.

Bids that are received after the advertised deadline, shall not usually be considered other than at the discretion of a designated officer or manager.

Applicants can bid for up to 3 affordable properties each bidding cycle. Bids can be cancelled and reassigned to other properties if desired.

All bids shall be checked by the Rehousing Team against the eligibility criteria. Ineligible bids shall be excluded from consideration by the designated manager. So far as is possible the Council shall use the Banding system and waiting time within the Band to allocate accommodation in accordance with paragraph xxx

8.6 Restrictive labelling

Restrictive labelling of properties through HomeOption may be applied to ensure that the Council meets its statutory obligations and to help achieve the intended outcomes of the Scheme, the District's Housing Strategy, Homelessness and Rough Sleeping Strategy and Tenancy Strategy.

Restrictive labelling may also be applied to the allocation of sheltered housing or to properties that have adaptations to meet the needs of elderly, or vulnerable or disabled applicants.

On occasion, the Council may choose not to advertise a property through the Choice Based Lettings Scheme and offer the property as a direct offer. This may be due to the serious nature and needs of an applicant, or as part of the Council's effort to reduce the amount of time that homeless households spend in temporary accommodation. The details of individual direct offers shall remain confidential, in order to protect the applicant.

8.7 Viewings

The Council may arrange multiple viewings for some properties (i.e. inviting more than one applicant to view a property) and anticipates that all partner agencies shall follow a multiple viewing framework. All invited applicants shall be required to bring proof of their identity and original documentation for verification.

The applicants with the highest priority may be required to sign for the property immediately. At the point of sign-up, the successful applicant's photograph and National Insurance number shall be taken as further verification of their identity.

All applicants who have been allocated an Epping Forest District Council tenancy through HomeOption shall be encouraged to attend an appropriate tenancy and/or money advice workshop depending on the availability at the point of allocation.

All Council properties shall be let to the agreed lettable standard, and a copy of the standard shall be included with the offer letter.

8.8 Withdrawal of an offer

An offer may be withdrawn prior to the tenancy being signed, where:

- (a) the applicant has made a false declaration, or failed to provide up to date information which substantially altered their eligibility for the property offered;
- (b) the information available at the time of offer about the vacant property was incorrect, and it is subsequently discovered that the size and type is no longer suitable to the applicant's needs;
- (c) incorrect information on the applicant's computer records substantially alters the applicant's qualification to join the Register and/or their priority status.
- (d) the property was offered prior to being ready to let and there are significant delays to the date that the property is likely to be available for the applicant to move in to.

8.9 Feedback on let properties

All properties that have been let through HomeOption shall be listed in a future HomeOption newsletter showing the number of bidders for each property, and the profile of the successful bidder including their Band, and date of registration.

SECTION NINE: ALLOCATIONS OUTSIDE OF THE SCHEME

9. Allocations may be made outside of the Allocations Scheme in the following circumstances:

9.1 Management transfers

Where the Council arranges a landlord transfer for housing management purposes, this is known as a management transfer.

Although a Council tenant can request a management transfer, it falls outside the rules of Part 6 because it is treated as a transfer that is initiated by the landlord.

In practice a management transfer is rarely offered as it shall only be used where no other housing solution is possible.

The tenant shall usually receive a single like for like direct offer of the next suitable property that becomes available. (A separate offer policy applies for temporary and permanent decants due to major works or regeneration)

9.2 Grounds for a management transfer

The Council may offer a management transfer because they require the tenant to move, or the tenant needs to move urgently due to, for example:

- (a) domestic abuse
- (b) violence, harassment, intimidation, or threats of violence likely to be carried out
- (c) the need to protect witnesses who have agreed to go to court to give evidence on matters of anti-social behaviour
- (d) urgent social reasons
- (e) major works to the property needing to be carried out (see regeneration and decant offer policy)*

9.3 Assessment, priority and offer policy

Where the Council agrees that a tenant meets the management transfer criteria, the Council does not need to apply the reasonable preference criteria.

The tenant is not assessed in the usual way through the allocations scheme, and

The Council shall generally give top priority to tenants who need to move under a management transfer, reflecting the urgent nature of the need.

Management Transfers shall be agreed by the designated manager housing needs and the designated manager for HRA (see appendix x) based on supporting evidence.

If a management transfer is agreed:

- (a) The applicant shall be offered a suitable property which may be a Council or housing property as soon as possible.
- (b) The offer shall be on a like for like basis i.e. a property that has the same number of bedrooms as the tenant's current home unless they are in a property that is too big for

their needs, in which case they may be offered a smaller property. Tenants granted management transfers shall not qualify for any under- occupation incentive payment.

- (c) The tenant shall be offered housing in any area in the district that removes them from the situation of immediate risk.

9.4 Joint Tenancies

If the existing tenancy is held by joint tenants and the management transfer does not include all tenants, then the tenancy shall need to be resolved first. The designated officer shall advise the tenant(s) of the available options including seeking independent advice.

9.5 Transfers due to domestic abuse

From 1 November 2021 certain social housing tenants who are transferred to a new property because of [domestic abuse](#) are entitled to a lifetime secure tenancy, rather than a fixed-term flexible tenancy.

If the Council offers a tenancy to someone who is or was previously secure tenant or fully assured tenant of a social landlord, and the new tenancy is being granted for reasons connected with the domestic abuse towards that person or a member of their household, the Council shall offer a lifetime secure tenancy, not a flexible tenancy.

9.6 Mutual exchange

A secure tenant has the right to exchange their tenancy, by way of assignment, with another secure tenant or with a fully assured tenant of a private registered provider of social housing (PRPSH).

The following three types of tenancy exchange are normally allowable:

- (a) assured shorthold tenant with a secure tenant
- (b) assured tenant with flexible tenant
- (c) assured tenant with assured shorthold tenant

The mutual exchange of tenancies falls outside the statutory criteria governing the allocation of housing.

A mutual exchange may only take place with written consent from the landlord. Exchanges can take place between more than two tenants if each landlord consents.

The most popular way to find another tenant who may be interested in exchanging their home is to register on [HomeSwapper](#). Full details of the regulations governing mutual exchanges can be found on [Gov.uk – swapping a council or housing association home](#).

9.7 Major works - regeneration or demolition*

[Summary of \(Draft\) Regeneration and Major Works Decant Policy](#)

9.8 Decants

Tenants who are required to vacate their home due to a Compulsory Purchase Order or

Council tenants who have to move, because their home requires major works, regeneration or demolition are rehoused in accordance with the Council's decant procedure.

The rules vary depending on whether the tenants are required to move permanently to another home or temporarily until they are able to return to their existing home.

9.9 Permanent decants

Permanent decants are usually subject to a maximum of two offers of suitable accommodation. If the tenant does not accept the second offer, then the Council is likely to have to initiate possession proceedings via the County Court which if granted is usually conditional on the availability of a final offer of suitable accommodation at the point of obtaining full vacant possession.

9.9.1 Statutory compensation

Tenants who are required to move permanently are usually entitled to a statutory home loss payment and/or a statutory disturbance payment.

9.10 Temporary decants

Temporary decants are usually subject to one offer of suitable accommodation.

9.10.1 Discretionary disturbance payments

Tenants who are required to move temporarily may be entitled to a discretionary disturbance payment to meet the main costs associated with the temporary relocation.

9.11 Persons living in supported housing

Persons to whom the Council does not owe the full homelessness duty, who and have been placed by the Council under its nomination rights or with the support of the Homelessness Prevention Team for at least 9 months and are ready to move on.

In respect of ~~xxxx~~ lesser Residency Criteria of 2 years shall apply. Such persons shall be made one offer of suitable accommodation at the end of their stay in supported housing, ~~generally in flatted accommodation (including maisonettes)~~. The Council shall offer such persons a 10-year Secure (fixed term) Tenancy.

9.12 Other allocations outside of the Housing Allocations Scheme

- (a) where a tenant succeeds to a tenancy (or an Introductory Tenancy) upon the death of a tenant;
- (b) to accommodate a successor tenant who is under-occupying Council accommodation;
- (c) where a tenancy is assigned to a person who would qualify to succeed to the tenant if the tenant died immediately before the assignment;
- (d) where a tenancy is either granted in response to a transfer request under Section 158 of the Localism Act 2011 or any other tenant transfers;
- (e) where an introductory tenancy becomes a Secure lifetime or Secure (fixed term) Tenancy on ceasing to be an introductory tenancy;
- (f) where an introductory tenant undertakes a mutual exchange with a Secure lifetime or Secure (fixed term) Tenant. In these circumstances, each party shall surrender their

tenancies, and the Council shall grant each party a new tenancy which reflects their previous tenancy status. Any period the affected tenant spent as an introductory tenant in their previous property shall count towards the fulfilment of the 12-month “introductory period” in the new property. It should be noted that some social landlords do not allow introductory tenants to enter into a mutual exchange within any trial period;

- (g) where a tenancy is disposed through a Property Adjustment Order in accordance with relevant legislation;
- (h) where a property is offered to an applicant on the Witness Protection Mobility Scheme.

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SECTION TEN: OTHER HOUSING POLICIES AND STRATEGIES

Summaries to be inserted following outcome of Tenancy Policy Review and Homelessness and Rough Sleeping Review

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SECTION ELEVEN: APPENDICES**PROPERTY SIZE AND TYPE OFFERED****APPENDIX A**

The following criteria shall determine the size and type of properties that applicants are considered for:

Property Size	Household Composition
Studio flat	Single person
1-bedroom flat	Single person Couple (Inc. where one is pregnant)
1- bedroom bungalow	Single older person Older couple Applicant who requires ground floor accommodation
1-bedroom sheltered flat or bungalow	Single older person Older couple Applicant who requires sheltered ground floor accommodation
2-bedroom flat, maisonette or house	Single person or couple with: family member, or family members of the same sex, or 2 family members of opposite sex both under 10 years Single person or couple downsizing by 2 or more bedrooms
2-bedroom sheltered flat or bungalow	Single older person or older couple with an assessed need for an extra bedroom Single person or couple who requires sheltered ground floor accommodation with and extra bedroom Single older person or couple downsizing by 2 or more bedrooms
3- bedroom flat, maisonette or house	Single person or couple with 2 family members of opposite sex with one family member over the age of 10 years Single person or couple with 3 family members 2 of whom are of the same sex Single person or couple with 4 family members 2 each of the same sex
4- bedroom* flat maisonette or house	Single person or couple with 4 or more family members where two are of opposite sex and over the age of 10 years
5-bedroom* flat maisonette or house	Single person or couple with 5 or more family members where 2 family members are of opposite sex and one is over 10 years of age

Exceptions

*Larger family sized homes are in the shortest supply. Therefore, applicants with an assessed need for four or more bedrooms may be considered for properties with one bedroom fewer than their assessed need provided this falls within the permitted number of occupants allowed under the Housing Act 1985.

Under-occupiers wishing to downsize from a house or maisonette or flat with three bedrooms to a flat can be considered for flat with one bedroom more than their assessed need (i.e. a 2-bed flat or a 1-bed flat) with or without a garden.

Under-occupiers wishing to downsize from a house with four or more bedrooms where they are giving up two or more bedrooms may be considered for a house or a flat with one bedroom more than their assessed need with or without a garden.

Under- occupiers with minor rent arrears shall not be prohibited from transferring on the condition that they give an undertaking to maintain a reasonable repayment agreement until the debt is paid in full.

Existing social housing tenants

Existing social tenants applying to the housing authority for a transfer who are considered to have reasonable preference for an allocation shall be treated on the same basis as new applicants.

DRAFT

ELIGIBILITY PERSONS FROM ABROAD

APPENDIX B

As per latest published Govt regulations at point of publication - to be inserted

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GLOSSARY**APPENDIX C**

Term	Meaning
Allocation	
Applicant	
Assessed Need	
Assured Tenancy	
Assured Shorthold Tenancy	
Assisted bidding	
Auto-bidding	
Bidding	
Choice Based Letting Scheme	
The Council	
Direct Allocation	
Duty to Co-operate	
Exceptional Circumstances Report	
Hardship Grounds	
HomeOption	
Household	
Housing Association	
Housing Register	
Key Worker Housing	
Landlord Transfer	
Leave to Remain	
Local Lettings Plan	
Looked After Children's	
Leave to Remain	
Management Transfer	
Medical Grounds	
Medical Officer	
Nomination	
Older Person	
Permanent Decant	
Personal Housing Plan	
Person from Abroad	
Proposed Duty to Collaborate	
Registered Housing Provider	
Secure Accommodation	
Sheltered Bungalows	
Sheltered Housing	
Social Prescribing	
Statutory Instruments	
Registered Provider	
Reviewing Officer	
Temporary Decant	
Tenancy Policy	
Tenancy Strategy	
Tenant	
True Void	
Welfare Grounds	

SUPPORTING DOCUMENT CHECKLIST**APPENDIX D****Proof of identification and eligibility**

One of the following must be provided for each applicant:

- (a) birth certificate (a secondary form of photo identification shall be required if birth certificate is provided)
- (b) passport
- (c) EU identification card
- (d) National Insurance card
- (e) photograph of the applicant and all family members

Additional documents may also be required where an applicant (or in some circumstances a member of the applicant's household) is:

- (a) subject to immigration control;
- (b) a national of the European Economic Area (EEA); or
- (c) an Accession State National.

Where an applicant is accepted as a refugee or granted indefinite, exceptional, discretionary or limited leave to remain in the UK then the relevant Home Office documents shall also be required.

Nationals of the EEA shall be required to provide recent payslips as evidence of current employment (2 months or 6 weekly) to demonstrate eligibility.

Accession State Nationals shall be required to provide current registration documents and proof of current employment e.g. recent wage slips, contract details, self-employment reference number verification.

Proof of residence

Any two of the following recent documents must be provided for each applicant; documents that are more than 6 months old will not be accepted:

- (a) household bill
- (b) DWP Benefit document
- (c) current driving licence
- (d) bank, credit card or catalogue statement with current address
- (e) tenancy or licence agreement
- (f) rent book or letter from the current landlord
- (g) Section 21 or Section 8 notice from the current landlord
- (h) proof of marriage
- (i) proof of name change (if applying in a different name)

- (j) proof of pregnancy
- (k) Child Benefit award letter or a recent bank statement showing Child Benefit payments
- (l) custody or residency paperwork if access to children applicable
- (m) completion statement if an applicant has previously owned a property

The Council shall conduct credit reference checks to verify the information that the applicant has provided on their housing application in an attempt to reduce tenancy fraud. If false information has been provided at any stage then the offer of accommodation will be withdrawn, or the application will be removed from the Housing Register.

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MEDICAL AND WELFARE INDICATORS**APPENDIX E****Indicators of medical and welfare reasonable preference categories**

(Source Allocation of Accommodation: Guidance for Local Authorities 29 June 2012 updated 16 September 2021- for illustrative purposes)

Applicants given reasonable preference medical or welfare grounds shall be awarded either Band A, Band B or Band C based on their level of need

- (a) Emergency need
- (b) Urgent need
- (c) Moderate need

Insanitary, overcrowded and unsatisfactory housing conditions

- (a) lacking bathroom or kitchen
- (b) lacking inside WC
- (c) lacking cold or hot water supplies, electricity, gas, or adequate heating
- (d) sharing living room, kitchen, bathroom/WC
- (e) property in disrepair
- (f) poor internal or external arrangements

People who need to move on medical or welfare grounds (criteria may apply to any member of the household)

- (a) a mental illness or disorder
- (b) a physical or learning disability
- (c) chronic or progressive medical conditions (e.g. MS, HIV/AIDS)
- (d) infirmity due to old age
- (e) the need to give or receive care* including active foster carers or those who are adopting
- (f) the need to recover from the effects of violence or threats of violence, or physical, emotional or sexual abuse
- (g) having escaped domestic abuse and are being accommodated in a refuge or other temporary accommodation
- (h) ability to fend for self, restricted for other reasons
- (i) young people at risk
- (j) people with behavioural difficulties
- (k) need for adapted housing and/or extra facilities, bedroom or bathroom
- (l) need for improved heating (on medical grounds)
- (m) need for sheltered housing (on medical grounds)
- (n) need for ground floor accommodation (on medical grounds)
- (o) need to be near friends/relatives or medical facility on medical grounds
- (p) need to move following hospitalisation or long-term care

GENERAL INFORMATION AND ADVICE**APPENDIX F**

General information about the Scheme shall be made available as follows:

- (a) the procedures for applying to go onto the Register and for applying for advertised vacancies;
- (b) how applicants will be prioritised under the Scheme;
- (c) how successful applicants will be selected;
- (d) how properties will be advertised, including bidding cycles and restrictive labelling (for example, certain properties will only be allocated to applicants who meet the mobility requirements of the property);
- (e) how to request a review of the procedures; and
- (f) details of the private registered providers that advertise vacancies through HomeOption the Councils choice-based lettings website

Applicants shall be provided with information regarding their own application which shall include:

- (a) the Band they have been awarded under the Scheme
- (b) the type of properties they are entitled to bid for
- (c) their chances of bidding successfully on the property types and areas in which they are interested
- (d) how bidding, direct offers assisting bidding and auto-bidding applies to them
- (e) the documents they will need to supply in regard to verification and references, and when they will need to provide it
- (f) the average waiting time per property type for each priority housing needs group; and
- (g) whether their application has been rejected and the options that are available to them
- (h) Advertisements shall include as many of the following as possible:
 - (i) property location;
 - (j) property type, size and floor level;
 - (k) type of tenancy to be offered;
 - (l) amount of rent and other charges payable;
 - (m) the energy performance certificate rating;
 - (n) the type of heating;
 - (o) whether there is a heating charge payable that is not covered by housing benefit;
 - (p) any additional amenities such as a garden or parking with the property;
 - (q) photos of the scheme or the locality and links to guides about the local area; and
 - (r) adaptations to the property that may aid mobility within the home.

Applicants who require assistance to access the Scheme shall, upon request, be offered the following services:

- (a) an interpretation service if their first language is not English;

- (b) signing if speech or hearing is impaired;
- (c) provision of documents in large print or braille if they have a visual impairment; and/or
- (d) an interview to explain the Scheme and information about where independent advice can be obtained about the Scheme
- (e) An easy to read version of key documents

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REFERENCES**APPENDIX G**

To be inserted at point of publication

SECTION TWELVE: GOVERNANCE & VERSION CONTROL**12. Monitoring the Allocation Scheme**

Performance information on applications and allocations shall be reviewed annually to establish whether the aims and objectives of the Scheme are being achieved. The findings shall be published in an Annual Lettings Report and made available on the Councils website.

12.1 Review of the Allocations Scheme

The review of the current Scheme is due to conclude in Spring 2022 (subject to consultation and Cabinet approval) with the publication of the Allocations Scheme 2022 – 2027

12.2 Consultation on changes to the Allocations Scheme

Before adopting a new Housing Allocations Scheme or making an alteration reflecting a major change of policy in its existing Housing Allocations Scheme, the Council will send a copy of the draft scheme or any proposed major change to the Scheme to all of the following interested parties giving them a reasonable opportunity to comment:

- Every private Registered Provider of social housing with which it has nomination arrangements
- Town and Parish Councils
- The Tenants and Leaseholders Panel
- Partner agencies with an interest in the Scheme

Designated Managers

Last updated 12 November 2021

	Decision	Designated Manager	Based on information provided by
	Exceptional Circumstances	Director Community and Wellbeing	Relevant Team Manager
	Fraudulent application	Director Community and Wellbeing	Relevant Team Manager
	Management Transfer	Director Community and Wellbeing	Director of Housing Revenue Account
	Permanent Decant	Director of Housing Revenue Account	Director Community and Wellbeing
	Temporary Decant	Director of Housing Revenue Account	Director Community and Wellbeing
	Mutual Exchange	Xxx Team Manager	XXX Officer

	Decision	Designated Officer	In consultation with

VERSION CONTROL LOG

Version	Date	Details of changes included in update	Author

Epping Forest District Council
Civic Offices,
High Street,
Epping,
Essex
CM16 4BZ

Telephone: 01992 564000
Email: rehousing@eppingfoestdc.gov.uk

www.eppingforestdc.gov.uk/housing

(16 February 2022)



REVIEW OF:
THE OVERARCHING HOUSING STRATEGY
THE ALLOCATIONS POLICY
THE TENANCY POLICY
THE HOMELESSNESS & ROUGH SLEEPING STRATEGY

STAGE 1 CONSULTATION – RESULTS

October 2021

INTRODUCTION

This report presents the results of the stage 1 initial consultation on the Epping Forest District Council review of the following 'Big 4' Housing strategies and policies.

- The Allocations Policy
- The Tenancy Policy
- The Homelessness and Rough Sleeping Strategy
- The overarching Housing Strategy

The review began on 4 May 2021 and is due to conclude in Spring 2022.

Subject to Cabinet approval, the review will result in the publication of a new Allocations Policy, and Tenancy Policy (both of which will then be due for review again in 2027), along with both the updated five-year Homelessness and Rough Sleeping Strategy 2022-2027 and the overarching Housing Strategy for 2022-2027.

STAKEHOLDER CONSULTATION

The consultation has been coordinated across all four items; to take account of the interest of some, but not all, stakeholders in more than one of the Big 4, and the interdependencies between many of the proposals.

The consultation has been split into two stages.

Stage 1 Initial Consultation: An invitation to stakeholders to influence the review from the outset by suggesting key themes and priorities they would like to be included in the draft updates of any or all the policies and strategies.

The stage 1 consultation opened on 21 June 2021 and closed on 6 September 2021.

Stage 2 Detailed Consultation: An invitation to stakeholders to comment on the draft proposals and major changes to the individual policies and strategies for consideration before any revision to the draft recommendations are presented to Cabinet between March 2022 and May 2022 for consideration and approval.

The stage 2 consultation is due to open on 29 October 2021 and close on 10 December 2021 for all but the overarching Housing Strategy which is scheduled to open on 15 November 2021 and close on 24 December 2021.

METHODOLOGY

The consultation has been designed to give everyone with an interest in Housing in the district the opportunity to contribute to the review.

Stage 1 consultation consisted of a range of direct emails, bitesize briefing sessions and webinars, and an on-line survey with simple open-ended questions.

325 stakeholders were sent a link to the on-line survey including:

- Registered providers of social housing in the district
- The clerks to the town councils and parish councils in the district
- The Community Safety Partnership and other statutory services
- Community groups including the Faith Covenant
- Essex County Council and the district, borough and city councils in Essex
- Third sector partners with an active interest in Housing in the district
- All elected Members of the Council and Council staff

The consultation and links to the survey along with background information are widely publicised on the Council’s website, in the Tenant and Leaseholders newsletter, on Facebook, and at relevant forums including the Tenant and Leaseholders’ Forum and Live Well, Be Well and Age Well groups.

RESPONSE RATE

Number of Responses

In total, 68 contributors completed the survey. A further 96 surveys were started and abandoned. It is not known how many of these were duplicate entries from potential contributors who then went on to complete a valid survey, and how many were lost opportunities.

A user group was consulted on the possible reasons for the relatively high number of abandoned responses. The group suggested a few ways of improving the response rate that will be tested for future surveys of this type.

Contributor Interest

Contributors were asked to indicate whether they were responding as a resident of the district or as a representative of an organisation with an interest in Housing in the district. Those contributors with a dual interest were given the option of completing two surveys.

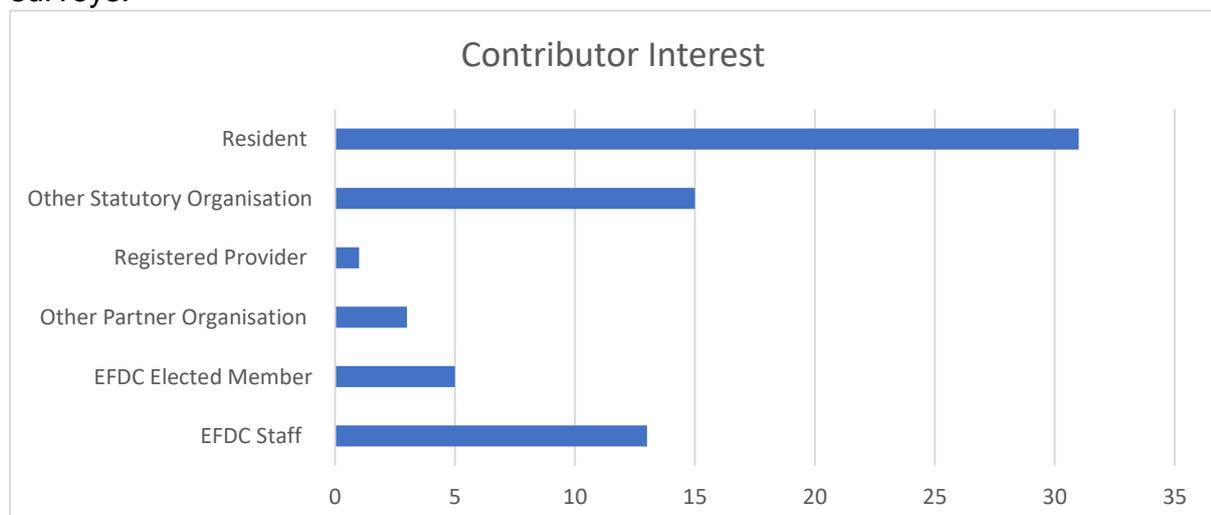


Fig 1

The vast majority of contributors were residents (46%) followed by other statutory organisations (22%) Council staff (19%) elected Members of the Council (7%) other partner organisations (4%) and other registered providers of social housing (1%).

Questions and Answers

Most questions were open ended and produced detailed qualitative data which was then grouped by themes for the purpose of analysis.

OVERARCHING HOUSING STRATEGY

Question: Please list between three and five priorities and say why they are important.

Responses:

Answered: 68 Not answered: 0



Fig 2

The most frequently listed priority related to increasing the supply of affordable housing, either generally (28%), specifically social housing (23%), of the right size and type to meet needs (22%), for local people (13%), or suitably adapted properties for people with physical or mental impairment (13%).

Protecting the environment featured in a high number of responses (25%) as did the Council's local planning policy, particularly with regards to the location and tenure mix of new developments (i.e. social housing, private rent, homeownership (24%) and the regeneration of local areas (10%).

Other reoccurring themes included ensuring good quality safe homes in both the private and public sector (19%); enabling residents (particularly vulnerable residents) to access suitable housing and activities to help improve their wellbeing and life-chances (19%) tackling homelessness (19%) and the allocations policy (19%).

HEALTH HOUSING AND WELLBEING

Answered: 65 Not answered: 3

Question:

Can you suggest other services or organisations that may be interested in working in partnership with Housing to help improve health and wellbeing?

Responses:

The suggestions included 31 specifically named organisations, some of which already have established or developing relationships with Housing. Consideration is being given to engaging with each of the 31 organisations and all positive outcomes will be included in the relevant strategy or policy.

Question:

Do you have any suggestions or practical tips about how partners could work with Housing to help improve the health and wellbeing of residents?

Responses:

Over 25 different practical tips and suggestions are being followed up. These include community-based activities that could also improve the local environment, targeted information sharing on specific schemes and opportunities, design features to assist sensory impairment and social inclusion, and training to raise awareness of neurodiversity amongst staff. All suggestions that are adopted or will be referenced in the relevant strategy or policy.

ALLOCATIONS POLICY

Answered: 60 Not answered: 8

Question:

For what circumstances or reasons should applicants be awarded Band A?

Responses

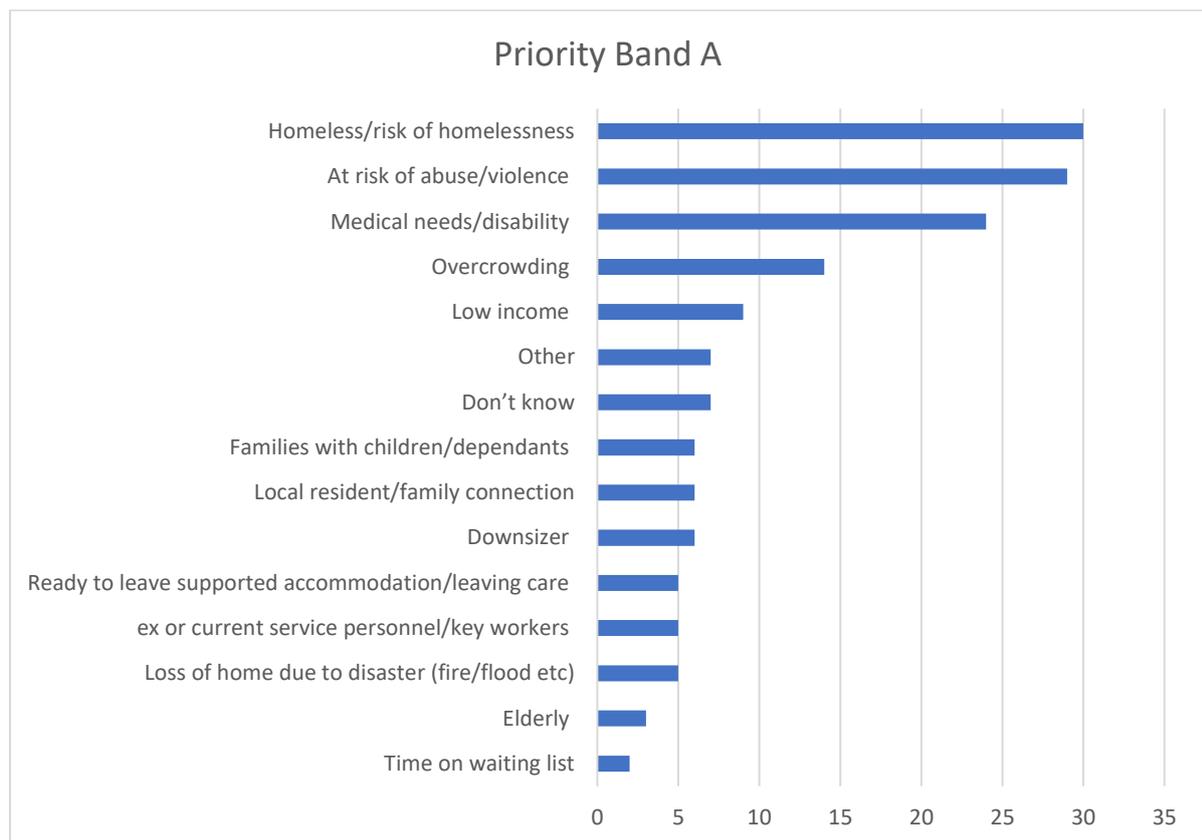


Fig 3

The most common reason that contributors said Band A should be awarded was to address homelessness or the risk of becoming homeless (50%) followed by risk of abuse or violence (48%), medical needs/disability (40%) and overcrowding (23%).

For what circumstances or reasons should applicants be awarded Band B?

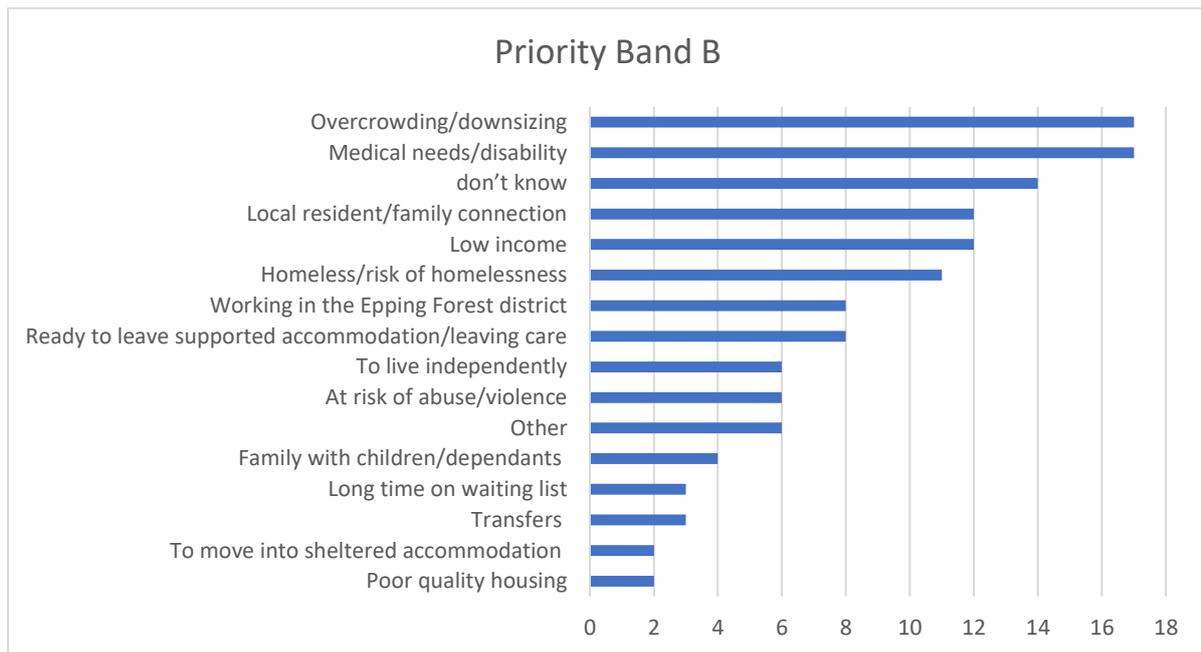


Fig 4

Overcrowding/downsizing (28%) and medical needs/disability (28%) were the most common suggestions for being awarded Band B. A relatively high number of contributors said they didn't know (23%). The next most frequent circumstances proposed for Band B were being a local resident or with a family connection (20%), or on a low income (also 20%) then Homelessness or the risk of homelessness (18%).

For what circumstances or reasons should applicants be awarded Band C

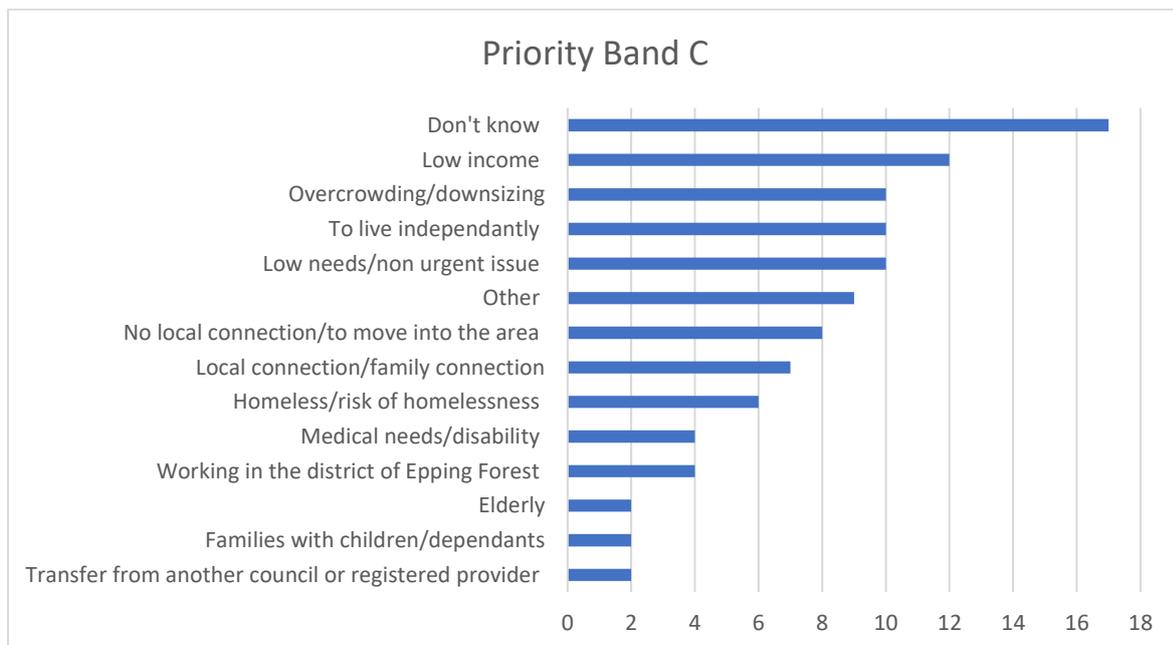


Fig 5

Fewer Contributors made suggestions for Band C than the other bands. The most common suggestion for Band C was low income (20%) followed by overcrowding/downsizing, or to live independently or low needs/non-urgent issues (all 17%).

TENANCY POLICY

Answered: 60 Not answered: 8

Question:

How many years should a council or housing association tenancy be granted for? 10 years, 20 years, a lifetime, or other?

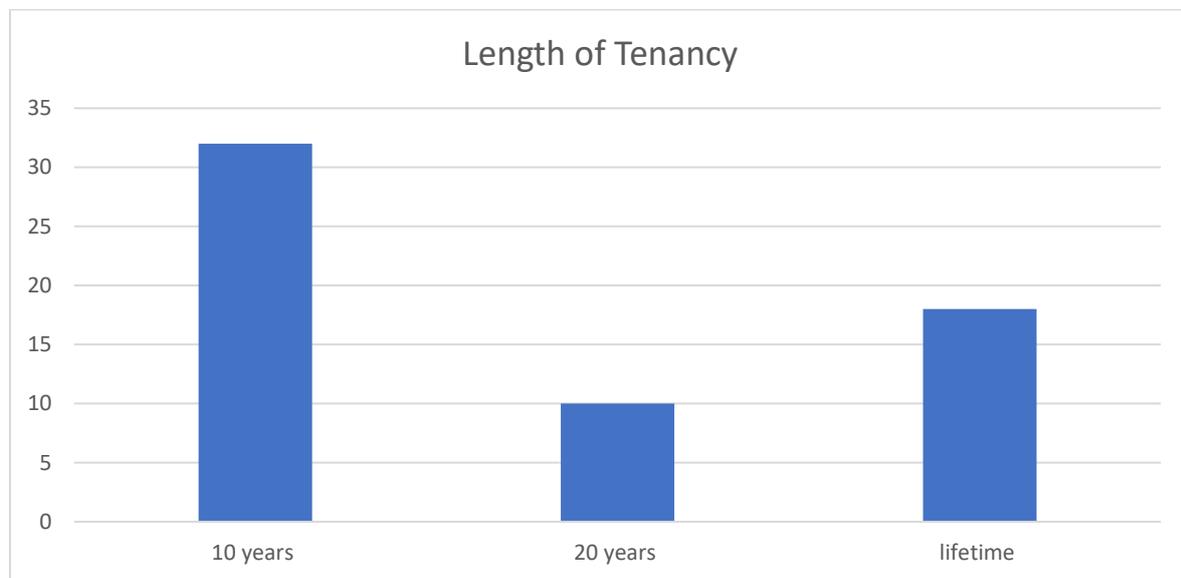


Fig 6

Over half of the respondents (53%) said tenancies should be for 10 years. Fewer respondents were in favour of lifetime tenancies (30%) and the least popular proposal was 20 years (17%).

Should every tenancy be granted for the same length of time?

Yes 53%

No 47%

If you answered no, then for what reason(s) should someone be offered a shorter tenancy or a longer tenancy?

The most common answer was that longer tenancies should be offered to older people, those with disabilities or learning difficulties, or families with young children.

And that shorter tenancies should be offered to households whose circumstances are likely to change and/or who have a realistic prospect of purchasing a property in the near or mid-term future.

HOMELESSNESS AND ROUGH SLEEPING STRATEGY

Answered: 57 Not answered: 11

Question:

What help should the Council offer to households who are threatened with homelessness, to prevent them from becoming homeless?

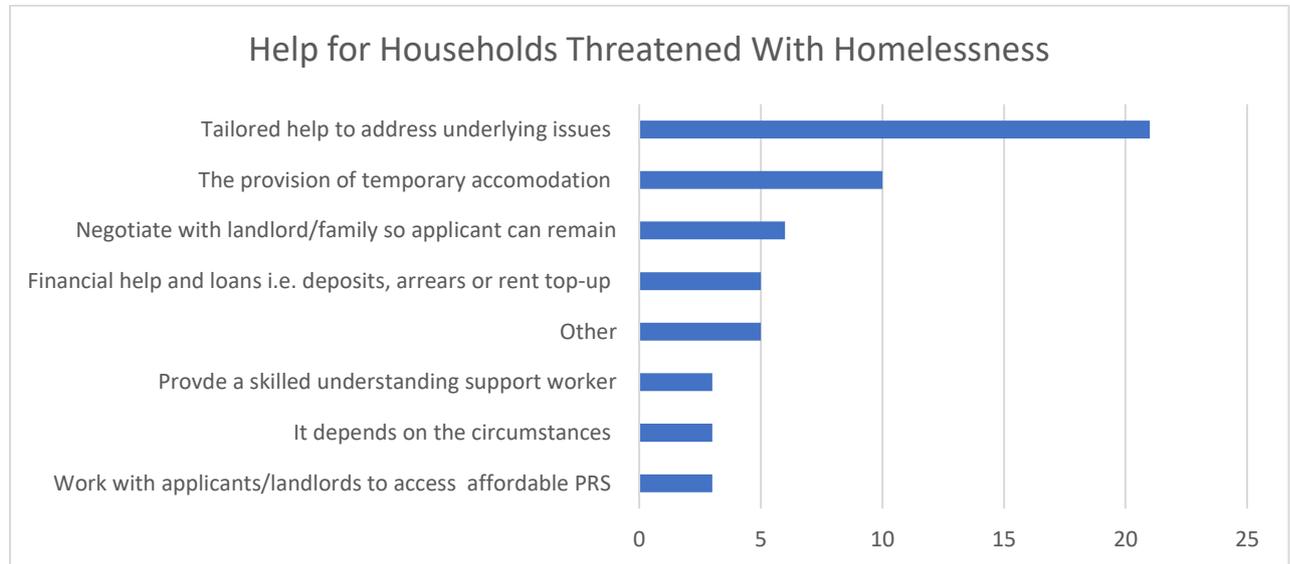


Fig 7

The most frequent suggestion was to offer tailored help to address the underlying causes of homelessness (37%), next was the provision of temporary accommodation (18%) and negotiating with the applicant's landlord or family member to allow the applicant to remain living there (11%).

What help should the Council offer households who are homeless?

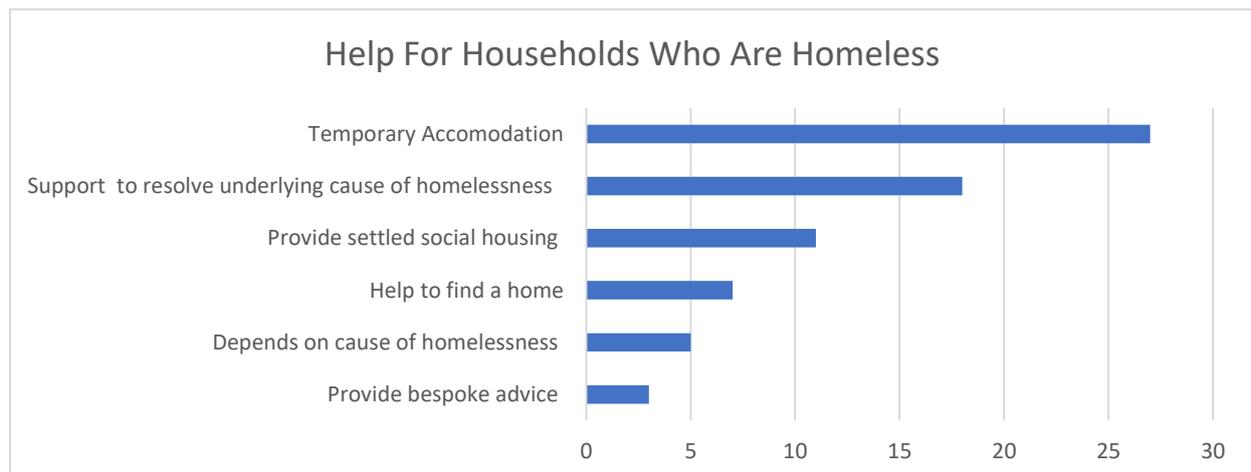


Fig 8

The most recurrent proposal was to offer temporary accommodation (47%), followed by support to resolve the underlying cause of homelessness (32%) and the provision of settled housing (19%).

What steps do you think the Council should take to end rough sleeping?

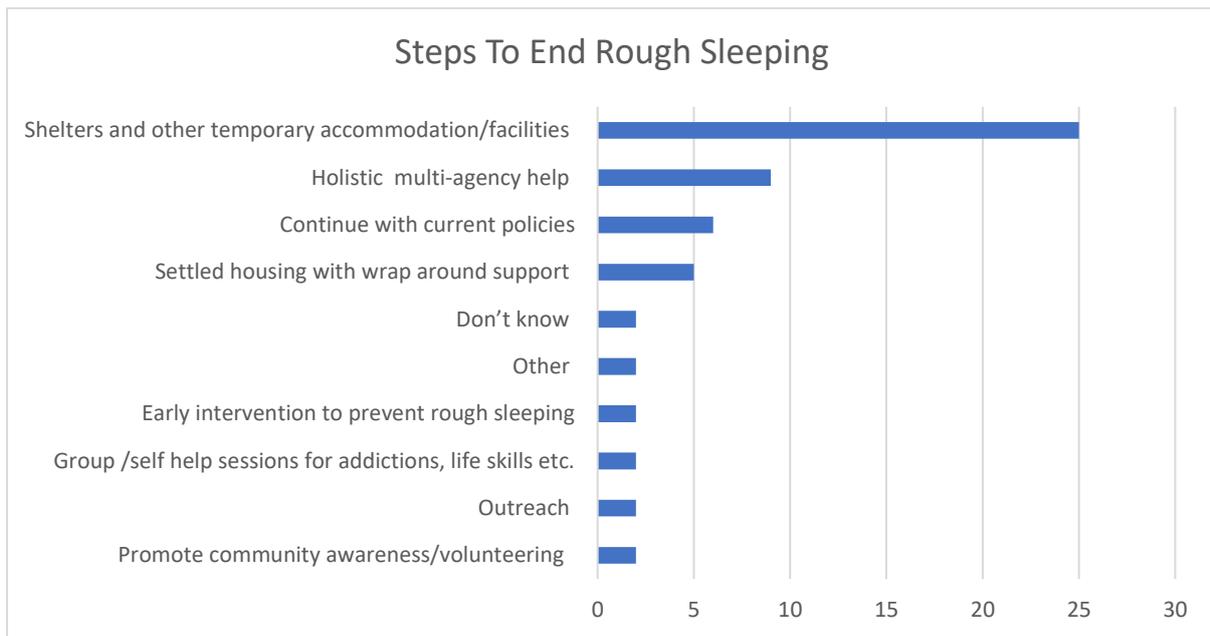


Fig 9

By far the most common suggestion was the provision of shelters and other temporary accommodation along with facilities such as access to a shower and a meal (44%). Holistic multi-agency help featured fairly frequently (16%), and a notable number of respondents suggested continuing with current policies (11%).

FURTHER INVOLVEMENT

Contributors were asked whether they were happy to be contacted to discuss any of their comments or suggestions and/or whether they would like the opportunity to be involved with more detailed consultation on any of the individual policies or strategies.

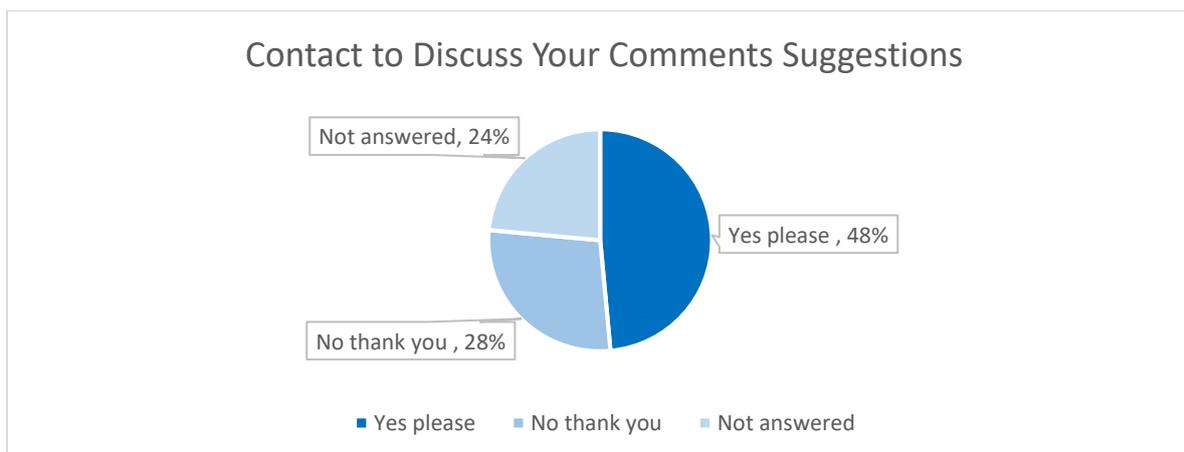


Fig 10

Nearly half of all contributors said they would be happy to be contacted to discuss the comments or suggestions they had made in their response to stage 1 consultation (48%).

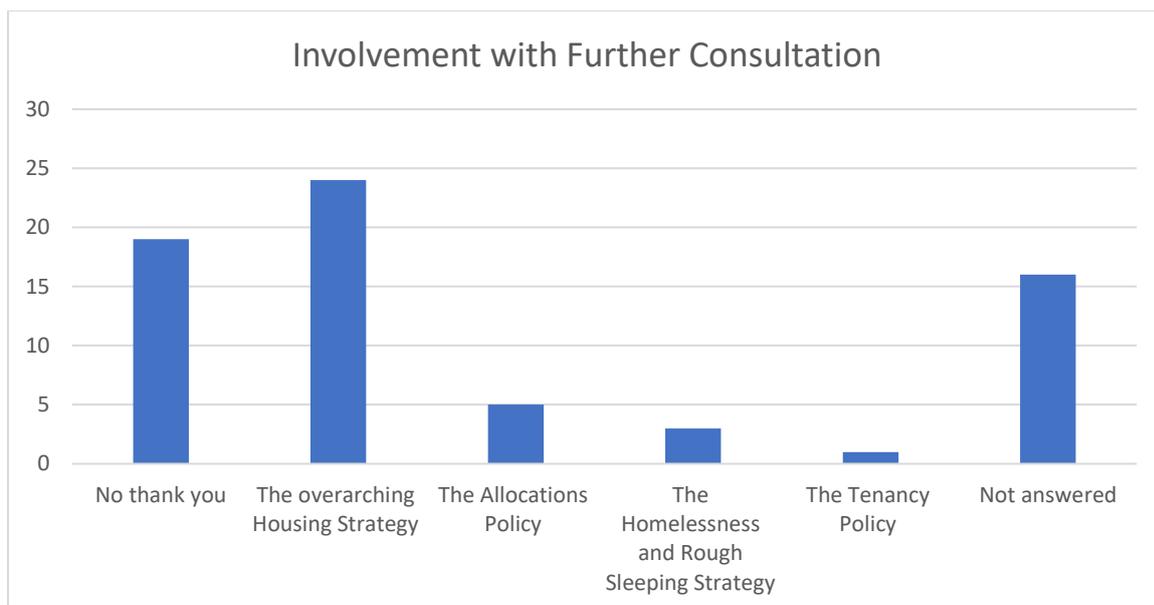


Fig 11

The Overarching housing Strategy generated the most interest in further involvement (35%) and the Tenancy Policy the least (1%).

Overall, 36 contributors said they were happy to discuss their responses to the stage 1 survey and/or would like to be more involved with the detailed stage 2 consultation.

At the time of writing the report arrangements were being made to contact the 36 contributors and discuss opportunities to have more direct involvement with the stage 2 consultation.

PROFILE OF CONTRIBUTORS

Contributors were invited to provide some additional confidential information about their personal characteristics to enable the Council to check whether the consultation process is fair and transparent and to monitor the impact of any recommendations on groups with particular characteristics. The findings will form part of the Equalities Impact Assessment to be published along with the outcome of the full review.

Contributors were given the option to skip the section or indicate that they would prefer not to answer a specific question.

Of the 68 Contributors to the survey, 70% answered most but not all the questions about their personal profile and 22% skipped the section entirely.

Age

Please indicate your age group

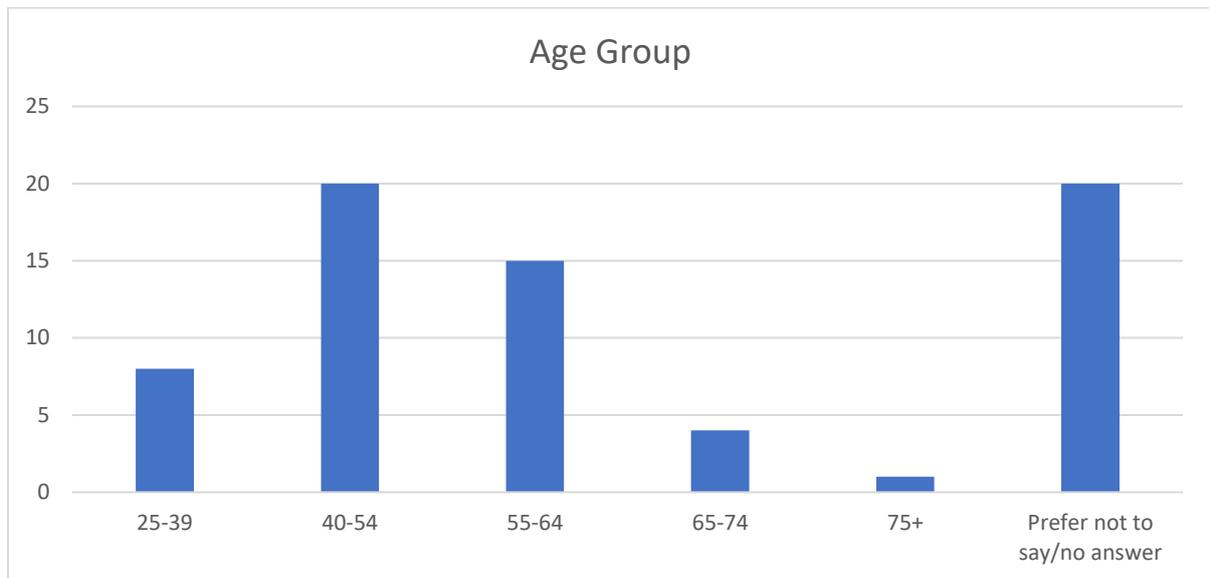


Fig 12

The majority of contributors who specified their age group were between 40-54 years old (29%) and 55-64 years old (22%).

Ethnicity

Please indicate your ethnic origin.

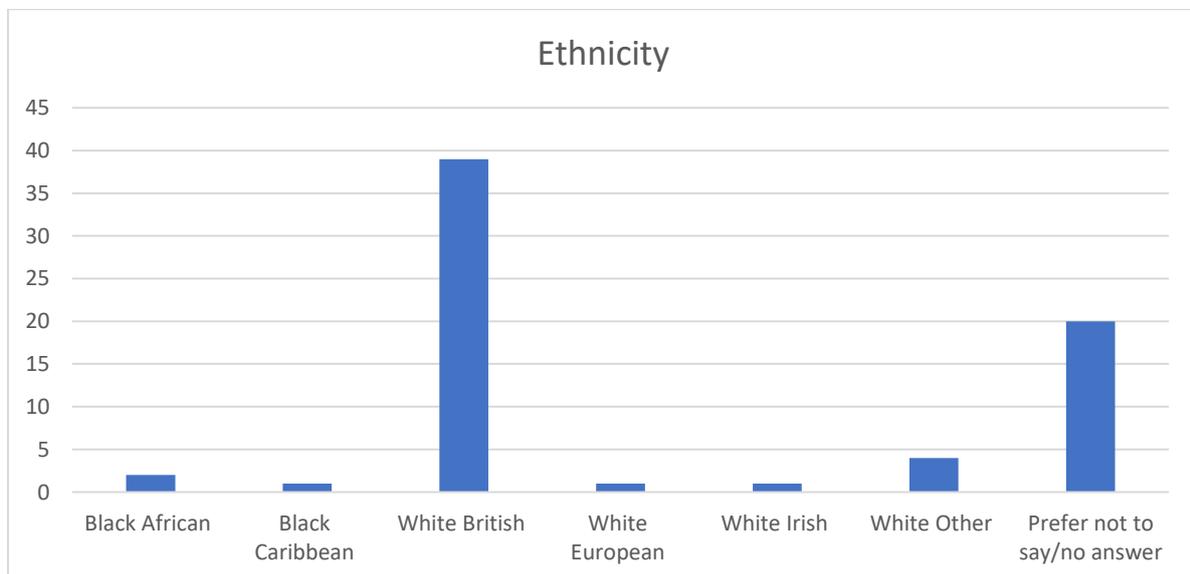


Fig 13

The majority of contributors described themselves as White British (57%) or opted not to provide details (29%).

Gender Identity

How would you describe your gender identity?

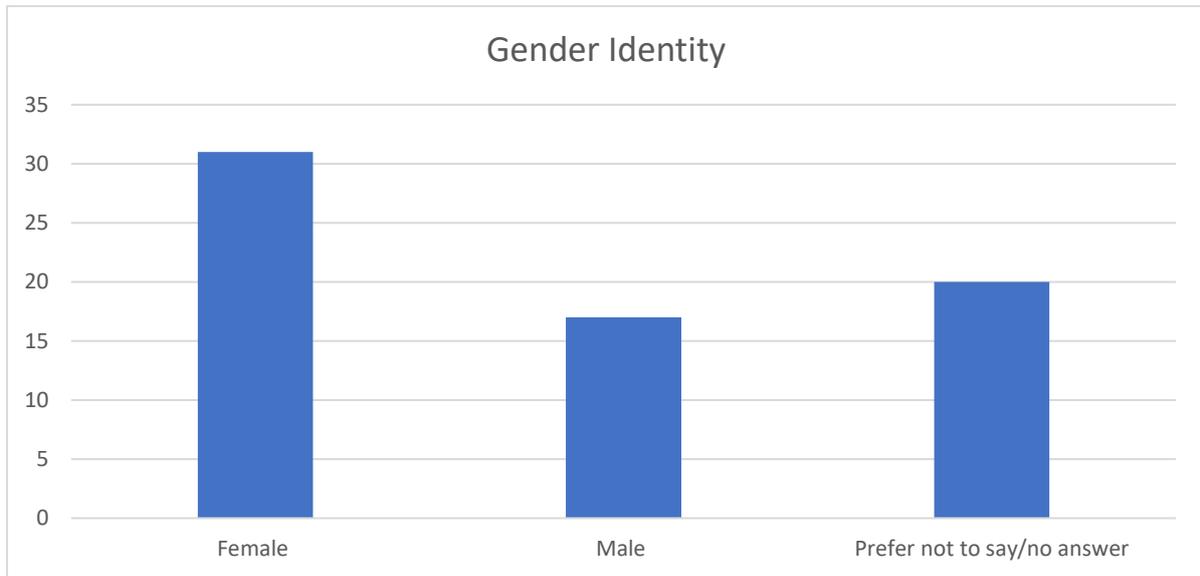


Fig 14

Contributors described themselves as female (46%) male (25%) or chose not to provide details (29%).

Religion

Please indicate your religion

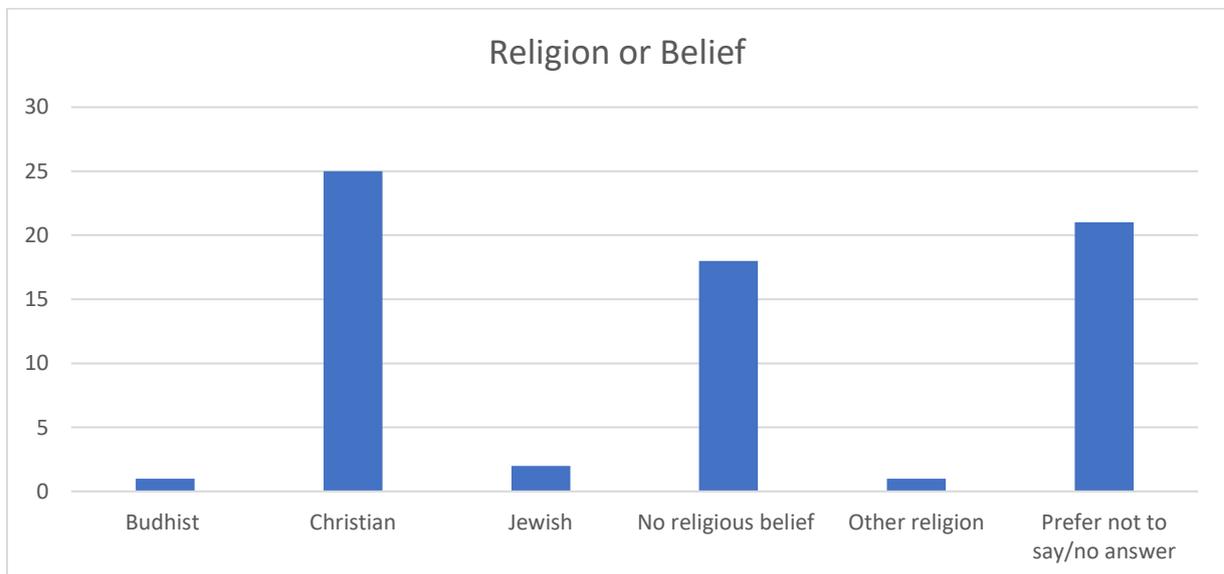


Fig 15

The religion or belief most frequently selected was Christian (37%) followed by no religious belief (26%). A fairly high proportion of contributors opted not to answer (31%).

Disability

Do you consider yourself to have a disability?

By disability we mean whether you have a long-term difficulty with mental or physical health, or a learning difficulty that affects your ability to carry out day to day activities.

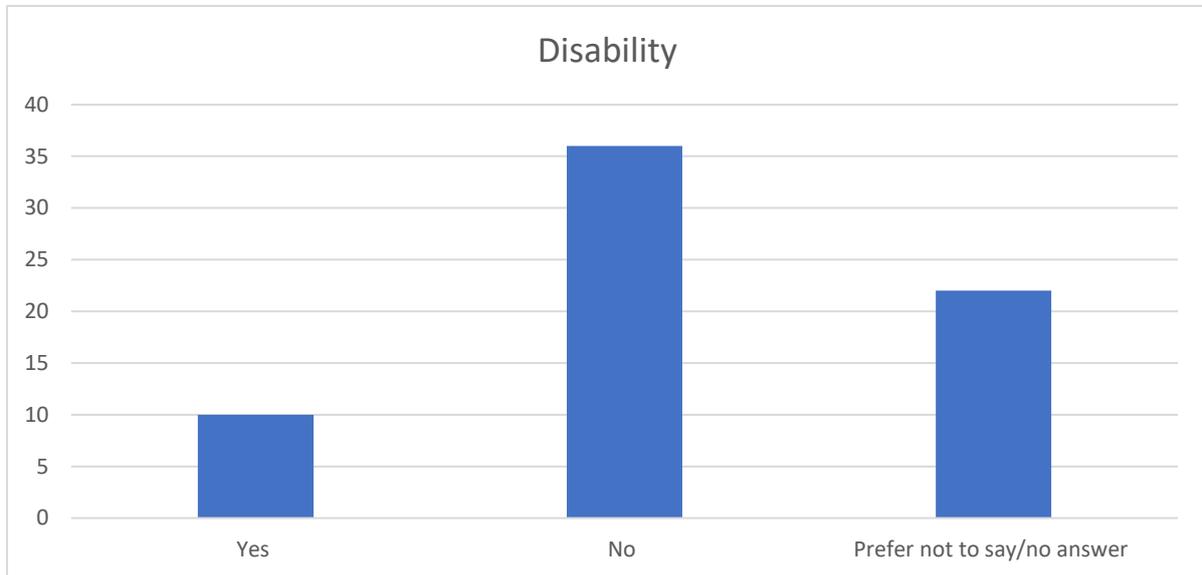


Fig 16

Overall, 15% of contributors said they had a disability, and a notable number chose not to answer (32%).

Sexual orientation

Please indicate your sexual orientation.

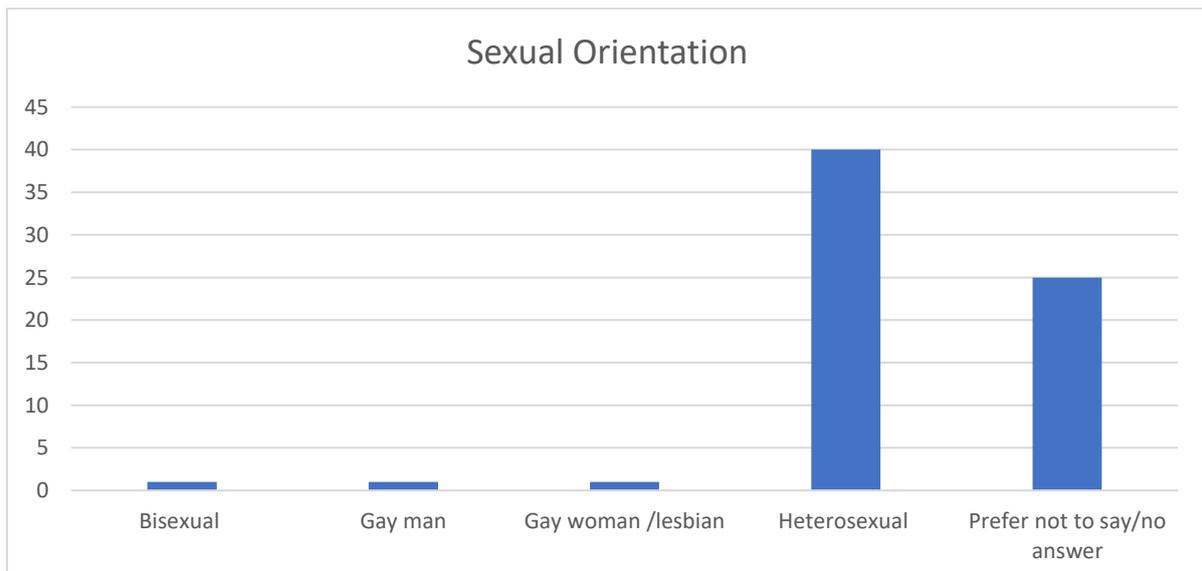


Fig 16

Most contributors said they were heterosexual (58%) or opted not to answer (37%).

NEXT STEPS

The results of the stage 1 consultation have been carefully considered in conjunction with the Councils corporate objectives, a range of staff workshops and its statutory obligations as a Local Housing Authority to inform the recommendations contained within the following four reports for stage 2 consultation.

- [Review of the Allocations Policy- Recommendations](#)
- [Review of the Tenancy Policy- Recommendations](#)
- [Review of the Homelessness and Rough Sleeping Strategy- Recommendations](#)
- [Review of the overarching Housing Strategy- Recommendations](#)

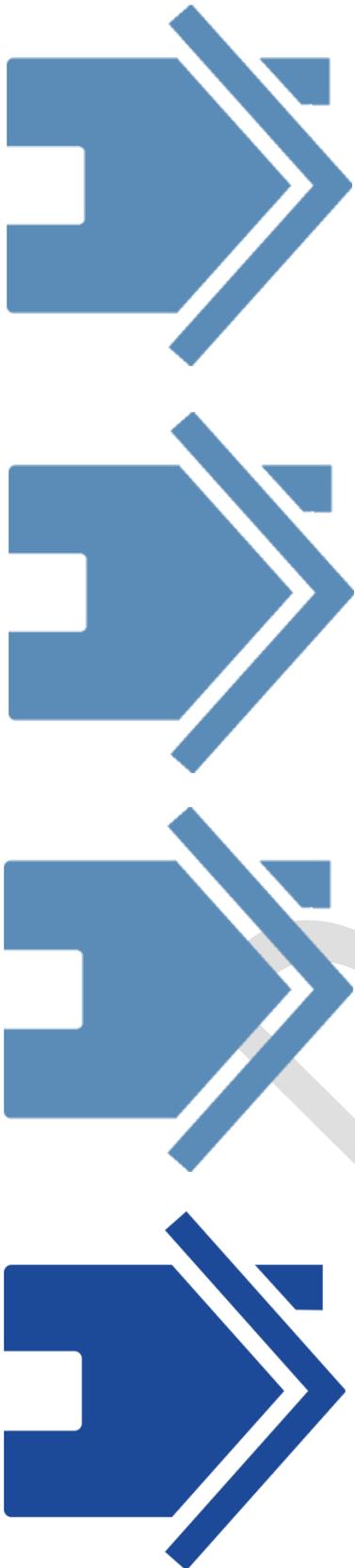
Stronger Communities Select Committee scrutinised the reports on 21 September 2021 and approved all recommendations contained therein.

Stage 2 Consultation will begin on 29 October 2021 and details can be found on [the Big 4 Housing strategies and policies consultation](#) page on the Council's website.

For further information please contact the Housing Strategy Team
[**Housingstrategy@Eppingforestdc.gov.uk**](mailto:Housingstrategy@Eppingforestdc.gov.uk)

Janice Nuth
Housing Strategy Manager (Interim)
Communities and Wellbeing
22 October 2021

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DRAFT

REVIEW OF:
THE ALLOCATIONS SCHEME
STAGE 2 DETAILED CONSULTATION
RESULTS

February 2022

SUMMARY

The stage 2 consultation exercise for the Allocations Scheme was publicised on the Council's website, social media, residents' newsletters a press release and 325 direct emails. A variety of on-line and in person events were held and detailed contributions were received from 70 stakeholders. The five proposed major changes and eleven proposed minor changes to the Allocations Scheme were largely supported and have remained in the recommendations with some minor adjustments for to establish clarity as listed in the main body of this report.

INTRODUCTION

This report presents the results of the stage 2 consultation on the Epping Forest District Council review of the Allocations Scheme (the Scheme) 2022- 2027 which forms part of a review of the Big 4 housing strategies along with the Tenancy Policy, the Homelessness and Rough Sleepers Strategy and the overarching Housing Strategy.

The review began on 4 May 2021 and is due to conclude in Spring 2022.

Subject to Cabinet approval, the review will result in the publication of a new Allocations Scheme, and a Tenancy Policy (both of which will then be due for review again in 2027), along with an updated five-year Homelessness and Rough Sleeping Strategy 2022-2027 and an overarching Housing Strategy for 2022-2027.

STAKEHOLDER CONSULTATION

The consultation was coordinated across all four items; to take account of the interest of some, but not all, stakeholders in more than one of the service areas, and the interdependencies between many of the proposals.

The consultation was split into two stages.

Stage 1 Initial Consultation: An invitation to stakeholders to influence the review from the outset by suggesting key themes and priorities they would like to be included in the draft updates of any or all the 'Big Four' policies and strategies.

The stage 1 consultation opened on 21 June 2021 and closed on 6 September 2021 and the findings were published on 22 October 2021.

Stage 2 Detailed Consultation: An invitation to stakeholders to comment on the draft proposals and major changes to the Allocations Scheme for the Council to consider before any revision to the draft recommendations are presented to Cabinet in spring 2022.

The stage 2 consultation for the Allocations Scheme opened on 12 November 2021 and closed on 24 December 2021.

The same approach is being followed for the stage 2 detailed consultation for the Homelessness and Rough Sleeping Strategy and the overarching Housing Strategy. The Tenancy Policy did not go stage 2 consultation as no major changes were requested.

METHODOLOGY

The consultation was designed to give everyone with an interest in housing in the district the opportunity to contribute to the review and was publicised in the same way as for stage 1.

Stage 2 consultation for the draft Allocations Scheme 2022-24 highlighted the proposed changes to the scheme, and included a workbook inviting comment on all or some changes and a presentation with key questions about the main changes.

The same audience was approached as for stage 1 via social media, a range of direct emails, bitesize briefing sessions and webinars, a stakeholder workshop and an on-line survey with specific questions.

325 stakeholders were invited to contribute and sent a link to the on-line survey including:

- Registered providers of social housing in the district
- The clerks to the town councils and parish councils in the district
- The Community Safety Partnership and other statutory services
- Community groups including the Faith Covenant and the Tenant and Leaseholders Panel
- Essex County Council and the district, borough and city councils in Essex
- Third sector partners with an active interest in Housing in the district
- All elected Members of the Council and Council staff

As well as a press release, the consultation and links to the survey (along with background reading material) were widely publicised on the Council's website, in the Residents newsletter, on Facebook, and at relevant forums including the Tenant and Leaseholders' Forum and Live Well, Be Well and Age Well groups.

CONTRIBUTIONS

In total 70 people contributed to the stage 2 consultation. The majority of responses were provided during in-person meetings or Microsoft Teams meetings.

Contributors included:

- 12 Members of the Council
- 42 Professional Stakeholders
- Representatives from the County Council
- 2 neighbouring Local Authorities
- 2 Registered Providers
- 6 Residents Groups /Tenant and Lessee Panel members
- 5 Town and Parish Council Members

PROPOSED MAJOR CHANGES - FEEDBACK

1) Medical priorities: should the two current medical priorities be replaced with three, and if so, how should this be introduced?

Contributors predominantly agreed with the proposal to replace the two current medical priorities with three and that they should be introduced retrospectively without being too burdensome on tenants, starting with applicants in Band C

Several requests were received to see examples of the level of medical need that would be included in Bands A - C

Follow-up actions

The guiding principles for the three proposed medical priorities were established along with the recommendation to introduce the re-banding retrospectively.

2) Downsize: should downsizers be eligible for a spare bedroom, and should any allowance for an extra room and/or any financial incentive be extended to include fixed term tenants with less than five years remaining

Contributors generally agreed with the proposal to allow downsizers to move to a property with a spare room.

There was some difference of opinion on whether the financial incentive should be offered to people with less than 5 years remaining on their tenancy. More than one person suggested reducing the lower time limit to three years. A greater number suggested introducing a 6-month limit.

There was general agreement that cash incentive was unlikely to be the main reason a tenant would downsize but does enable those people to move who may not otherwise be able to afford to do so.

It was highlighted that 2-bed properties are most in demand and most likely to be taken by downsizers seeking a spare room, and that sheltered housing is in least demand. Some suggested adjusting the incentives to reflect the variable demand for property size and type.

Follow-up actions

Proposals were drawn up to generally offer £1,000 per room downsizers gave up, with the exception of downsizers moving from a 3-bed to a 2-bed that only needed a 1-bed who would be offered £500, and downsizers moving into sheltered accommodation being offered an extra £1,000 (including those tenants moving from 1-bed general needs accommodation to 1-bed sheltered housing).

3) Homeless households that the Council has a main housing duty towards – should this cohort of applicants be placed in reasonable preference Band B and given the opportunity to bid on suitable properties via Choice Based Lettings (CBL) for their one suitable offer, unless or until a suitable direct offer is made via auto – bidding or direct allocations.

The general consensus of opinion was that homeless households should be awarded reasonable preference Band B and allowed to bid on CBL unless or until they received a suitable direct offer.

One contributor asked for provision to be made to ensure people do not take advantage of the homelessness route to access a Council house. They were reassured that the same checks and balances would still apply.

Several asked whether awarding a priority band to homeless households would increase the waiting time for general applicants in Band B. It was explained that the increase in numbers of applicants in Band B should be counterbalanced by the increase in advertised properties which would have otherwise been allocated outside of CBL.

Follow-up actions

Proposals were drawn up to allow homeless households to whom the Council has a main housing duty to bid for a period of at least 6 months before being placed on auto bidding and/or receiving a direct offer.

4) Local Lettings Plans: should the option to include local lettings plans be introduced to the Allocations Scheme?

The proposal to include the option of local lettings plans was generally supported in exceptional circumstances for a set period of time and subject to scrutiny and Cabinet approval. Concern was raised that local lettings plans risked introducing discriminatory exclusion policies if not properly and transparently administered, and that the need for local lettings plans should be community led rather than officer led.

Follow-up actions

Proposals were drawn up to ensure that stringent rules be applied to introducing any local lettings plans that would be considered by Cabinet on a scheme by scheme basis, to address specific local, subject to periodic review and in accordance with legislation and regulatory guidance.

5) Rent arrears and unacceptable behaviour: should the 7-year disqualification period be replaced with case by case risk-based assessment

The vast majority agreed with replacing the 7-year disqualification period with a case by case risk assessment. There was greater consensus over rent arrears than anti-social behaviour on the condition that the applicant demonstrated a commitment to maintaining a satisfactory rent account with a repayment plan and pursue money advice and/or debt counselling as appropriate .

Some concerns were raised over rehousing applicants responsible for anti-social behaviour and whether a shorter time-limit of 3-5 years be introduced. A proposal was made to differentiate between ongoing anti-social behaviour and a spent conviction.

Follow-up actions

Proposals were drawn up to ensure fair consistent guiding principles be applied to proportionate risk-based assessments for disqualification due to rent arrears or anti-social behaviour that focus on support, accountability, probability of reoccurrence and community interest rather than penalty.

OTHER FEEDBACK

6) Affordability

Affordability of current accommodation in private rented sector was raised by several contributors who asked whether this should attract additional priority.

Follow-up action

After careful consideration it is recommended that affordability per-say includes too many variables to legitimately be included as a need, and that promoting and incentivising access to the private sector, and the safety net of the homelessness duty are preferable alternatives

7) Age threshold for young people to join the housing register

Several proposals were made to lower the age limit for joining the housing register from 18 to 16, primarily to enable looked after children to join before they risk becoming homeless if they leave care at 18.

Follow-up action

Proposals were drawn up to keep the age limit to 18 pending the outcome of the Countywide review of the Care-leavers Protocol due in 2022/23.

8) Supplementary waiting list

Concerns were raised about the existence of a supplementary waiting list if considerations to regenerate sheltered housing progress therefore making it more desirable to qualifying local households on the register.

Follow-up action

Proposals were drawn up to review the relative value of the supplementary waiting list in the event of a regeneration programme when anticipated practical completion dates are known.

9) Supported Housing Move on:

A request was made to work closely with Essex County Council (ECC) to achieve their aspirations to support adults with disabilities to step down to general needs accommodation.

Follow-up action

An agreement in principle was reached for the Rehousing Team Manager to continue to liaise with ECC regarding stepdown arrangements to improve the flow through supported housing, and to keep the Development Service Manager updated with demand for specific disability adapted accommodation.

10) Band A direct offers and auto bidding

The suggestion to consider Band A applicants for direct offers and auto bidding after a period of inactivity or failure to secure a suitable property (with the exception of downsizers) was largely supported.

Follow-up action

Proposals were drawn up to enable applicants in Band A to be considered for auto bidding and/or direct offers after a period of 6 months.

11) Waiting time

Contributors reached unanimous agreement that the priority date for an applicant moving up a band should be the date they moved up to that band rather than the date they joined the housing register.

The majority of respondents agreed that it would be reasonable for applicants who moved up a band then moved down again to retain the date they were originally placed in that band.

Follow-up action

Proposals were drawn up to modify the priority date to reflect the date that an applicant joined that band rather than the date they joined the Housing Register.

12) Band A management transfers

Opinion was split on whether Band A management transfers should be excluded from the under-occupation incentive payment where the applicant's need is for a smaller property than the property currently occupied.

Follow-up action

Proposals were drawn up to exclude Band A management transfers from the under-occupation incentive payment.

13) Definition of household

Opinion was split on whether the 2-year requirement to be considered a member of the household should be changed.

Follow-up action

Proposals were drawn up to align the definition of household for the purpose of housing allocations to the following definition for homeless households.

'An applicant or any other person who usually lives with the applicant as a member of their family or someone who might reasonably be expected to reside with them'.

14) Cancel applications who failed to bid for 12 months

Opinion was split on whether to cancel applications where applicants failed to bid for 12 months.

Follow-up action

Proposals were drawn up to allow applicants to remain on the housing register even if they failed to bid for 12 months - in recognition of:

- a) the scheme being choice based; and
- b) the provision to allow auto bidding and direct offers for Band A management priority transfers and Band B main housing duty homelessness applicants.

15) Supported accommodation

The majority agreed to remove the restriction for applicants in supported housing to only be considered for flatted accommodation, largely because in most cases applicants leaving supported accommodation required 1-bed accommodation and by default virtually all 1-bed social rented housing is flatted accommodation.

Follow-up action

Proposals were drawn up to regularise the policy removing restrictions on bidding for flatted accommodation to include applicants leaving supported housing

16) Residents leaving supported housing

Opinion was split on whether residents leaving supported housing should be entitled to receive one suitable offer or two.

Follow-up action

Given the need to improve the flow through supported accommodation proposals were drawn up to keep with the current policy to make one suitable offer

NEXT STEPS

The draft Allocations Scheme 2022-2027 has been revised to take account of the stage-2 consultation feedback and will be presented to Stronger Communities Select Committee for consideration, comment and agreement on 1 March 2022 prior to being submitted to Cabinet for approval on 7 March 2022.

For further information please contact the Housing Strategy Team
Housingstrategy@Eppingforestdc.gov.uk

Janice Nuth
Housing Strategy Manager (Interim)
Communities and Wellbeing
21 February 2022

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Social Housing Lettings Annual Report

2020/21



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Social housing lettings - April 2020 to March 2021

This report provides information on the number, size, and type of social rented properties that Epping Forest District Council (EFDC) let to qualifying households in 2020/21. The figures include lettings to the Council owned stock, and successful nominations to housing associations (hereafter referred to as Registered Providers or RPs).

Supplementary information is also provided on; the number of applicants on the housing register, the number of mutual exchanges that have taken place and the number of properties that former tenants have purchased from the Council under the Right to Buy, between 2016/17 and 200/21.

Registering for housing

The housing register is a list of home seekers who qualify for at least one offer of a council or RP property. The term 'home seeker' includes those applicants who have applied to the Council for housing, and existing Council or RP tenants who have been approved for a transfer to alternative accommodation.

Applicants are only accepted onto the housing register if they fulfil the local eligibility criteria specified in the Allocations Scheme.

Homeseekers on the housing register are awarded one of three priority bands; band A, band B, or band C. Band A represents the highest priority and band C represents the lowest.

Choice-based lettings and direct offers

EFDC operates a choice-based letting (CBL) scheme to let vacant social rented housing to home seekers on the housing register. Home seekers actively search for available council and RP properties that are advertised on a database known as LOCATA.

Homeseekers access LOCATA via the HomeOption website (www.homeoption.org).

Vacant properties are advertised weekly and home seekers can express their interest in the advertised properties by making a 'bid'.

The Council expanded the LOCATA functionality in April 2020 - to record and monitor households that are homeless or threatened with homelessness within 56 days, to comply with its statutory duties listed in the Homelessness Reduction Act 2017.

Shortlisting

When home seekers bid for an advertised vacant property HomeOption will automatically compile a shortlist of applicants.

Typically, the bid from a qualifying home seeker in the highest band with the earliest registration date will generate an offer to that household first.

Housing Allocations Scheme - categories of need by band

All housing applications are assessed in line with the [Housing Allocations Scheme](#). The current scheme can be viewed in full on the EFDC website.

The following table gives a breakdown of the main categories of need within each priority band for a choice based letting within the current scheme.

Band	Main categories of need
A	<ul style="list-style-type: none"> • Members of the Armed Forces with serious injury, illness, or disability • Bereaved spouses or civil partners of those serving in the regular forces • Downsizers seeking fewer bedrooms than current social housing property • Home seekers needing to move on urgent medical/welfare grounds • Home seekers living in insanitary, overcrowded, or unsatisfactory conditions • Home seekers with mobility problems • Home seekers needing two or more additional bedrooms compared to their current accommodation
B	<ul style="list-style-type: none"> • Home seekers sharing accommodation, lacking at least one bedroom • Home seekers needing to move to a particular locality • Home seekers needing to be one household but are having to live apart • Home seekers needing one additional bedroom • Existing council tenants living in 2/3-bedroom flatted accommodation needing houses • Existing council sheltered tenants wishing to move within their scheme or to another scheme • Existing council tenants over 60 living in 1 bed property wishing to move to sheltered accommodation
C	<ul style="list-style-type: none"> • Home seekers needing to be closer to their place of work • Home seekers sharing accommodation with another household • Members of the Armed Forces with no housing need, and the application is made within 5 years of discharge • Spouses and children of existing and former Armed Forces Personnel • Home seekers needing to move on moderate medical/disability grounds • Home seekers in the Council's interim accommodation awaiting homelessness decision • Home seekers demonstrating an exceptional need to move to the district • Home seekers to whom the Council does not owe a full homelessness duty, where there is a requirement to afford reasonable preference on the ground of homelessness

The periodic review of the Housing Allocations Scheme is in progress and is due to be published in April 2022 (subject to statutory consultation and Member approval).

Number of properties let by year between 2016/17 and 2020/21

Year	Total	EFDC General Needs	RP General Needs
2020/21**	397	356	41
2019/20	450		
2018/19	449		
2017/18	437		
2016/17	493		

Source: Local Authority Housing Statistical Returns (LAHS) 2015-2020. **Provisional figures 2020/21

Fig.1

This table shows the number of properties that have been let to home seekers each year over the last five years.

From 2020/21 the table includes a breakdown of the number of lettings between EFDC stock and RP stock.

Number of properties let by bed size in 2020/21

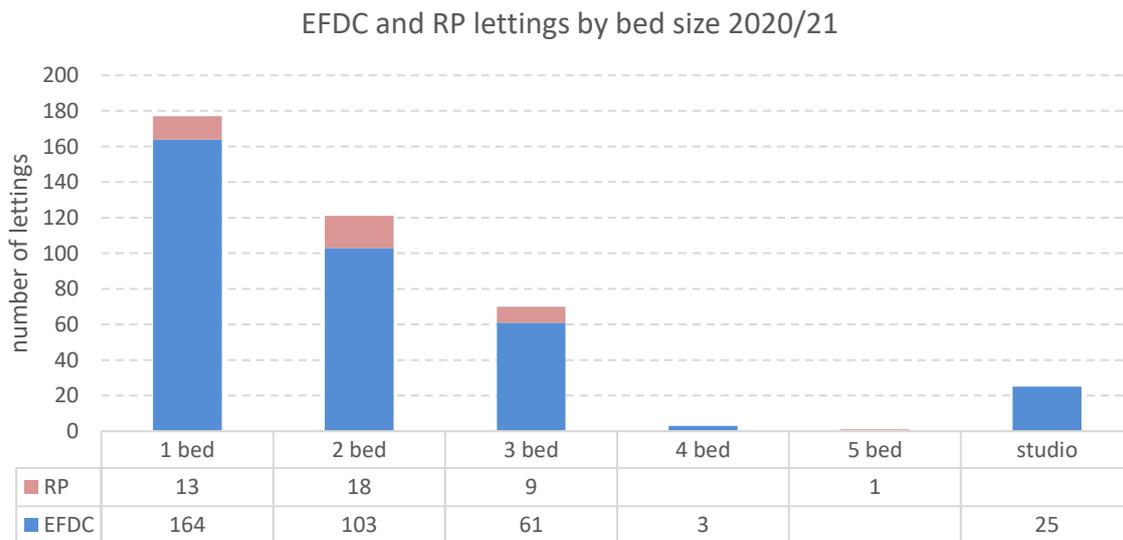


Fig. 2

Most lettings in 2020/21 were for 1-bed properties. These generally have the highest turnover of occupants and therefore become vacant more frequently than family sized accommodation.

Percentage of properties let by age of main applicant in 2020/21

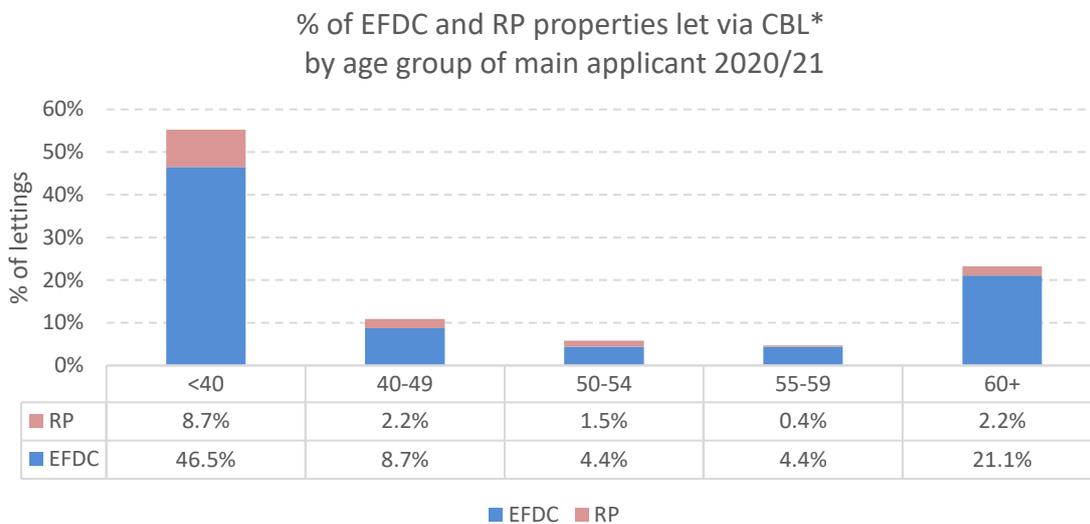


Fig.3

The majority of CBL lettings were to households where the main applicant was under 40 or over 60 years old.

Number of properties let by bed size and age of main applicant in 2020/21

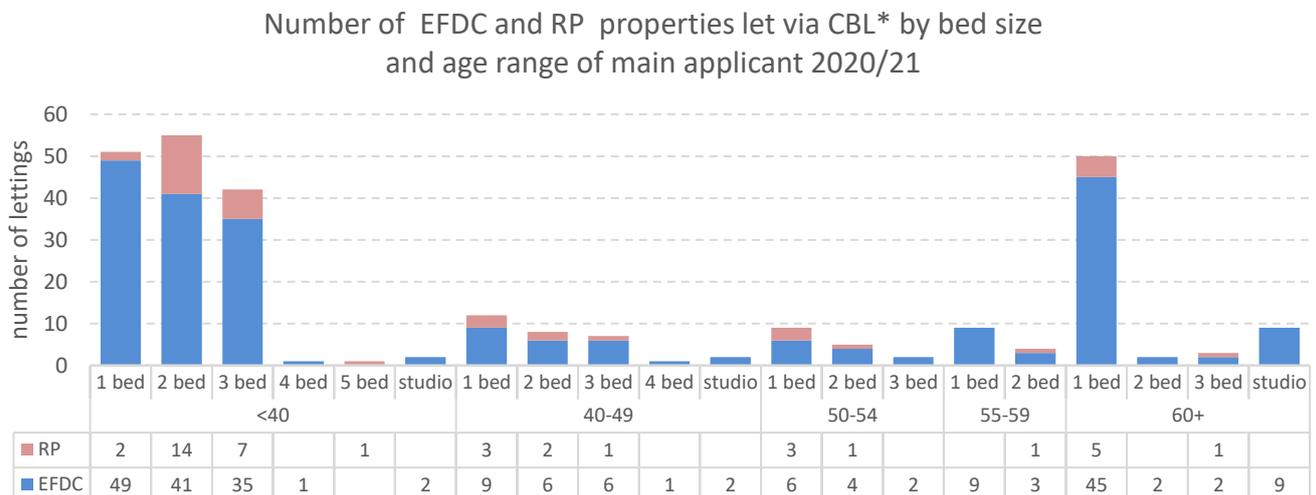


Fig.4

This comparison between the age of the main applicant and the size of the property is used to help with projecting the size, type and number of properties required to meet future demand.

*The data in Fig 4 and Fig 5 relates to households that moved via CBL and does not include the 122 direct allocations that were made to management transfers and homeless households.

Percentage of properties let by priority band in 2020/21

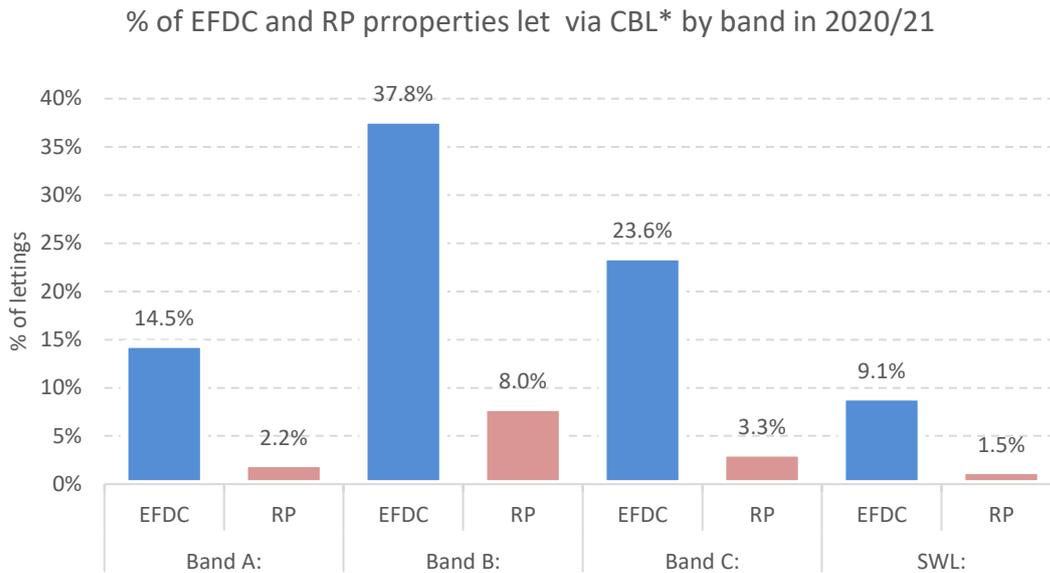


Fig.5

The majority of properties were let to applicants in band B.

Applicant categories

Applicants fall into three categories:

Direct applicants – Homeseekers, the majority of whom are households currently renting in the private sector or living with their family.

Transfer applicants – Existing Council or RP tenants seeking a move to another property.

Homeless applicants – Homeless households that EFDC has accepted a legal duty to house, the majority of whom will be in temporary accommodation.

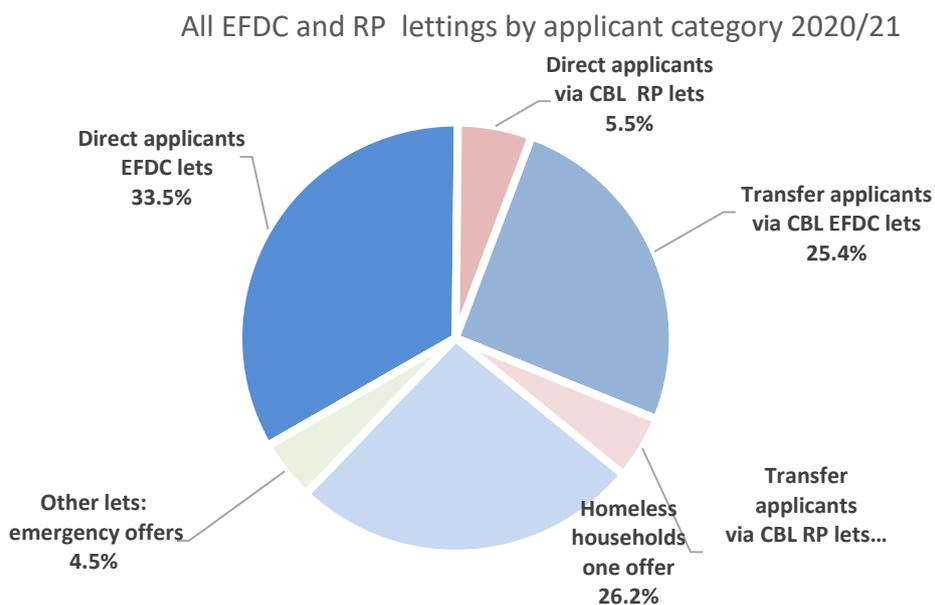


Fig.6

Accessibility and adaptations in 2020/21

A significant number of households include one or more occupants with disabilities. Most commonly mobility is restricted, and a property is required with level access such as a bungalow or ground floor flat. Occasionally additional adaptations may be necessary such as a level-access shower, handrails, a stair lift or a fully wheelchair adapted property.

When adapted properties become available to let then households with an identified need for those specific adaptations are usually prioritised above households without that need.

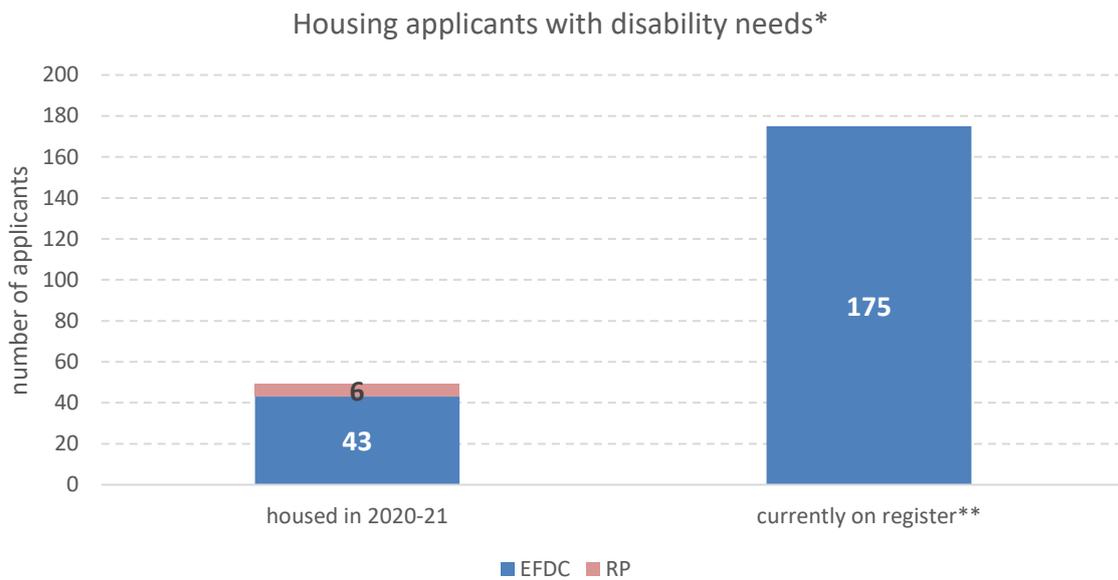


Fig.7

*This data relates to all applicants who have identified a household member with a permanent physical disability including but not limited to those with supporting occupational health or medical evidence.

** This data includes 35 applicants' households with a member who uses a wheelchair some or all the time.

Waiting times to move via CBL by band in 2020/21

Waiting times for applicants to move to an EFDC or RP property via CBL in 2020/21

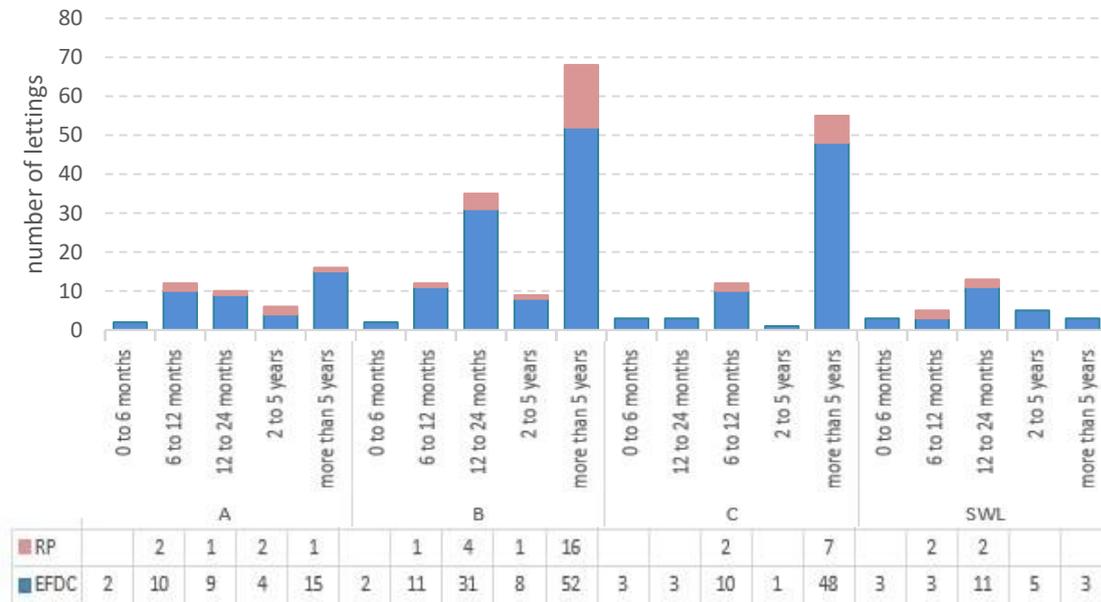


Fig.8

The above chart shows the number of months that households have waited to move to an EFDC or RP property via CBL.

The high number of households in band A that appear to have been waiting for longer than 12 months, and the very high number in band B waiting for longer than 5 years will have their applications reviewed to establish and (where possible) address the cause.

Local connections in 2020/21

The following chart compares the percentage of lettings made to home seekers already living in EFDC with the percentage of lettings made to home seekers from other local authority areas.

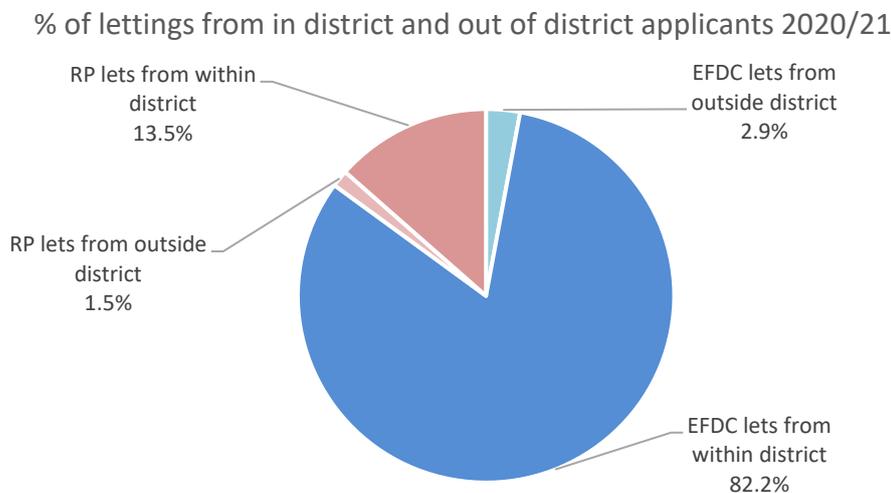


Fig.9

Number of properties let via CBL by property type in 2020/21

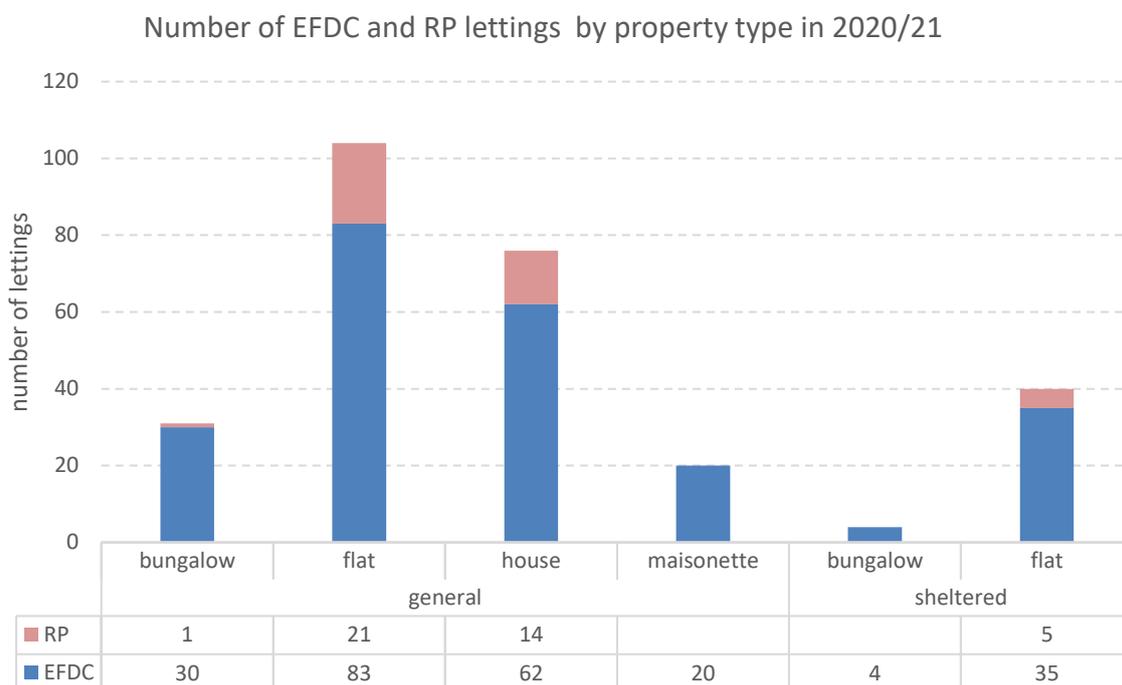


Fig.10

Most properties that were let via CBL in 2020/21 were flats, followed by houses then bungalows.

Invariably sheltered housing properties are flats in purpose-built schemes designed for older people, although the Council does have some individual properties (usually bungalows) that are linked to neighbouring sheltered schemes.

Percentage of EFDC and RP new - build lets compared with re-lets in 2020/21

The graph below compares lettings of new-build Council and RP housing with the re-letting of existing Council and RP stock.

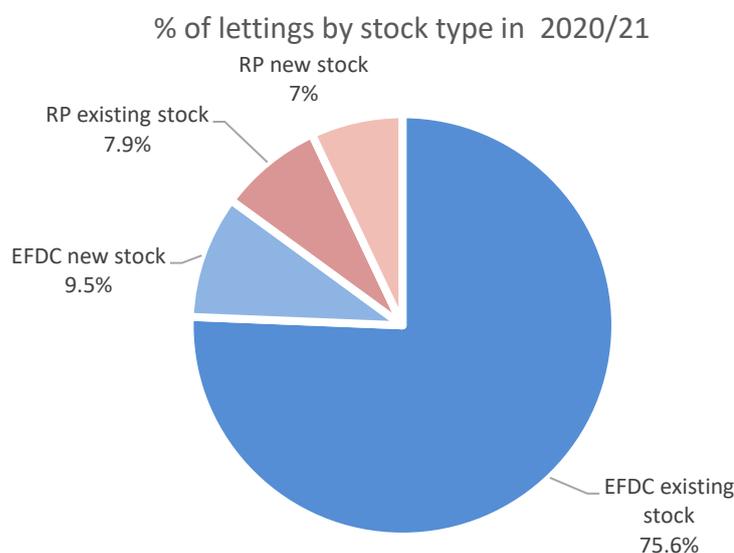


Fig.11

Members of the Armed Forces or their bereaved partners

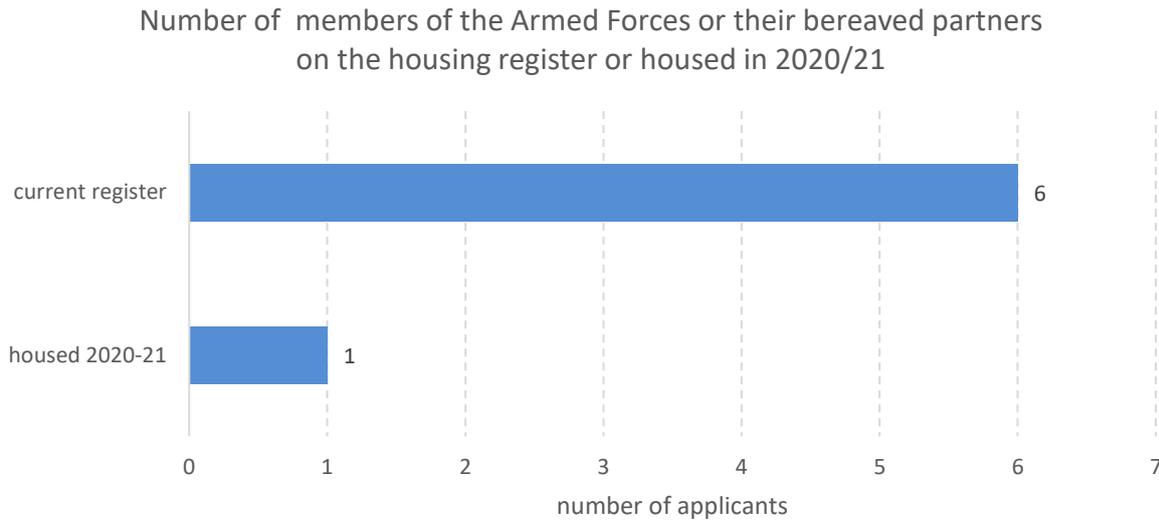


Fig. 12

Members of the Armed Forces and former members of the Armed Forces, or their bereaved partners are given specific consideration and priority is awarded based on their circumstances in relation to their service.

Number of mutual exchanges by year between 2016/17 and 2020/21

Year	Total	Intra- district	Inter - district
2020/21	69	59	10
2019/20	74	63	11
2018/19	96	82	14
2017/18	92	82	10
2016/17	75	63	12

Fig.13

The vast majority of mutual exchanges over the last five years have been between tenants who already live in the district.

Number of Right to Buy Sales by year between 2016/17 and 2020/21

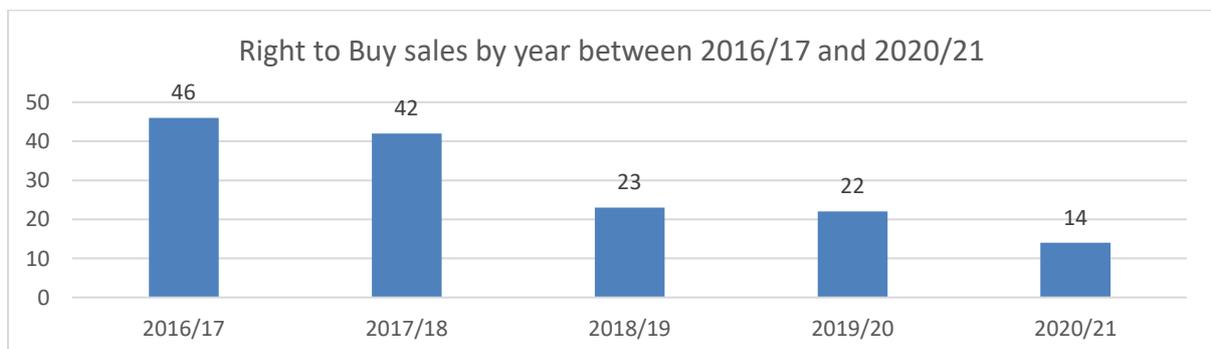


Fig. 14

There has been a steady reduction in the number of RTB sales per annum since 2016/17.

Ethnic profile of households who moved via CBL in 2020/21 compared with the ethnic profile of the general EFDC population as recorded in the 2011 Census

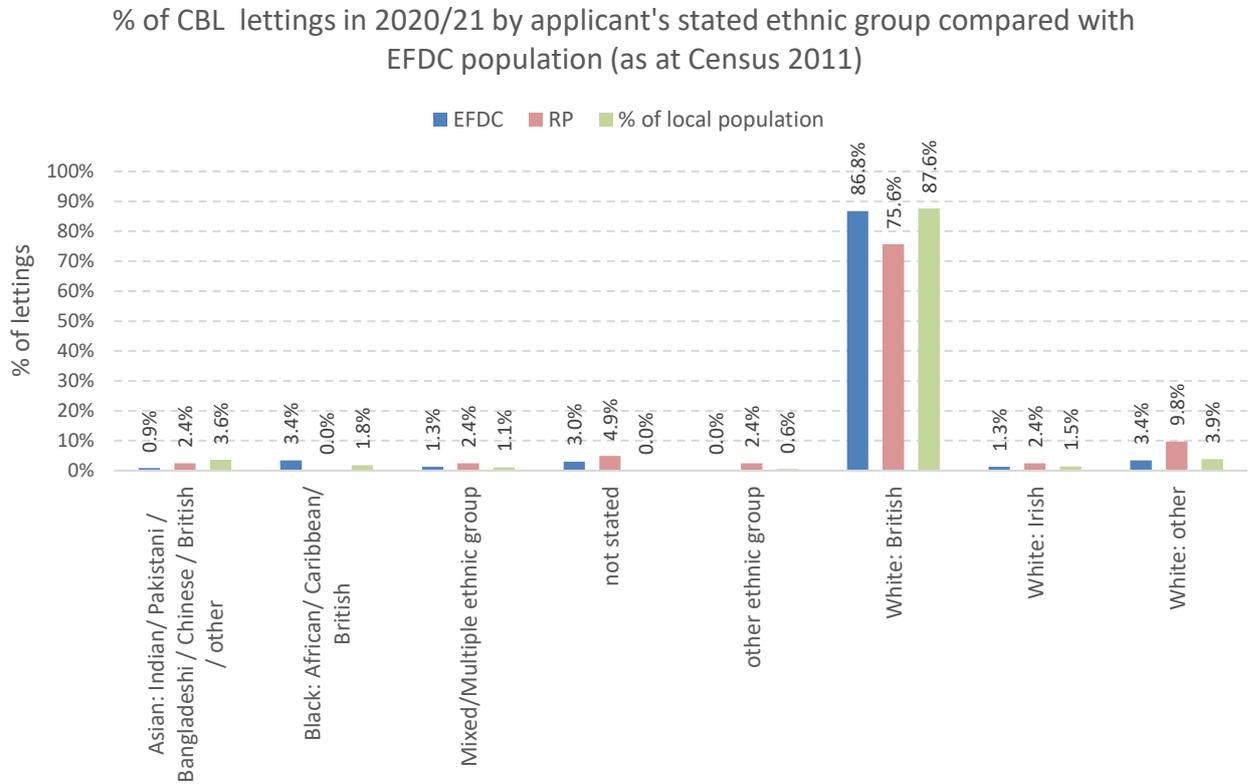


Fig.15

The ethnic profiling data comparison may not be robust enough to draw firm conclusions as the comparison is between current information for people who moved via CBL with 2011 Census statistics for the general population of EFDC.

More meaningful analysis can be undertaken once the 2021 Census data is published.

Applicants on the housing register by year between 2016/17 and 2020/21

This is a snapshot per annum as at 1 April of the total number of active applicants on the housing register between 2016/17 and 2020/21.

Year	Total Active Applicants
2020/21	1,555
2019/20	1,291
2018/19	1,494
2017/18	1,376
2016/17	1,353

Fig.16

Applicants on the housing register by band as at 1 April 2021

The chart below gives a snapshot as at 1 April 2021 of the number of home seekers in each band waiting to move, by the size of property that they require.

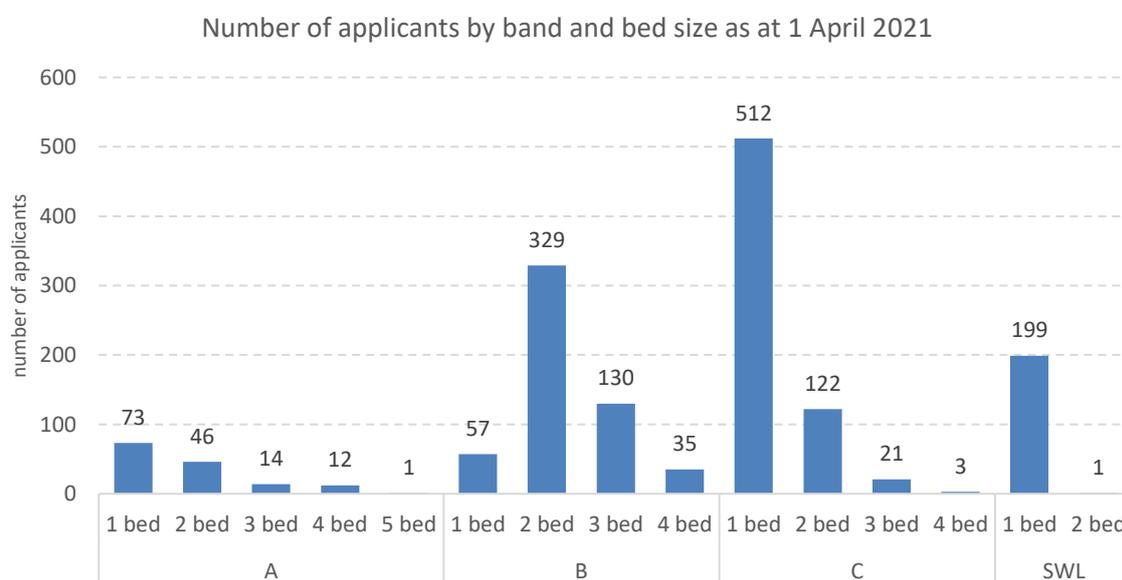


Fig. 17

There were 146 applicants in band A, 551 applicants in band B and 658 applicants in band C. An additional 200 applicants were on the Supplementary Waiting List.

The demand from band A applicants is mainly for 1 bed properties. The overwhelming demand from band B applicants is for 2-bed family sized accommodation.

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June 2021

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PRIORITY BANDS

Priority Bands shall be based on the following assessed needs

BAND A

	Band A – Emergency Need	Proposal
i	Any member of the Armed Forces, or former Service personnel, or serving or former members of the Reserve Forces who joins the Council's housing register, where they are assessed by the Council's Medical Advisor as suffering from a serious injury, illness or disability which is wholly or partly attributable to their service, where the application is made within 5 years of discharge are given priority above all other applicants within Band A.	No change
ii	Bereaved spouses or civil partners of those serving in the Regular Forces where the bereaved spouse or civil partner has recently ceased, or will cease to be entitled, to reside in Ministry of Defence accommodation following the death of their spouse or civil partner and the death was wholly or partly attributable to their service.	No change
iii	Applicants with an assessed need to move on emergency medical grounds or emergency grounds relating to disability.	Change "urgent "
iv	Applicants with an assessed need to move on emergency welfare grounds.	Change "urgent "
v	On the recommendation of the Council's Medical Advisor applicants with specific accommodation requirements will be given priority for suitable properties as they become available above other applicants in the Band (e.g. adapted or ground floor properties etc) regardless of the date they joined the Band.	Replace
	Home-seekers with mobility problems will be given priority for ground floor flats and bungalows above other home-seekers in this Band [with the exception of Band A (i)], regardless of their waiting time, on recommendation of the Council's Medical Advisor.	
vi	Applicants with a Council or housing association tenancy in the District wanting to move to accommodation with fewer bedrooms than the property they currently occupy.	No change

BAND B

	Band B – Urgent Need	Proposal
i	Applicants occupying insanitary or overcrowded housing which poses a serious health hazard, or otherwise living in unsatisfactory conditions (in accordance with housing legislation)* but not as a result of the introduction of a further household.	Change of Band from Band A

	Band B – Urgent Need	Proposal
ii	Applicants with an assessed need to move on urgent medical grounds or urgent grounds relating to disability including learning disabilities	New
iii	Applicants with an assessed need to move on urgent welfare grounds.	New
iv	Applicants needing two or more additional bedrooms compared to their current accommodation.	Change of Band from Band A
v	Applicants who can demonstrate they would otherwise be one household, but are having to live apart from other members of their household because of a lack of accommodation, which would lead to statutory overcrowding if they occupied accommodation available to them individually but not for other personal reasons (i.e. family disputes).	No change
vi	Applicants with an assessed need to move to a particular locality within the District where failure to meet that need would cause hardship to themselves or to others.	No change
vii	Applicants who have an agreed fostering or adoption agreement in place with Essex County Council, who need to move to a larger home in order to accommodate a looked after child. Special guardians, holders of a residence order, and family and friend carers who are not foster carers but who have taken on the care of a child because the parents are unable to provide care shall also be included in this category.	New
viii	Applicants accepted by the Council as being statutorily homeless and owed the main housing duty under section 193 of the Housing Act 1996 (as amended).	New
ix	Existing tenants living in sheltered accommodation, who are wishing to move to alternative sheltered accommodation within their own scheme or to another sheltered scheme within the District (including sheltered bungalows).	Change: include “bungalows”
x	Existing tenants of the Council aged over 60 years, living in 1-bedroom Council accommodation wishing to move to sheltered accommodation regardless of their need (including sheltered bungalows).	Change include “bungalows”
xi	<p>living in 2 or 3 bedroom flatted accommodation (including maisonettes) who meet the Local Eligibility Criteria under Paragraph 14 of the Scheme (apart from the Housing Need element), making expressions of interest for</p> <p>houses that meet with their housing need, with their registration date being the tenancy commencement date of their current property.</p>	Delete

BAND C

	Band C – Moderate Need	Proposal
i	Any member of the Armed Forces or former Service personnel or serving or former members of the Reserve Forces who have no housing need, and the application is made within 5 years of discharge.	No change
ii	Spouses and children (including step-children) of existing and former Armed Forces personnel (where the application is made within 5 years of discharge) seeking accommodation in their own right, provided that one of their family members (as defined by Section 113 of the Housing Act 1985) has lived within the District for at least 3 years immediately prior to the date of application.	No change
iii	Applicants with an assessed need to move on moderate medical grounds or moderate grounds relating to disability.	No change
iv	Applicants with an assessed need to move on moderate welfare grounds.	No change
v	Applicants needing one additional bedroom compared to their current accommodation.	Change from Band B
vi	Applicants defined as a household, who are sharing accommodation with another household for a minimum of 2 years, which is resulting in a lack of at least one bedroom.	Change of Band from Band B
vii	Applicants with an assessed need to move to be nearer to their place of work or to take up an offer of permanent employment or an apprenticeship (in accordance with Paragraph 14.3 (f) of this Housing Allocations Scheme).	No change
viii	Applicants placed in interim accommodation by the Council awaiting their homelessness decision under S.184 of the Housing Act 1996 as amended.	No change
ix	Applicants to whom the Council does not owe a full homelessness duty, where there is a requirement under Part 7 of the Housing Act 1996 as amended to afford reasonable preference on the ground of homelessness.	No change
x	Applicants who are entitled to a reasonable preference under Part 6 of the Housing Act 1996 as amended and can demonstrate an exceptional need to either leave their current local authority's area or move to the Epping Forest District.	No change

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Schedule of payments for downsizing

Vacates	Needs	Wants	Incentive
2- bed	1-bed	1bed	£1,000
3 - bed	1-bed	2-bed	£500
3-bed	2-bed	2-bed	£1,000
4 – bed	1- bed	2-bed	£2,000
4-bed	2-bed	3-bed	£1,000
4-bed	3-bed	3-bed	£1,000
Any GN (inc.1 bed)	1-bed	1-bed sheltered	amount per room + bonus £1,000

Janice Nuth

26.01.21

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Allocations Scheme 2022-2027

Equality Impact Assessment

1. Under s.149 of the Equality Act 2010, when making decisions, Epping District Council must have regard to the Public Sector Equality Duty, i.e. have due regard to:
 - eliminating unlawful discrimination, harassment and victimisation, and other conduct prohibited by the Act,
 - advancing equality of opportunity between people who share a protected characteristic and those who do not,
 - fostering good relations between people who share a protected characteristic and those who do not, including tackling prejudice and promoting understanding.
2. The characteristics protected by the Equality Act are:
 - age
 - disability
 - gender
 - gender reassignment
 - marriage/civil partnership
 - pregnancy/maternity
 - race
 - religion/belief
 - sexual orientation.
3. In addition to the above protected characteristics you should consider the cross-cutting elements of the proposed policy, namely the social, economic and environmental impact (including rurality) as part of this assessment. These cross-cutting elements are not a characteristic protected by law but are regarded as good practice to include.
4. The Equality Impact Assessment (EqIA) document should be used as a tool to test and analyse the nature and impact of either what we do or are planning to do in the future. It can be used flexibly for reviewing existing arrangements but in particular should enable identification where further consultation, engagement and data is required.
5. Use the questions in this document to record your findings. This should include the nature and extent of the impact on those likely to be affected by the proposed policy or change.
6. Where this EqIA relates to a continuing project, it must be reviewed and updated at each stage of the decision.
7. **All Cabinet, Council, and Portfolio Holder reports must be accompanied by an EqIA.** An EqIA should also be completed/reviewed at key stages of projects.
8. To assist you in completing this report, please ensure you read the guidance notes in the Equality Analysis Toolkit and refer to the following Factsheets:
 - Factsheet 1: Equality Profile of the Epping Forest District
 - Factsheet 2: Sources of information about equality protected characteristics
 - Factsheet 3: Glossary of equality related terms
 - Factsheet 4: Common misunderstandings about the Equality Duty
 - Factsheet 5: Frequently asked questions
 - Factsheet 6: Reporting equality analysis to a committee or other decision-making body

Section 1: Identifying details
Your function, service area and team: Housing Strategy Manager Communities and Wellbeing
If you are submitting this EqIA on behalf of another function, service area or team, specify the originating function, service area or team:
Title of policy or decision: Allocations Scheme 2022-2027
Officer completing the EqIA: Janice Nuth Tel: 01992 564 000 Email: Jnuth@eppingforestdc.gov.uk
Date of completing the assessment: 22.02.2022

Section 2: Policy to be analyzed	
2.1	Is this a new policy (or decision) or a change to an existing policy, practice or project? This is a review and update of the existing Housing Allocations Scheme for the period 2022 -2027.
2.2	Describe the main aims, objectives and purpose of the policy (or decision): The purpose of the Housing Allocations Scheme is to determine the priorities and procedures to be followed when allocating social housing within the District between 2022 -2027. What outcome(s) are you hoping to achieve (i.e. decommissioning or commissioning a service)? The intended outcome of the Allocations Strategy 2022-2027 is to ensure everyone has and is seen to have fair transparent access to social housing in the district; that accords with our statutory and regulatory duties as a Local Housing Authority, and makes the best use of housing stock to meet the needs of our residents.
2.3	Does or will the policy or decision affect: <ul style="list-style-type: none"> • service users • employees • the wider community or groups of people, particularly where there are areas of known inequalities? The scheme affects residents and other registered providers of housing, community groups, statutory agencies and organizations with an interest in social housing in the district. Will the policy or decision influence how organizations operate? The policy will influence how organizations operate.
2.4	Will the policy or decision involve substantial changes in resources? The scheme will not involve substantial changes in resources.
2.5	Is this policy or decision associated with any of the Council's other policies and how, if applicable, does the proposed policy support corporate outcomes? The Allocations Scheme is linked to: <ul style="list-style-type: none"> • Epping Forest District Council Corporate Strategy 2018-2023

- The Social Recovery Map for Epping Forest District
- The Homelessness and Rough Sleeping Strategy 2022-2027 (draft)
- The Tenancy Policy 2022-2027 (draft)
- The Overarching Housing Strategy 2022-2027 (draft)
- Levelling Up Essex – An Essex White Paper 2022
- The Health and Wellbeing Strategy 2018-2028 (which is due to be refreshed in 2022)
- The Essex County Council Housing Strategy 2021-2025
- The Local Plan
- The More than Bricks and Mortar Estate Improvement Program 2020

The Scheme supports the following Corporate outcomes:

- People live longer, healthier and independent lives
- Adults and children are supported in times of need
- People and communities achieve their full potential
- Delivering effective core services that people want
- Improving the districts Housing offer

Section 3: Evidence/data about the user population and consultation¹

As a minimum you must consider what is known about the population likely to be affected which will support your understanding of the impact of the policy, e.g. service uptake/usage, customer satisfaction surveys, staffing data, performance data, research information (national, regional and local data sources).

3.1	<p>What does the information tell you about those groups identified?</p> <p>The evidence to support the Council's understanding of the impact of the Strategy is based on:</p> <ul style="list-style-type: none"> • profiling information that is routinely gathered for people who apply to join the Housing Register and are allocated social housing in the district including mandatory statistical returns such as HClic, and Core • profiling information that is routinely gathered for people who approach the Council for assistance to prevent or relieve homelessness • government and industry publications about the characteristics of those households most in need of affordable housing, including those to whom a reasonable preference must be given to join the waiting list and/or are homeless or at risk of homelessness • The Epping Forest Social Housing Annual Lettings Report 2020/21 • The Review of Homelessness and Rough Sleeping 2020/21(draft)
3.2	<p>Have you consulted or involved those groups that are likely to be affected by the policy or decision you want to implement? If so, what were their views and how have their views influenced your decision?</p> <p>Yes, open consultation was carried out in two phases with the following groups:</p> <ul style="list-style-type: none"> • Residents • The Tenant and Leaseholders Panel • Registered providers of social housing in the district • The clerks to the town councils and parish councils in the district • The Community Safety Partnership and other statutory services • Community groups including the Faith Covenant • Essex County Council and the district, borough and city councils in Essex • Third sector partners with an active interest in Housing in the district • All elected Members of the Council and Council staff <p>Phase 1 consultation sought views on the circumstances or reasons qualifying applicants should be awarded 'Emergency Need' i.e. priority Band A, 'Urgent Need' i.e. priority Band B or Moderate Need' i.e. priority Band C for social housing.</p> <p>The report on the outcome of the phase 1 consultation is available on the Council's website.</p> <p>This information was considered in conjunction with legislation, regulatory guidance on housing allocations, the Corporate Strategy and management information including the Social Housing Annual Report 2020/21 and the draft Review of Homelessness and Rough Sleeping 2020/21 to produce a draft Allocations Scheme, along with a draft Tenancy Policy and a draft Homelessness and Rough Sleeping Strategy.</p>

	<p>Phase 2 consultation sought views on a range of proposed major changes and minor changes to the existing scheme (which covered the period 2018 – 2022) that were highlighted in the draft scheme.</p> <p>The report of the outcome of the phase 2 consultation is currently in draft form and will be published alongside this Equalities Impact Assessment subject to approval by Stronger Communities Select Committee and Cabinet in March 2022.</p>
3.3	<p>If you have not consulted or engaged with communities that are likely to be affected by the policy or decision, give details about when you intend to carry out consultation or provide reasons for why you feel this is not necessary:</p>

Section 4: Impact of policy or decision

Use this section to assess any potential impact on equality groups based on what you now know.

The proposals included in the draft Allocations Scheme for 2022-2027 includes five major changes and eleven minor changes to the existing scheme.

In summary the proposed major changes are:

- Increasing the two medical priority bands to three
- Improving the incentives for under-occupiers to downsize
- Awarding homeless households to whom the Council has a main housing duty Band B and the opportunity to bid on properties advertised through choice-based lettings
- Introducing the ability to consider local lettings plans in exceptional circumstances to promote mixed communities
- Replace the 7-year disqualification rule for serious unacceptable behavior or rent arrears with a risk-based assessment on a case by case basis

The proposed major changes along with the eleven minor changes are listed in greater detail in the Reports to 1 March 2022 Stronger Communities Select Committee and the 7 March 2022 Cabinet on the Review of the Housing Allocations Scheme.

Description of impact	Nature of impact Positive, neutral, adverse (explain why)	Extent of impact Low, medium, high (use L, M or H)
Age	<p>Positive – The opportunity to downsize to a property with a spare bedroom is likely to apply to older tenants as their families move away. A smaller property helps to counteract fuel poverty and restricted mobility, more prevalent as people get older; and a spare bedroom promotes wellbeing and family life. The additional financial incentive to move to sheltered accommodation.</p> <p>Releasing family sized homes in turn reduces the time that families typically with young children in urgent need of rehousing have to remain living in unsuitable accommodation.</p>	H
Disability	<p>Positive – The increase from two medical priority bands to three to account for those long-term disabilities or illnesses that mean an applicant has an urgent need for moving, that is greater than a moderate need but is not an emergency.</p> <p>Although there is a wide variation a disproportionate number of applicants with learning disabilities, physical disabilities or a</p>	H

	<p>history of mental illness, are more likely to be on a low income, face longer periods of unemployment and/or have experience clinically defined crisis which may have affected their ability to manage a tenancy.</p> <p>The risk-based approach to a history of serious unacceptable behavior or rent arrears takes account of the cause of the behavior or arrears and support mechanisms for the applicant including mental and physical health problems.</p>	
Gender	<p>Positive – Women are more likely to be victims of domestic abuse including financial abuse, and the risk- based approach to a history of serious unacceptable behavior or rent arrears takes account of financial abuse.</p> <p>Women with dependent children make up the largest cohort of households in temporary accommodation. The ability to bid for suitable available accommodation and removing the restriction for flatted accommodation with a view to re-applying for a house at a later date promotes equitable choice, independence and stability.</p>	
Gender reassignment	<p>Neutral – There is limited data to evaluate the impact of the Scheme on people with this defined characteristic.</p>	L
Marriage/civil partnership	<p>Positive – The minor change redefining the term ‘Household’ removes the two-year requirement with who would reasonably be considered part of a household which would include blended families though marriage /civil partnership.</p>	H
Pregnancy/maternity	<p>Positive – Women who are pregnant or have a child under 12 months in temporary accommodation can exercise increased choice over where their offer of settled accommodation may be.</p>	M
Race	<p>Positive – People from minority ethnic backgrounds are more likely to be in low income jobs and make up a disproportionate number of key workers in the health and care services. A fair transparent Allocations scheme which includes the option to introduce local lettings plans to promote cohesion in exceptional circumstances is likely to have a positive impact on people with this protected characteristic.</p>	M
Religion/belief	<p>Positive – some belief systems emphasize the role of extended family members in the</p>	H

	provision of support and care for elderly, vulnerable or young relatives in times of need. The ability to downsize but keep a spare bedroom can support this.	
Sexual orientation	Neutral – There is limited data to evaluate the impact of the scheme on people with this defined characteristic.	L

Section 5: Conclusion			
		Tick Yes/No as appropriate	
5.1	Does the EqIA in Section 4 indicate that the policy or decision would have a medium or high adverse impact on one or more equality groups?	No <input type="checkbox"/>	No
			If ' YES ', use the action plan at Section 6 to describe the adverse impacts and what mitigating actions you could put in place.

Section 6: Action plan to address and monitor adverse impacts

What are the potential adverse impacts?	What are the mitigating actions?	Date they will be achieved.

Section 7: Sign off I confirm that this initial analysis has been completed appropriately. (A typed signature is sufficient.)	
Signature of Head of Service: 	Date: 23.02.22
Signature of person completing the EqIA: Janice Nuth	Date: 22.02.22

Advice

Keep your director informed of all equality & diversity issues. We recommend that you forward a copy of every EqIA you undertake to the director responsible for the service area. Retain a copy of this EqIA for your records. If this EqIA relates to a continuing project, ensure this document is kept under review and updated, e.g. after a consultation has been undertaken.

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Report to the Cabinet

Report reference: C-048-2021/22

Date of meeting: 7th March 2022



**Epping Forest
District Council**

Portfolio: Housing Services – Cllr H Whitbread

Subject: Review of the Homelessness and Rough Sleeping Strategy 2022 - 2027

Responsible Officer: Jennifer Gould Director of Communities and Wellbeing (01992 564073)

Democratic Services: Adrian Hendry (01992 564246).

Recommendations/decisions required:

- (1) That Cabinet considers and agrees the five proposed priorities and associated themes within the draft Homelessness and Rough Sleeping Strategy 2022 – 2027 at Appendix 1.**
- (2) That Cabinet considers the findings and approves the publication of the Homelessness and Rough Sleeping Review 2020/21 at Appendix 2.**
- (3) That Cabinet considers the findings and approves the publication of the Homelessness and Rough Sleeping Stage 2 Consultation Report at Appendix 3.**
- (4) That Cabinet delegates authority to the Portfolio Holder for Housing Services to consider and approve the annual update of the Homelessness and Rough Sleeping Strategy Action Plan.**
- (5) That the Homelessness and Rough Sleeping Strategy for 2022-2027 is reviewed no later than 5 years after the date of publication.**

Executive summary:

Cabinet is being asked to accept the recommendations set out in this report and approve the draft Homelessness and Rough Sleeping Strategy for 2022 - 2027 (the Strategy) and the evidence base that supports the Strategy including the Homelessness and Rough Sleeping review (the Review) and the Stage 2 Consultation Report. (the Consultation report).

The current strategy was published in August 2018 and is due for renewal in April 2022 as is the Housing Allocations Scheme, the Tenancy Policy and the overarching Housing Strategy .

A review of all four strategies and policies commenced in May 2021 the draft Strategy is being presented to Cabinet along with the draft Allocations Scheme and draft Tenancy Policy for the same 5-year period.

The issue is a key decision.

The review of the overarching Housing Strategy is due to be presented to Cabinet in July 2022.

Reasons for proposed decision:

To enable the Council to publish the Homelessness and Rough Sleeping Strategy 2022 - 2027, along with the review and the consultation report.

Other options for action:

- (i) Not to agree the recommendations for the Homelessness and Rough Sleeping Strategy 2022-2027
- (ii) To make alternative recommendations for the Homelessness and Rough Sleeping Strategy 2022-2027 (subject to further consultation where appropriate).
- (iii) Not to approve the publication of the Homelessness and Rough Sleeping Review
- (iv) Not to approve the publication of the Public Consultation Outcome Report

Report:

1. Under section 1(3), (4) of the Homelessness Act 2002, local authorities have a duty to review and publish their Homelessness and Rough Sleeping Strategy on at least a 5-yearly basis.
2. The current Homelessness and Rough Sleeping Strategy was published in 2018. It set out the achievements since 2015/16, incorporated the needs and demands on the service and an action plan to address these needs.
3. The review identified:
 - Achievements and outcomes to date
 - Causes of homelessness
 - Profile of applicants
 - Current demand
 - Current supply
 - Pipeline supply
 - Anticipated demand
 - Shortfall / resources

Style and format of the Strategy for 2022-2027

The current strategy is a text rich document over 52 pages covering detailed requirements of the Homelessness Reduction Act 2017 as it had just been introduced at the time of publication and was therefore relevant to that document.

It is recommended that the Strategy for 2022-2027 is a streamlined accessibility compliant publication and that the associated policy and procedure for preventing and relieving homelessness and rough sleeping are produced as separate stand-alone documents.

Synergy with the overarching Housing Strategy 2022-2027

The critical part of the Strategy will be the associated action plan, which sets out how the objectives and intended outcomes will be delivered and measured via SMART targets.

If a consistent approach is taken to the formulation of the overarching Housing Strategy (which is due to be presented at July Cabinet subject to Stronger Communities Select Committee approval) the proposed objectives and outcomes contained therein can be delivered and measured in the same way.

The action plans can then create the cascade from the Corporate Plan, Community Safety Strategy, Health and Wellbeing Strategy and Local plan - with coordinated links to associated Housing and Property and Community and Wellbeing strategies and policies - to feed into service plans, team plans and individual one-to ones.

Priorities and themes

It is recommended that the draft Strategy is presented as a set of 5 strategic priorities and associated themes framed within the national context, the local context, and Epping Forest District Council's Corporate Objectives. Each priority and theme will have a corresponding set of outcomes and targets.

The five proposed priorities and themes are:

Priority 1 Working Together

Theme: Make every contact count

Priority 2 Preventing Homelessness

Theme: Early intervention

Priority 3 Building Resilience

Theme: Positive mental health, positive activities, positive community

Priority 4 Access to Suitable Accommodation and Support

Theme: More than bricks and mortar

Priority 5 Ending Rough Sleeping

Theme: Proportionate prevention, intervention and recovery

Priority 1: Working together

This will focus on making every contact count, multi-agency interventions and referrals, maximising the take-up of a range of services aimed at levelling up, maximising opportunities for grant funding and partnership bids, pooling resource and training, skills shortages and employment opportunities.

Priority 2: Preventing homelessness

This will focus on the importance of early intervention, access to information and advice, digital inclusion, communities supporting mental health, landlord incentives, education, mediation and money advice, holistic services for people leaving institutions, and raising awareness of homelessness in schools and colleges.

Priority 3: Building resilience

This will focus on positive mental health, positive activities and positive community. Developing a strong resilient and motivated workforce. Launching the 'Say Something' campaign for staff to be confident both about raising safeguarding concerns and talking about their wellbeing and career progression with their managers. Personal Housing Plans will be developed further to incorporate opportunities to engage in community initiatives, to assist homeless households or those threatened with homelessness to achieve their goals improve their overall life-chances and reduce the stigma of homelessness.

Priority 4: Access to suitable housing and support

This will support the Council's More than Bricks and Mortar campaign, and the role of the home as a place of safety - by making the best use of housing including adaptations, temporary accommodation, the private rented sector, the housing register, supported housing and affordable home ownership.

The focus on support will include accessing the right statutory and voluntary help at the right time. We will pursue Domestic Abuse Housing Alliance (DAHA) accreditation, and work collaboratively with Social Care and Health Care to promote independence - so that residents can access appropriate timely interventions to avoid or recover from crisis whilst remaining in their own home. We will also encourage multi-agency working to enable people to move both in to and out of supported housing when they are ready to do so.

Priority 5: Ending rough sleeping

This will include learning from lived experiences, and continuing to actively support and benefit from the strong working relationships across the County such as the Essex Rough Sleeper partnerships, pursuing joint funding initiatives such as mental health and substance misuse navigators, building on the success of the recently developed Houses in Multiple Occupation to accommodate people who had been sleeping rough or at risk of sleeping rough, and expanding the outreach service to former rough sleepers.

Resource implications:

The Strategy includes an action plan that is being produced in collaboration with named partner organisations listed at Appendix 2. They have all given an undertaking in principle to jointly own responsibility for driving the Strategy and achieving the agreed outcomes, including appropriate joint bid submissions for grant funding as it becomes available.

Delivery shall be managed within existing staff resources across the Community and Wellbeing Directorate and progress will be tracked by the Housing Strategy Team

Legal and governance Implications:

The draft Review and the draft Strategy enable the Council to fulfil its duties under the Homelessness Act 2002: to have in place a homelessness strategy based on a review of all forms of homelessness in the district, and to renew the strategy at least every 5 years.

The Homelessness and Rough Sleeping Strategy 2018-2022 addressed the significant reforms that were introduced by the Homelessness Reduction Act 2017. This placed duties on local authorities to intervene at an earlier stage to prevent homelessness in their areas and provide relief services to all those affected (not just those who have 'priority need'). The draft Review provides evidence of how the Council is currently performing in this regard.

The draft Review and draft Strategy comply with the statutory Homelessness Code of Guidance for Local Authorities February 2018 as amended.

The draft Strategy incorporates the requirements of the Domestic Abuse Act 2021 which amends Part 7 of the 1996 Act to strengthen the support available to victims of domestic abuse, extends priority need to all eligible victims of domestic abuse who are homeless as a result of being a victim of domestic abuse, and brings in a new definition of domestic

abuse which local housing authorities must follow to assess whether an applicant is homeless as a result of being a victim of domestic abuse.

The draft Strategy is consistent with the proposals being submitted to Cabinet in respect of the draft Allocations Scheme 2022 – 2027 and the draft Tenancy Policy 2022 -2027.

Legal Services have reviewed the draft report and have no suggested amendments.

Safer, cleaner and greener implications:

Climate change is expected to disproportionately affect those in more vulnerable positions such as the homeless. This is because they are generally less able to protect themselves from the effects of climate change expected in the area, which are more extreme temperatures, flooding and drought.

The development of the homelessness Strategy will therefore help to protect against the societal effects that climate change will have.

Consultation undertaken:

The recommendations within this review have all been subject to a comprehensive 2-stage public consultation exercise which included; bite-size briefings, webinars, workshops, surveys, on-line questionnaires, small meetings and one to one conversation.

In total 325 people were directly invited to participate in both stages of the consultation including:

- Council tenants, leaseholders and residents
- Partner agencies and community groups with an interest in housing
- Private registered providers of social housing
- EFDC staff and other statutory services
- Members of the Council
- Clerks of parish and town councils to forward to their respective elected members
- District, borough and city councils in the county

Risk management:

A number of significant risks are associated with the review of the Homelessness and Rough Sleeping Strategy including :

Disregarding the requirement to review the Strategy within the timescales and parameters set out in the statutory guidance may attract a reputational damage, and/or a penalty for non-compliance.

Responding to stakeholder consultation feedback mitigates the risks of dissatisfaction and failure demand.

Disregarding the requirements of or findings of an equalities impact assessment risks the provision of an unequitable housing service which may disproportionately affect vulnerable residents and those with protected characteristics.

Background papers:

Appendix 1 Draft Homelessness and Rough Sleeping Strategy 2022-2027

Appendix 2 Draft Homelessness and Rough Sleeping Review 2020/21

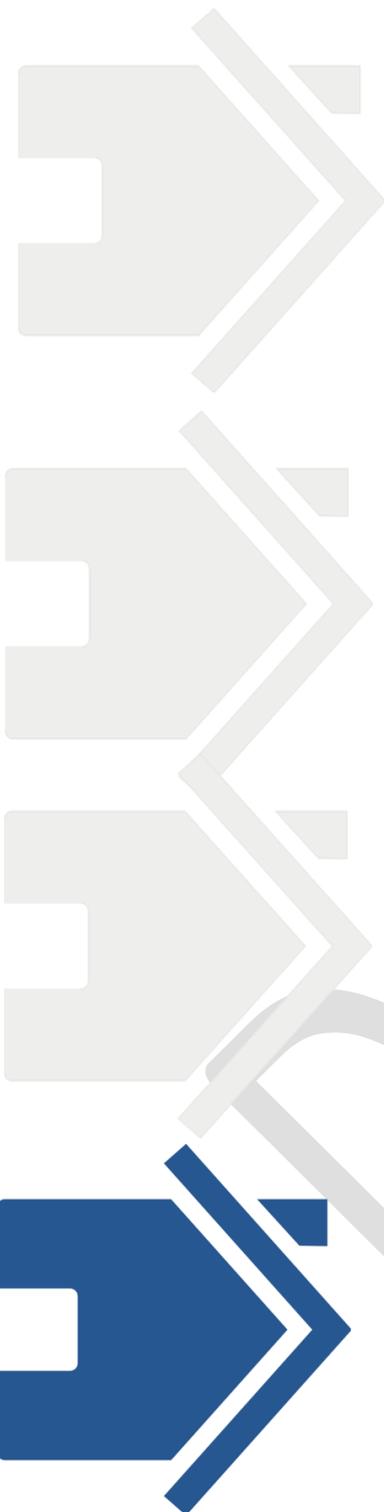
Appendix 3 The Big 4 Stage 1 Consultation Findings

Appendix 4 Homelessness and Rough Sleeping Stage 2 Consultation Findings

Appendix 5 Equality Impact Assessment



HOMELESSNESS AND ROUGH SLEEPING STRATEGY
Draft **2022- 2027**



**If you would like this document in a more
accessible format, then please contact:**

The Housing Strategy Team
Housingstrategy@eppingforest.dc.gov.uk
Telephone 01992 564 214
or at the Civic Office
323 High Street
Epping
CM16 4BZ

DRAFT

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FORWARD

To be provided by Holly Whitbread

INTRODUCTION

Under section 1(3), (4) of the Homelessness Act 2002, local housing authorities have a duty to review and publish their Homelessness Strategy on at least a 5-yearly basis.

The purpose of this Homelessness and Rough Sleeping Strategy (the Strategy) is to set out the plans that Epping Forest District Council (the Council) has agreed with its partners to prevent and relieve homelessness in the District between 2022-2027.

The Strategy takes into account new legislation and guidance and is based on a review of Homelessness and Rough Sleeping in the District and the open consultation with residents and organisations with an interest in homelessness and rough sleeping; both of which have been published alongside this document.

The national context

Major changes have been introduced in recent years to the duties that local housing authorities have towards families and single people who are homeless or at risk of homelessness. The Homelessness Reduction Act 2017 which came into effect in 2018, and the associated Homelessness Code of Guidance for Local Authorities 2018 (as amended) are considered to be the most significant changes to primary homelessness legislation and guidance since 1985.

In August 2018, The Ministry for Housing Communities and Local Government (MHCLG) (now Department for Levelling Up Housing and Communities (DLUHC)) published its national Rough Sleeping Strategy.

There continues to be a range of homelessness related legislative and regulatory directives initiatives and funding opportunities to prevent and reduce homelessness. Most recently; the Prime Minister's 2019 pledge to end rough sleeping, the Coronavirus Act 2020 (as amended) which placed temporary restrictions on the residential possession processes, the Domestic Abuse Act 2021 which strengthens the support for victims of abuse, and the Levelling Up White Paper 2022 which aims to spread opportunity more equally across the UK.

The local context

The District of Epping Forest (the District) is one of 12 district, borough and city local housing authorities in the County of Essex. It is classified statistically as urban with significant rural populations, covering an area of approximately 339 square kilometres. In 2018 the resident population was estimated to be 131,137 people.

The District is the ninth (out of 12) most densely populated district in Essex, well below the County average. It is divided into 24 town and parish councils. These are mainly rural and sparsely populated in the north and east, and more densely populated in the south (which borders the London boroughs of Enfield Waltham Forest Redbridge and Havering).

The majority of residents live across four suburban settlements; in Loughton, Waltham Abbey, Epping and Buckhurst Hill.

Index of multiple deprivation

The Index of Multiple Deprivation (IMD) ranks areas in relation to six indices; income, employment, health, education, crime, barriers to housing and services, and the environment. In 2019 the District was ranked 200 out of 317 lower tier authorities in England (1 being the most deprived) and its ranking has improved gradually to its highest level since 2007. This belies the contrast of mainly affluent geographical areas with several pockets of significant deprivation.

The District is split into 78 neighbourhoods known as 'Lower Super Output Areas'. In 2019 a total of 17 neighbourhoods were ranked in the top 20% (least deprived) areas nationally, 5 neighbourhoods were ranked in the bottom 30% (most deprived areas) 1 of which was ranked in the bottom 20%.

Housing supply and demand

The demand for affordable housing in the District far outweighs the supply across all tenure types. In 2017 there was an estimated 55,630 homes in the District with around 85% in the private sector of which about 70% were owner occupied and 15% private rented.

Social housing accounts for approximately 14% of accommodation in the District. The Council is the largest social landlord with 6,384 general needs properties which equates to 11% of all properties whilst Housing Associations own just over 3%.

The Strategic Market Housing Assessment forecasts that 12,573 properties of all tenure types are required to meet demand across the District over the 12-year period 2011- 2033.

The Council plans to build circa 195 homes for affordable housing between 2021/22 and 2025/26. These will be allocated to people on the housing register including homeless households.

Urgent housing need

As at 31 March 2021 there were 1,555 people on the housing register who qualified for social housing. Of these 697 had an urgent need for rehousing.

Between April 2020 and March 2021, a total of 567 households approached the Council for assistance due to homelessness or the threat of homelessness. The Council provided information and advice to 186 households, accepted a duty to prevent or delay 123 households from becoming homeless and provided relief to 258 households who had lost their home (typically offering temporary and support to find alternative accommodation), and accepted a main duty to provide settled accommodation for 96 households.

The effects of Covid 19

The impact of the pandemic has significantly affected the patterns of homelessness and rough sleeping in the District. Government restrictions on possession proceedings, risks to public health through close contact, financial and social hardship, furlough and isolation has seen a reduction in landlord evictions but an increase in domestic abuse, non-violent relationship breakdown and the number of people found to be sleeping rough or at risk of doing so.

The effects have been compounded by supply chain issues which have slowed down much needed housing developments and the volume of properties that would typically become available and ready to let within given timescales.

Links with other strategies and programmes

In order to achieve maximum impact, the Homelessness and Rough Sleeping Strategy 2022-2027 is being aligned with:

- The Social Recovery Map for Epping Forest District
- The Allocations Policy 2022-2027
- The Tenancy Policy 2022-2027
- The overarching Housing Strategy 2022-2027
- Levelling Up Essex – An Essex White Paper 2022
- The Health and Wellbeing Strategy 2018-2028 (which is due to be refreshed in 2022)
- The Essex County Council Housing Strategy 2021-2025
- The Local Plan
- The More than Bricks and Mortar Estate Improvement Programme 2020

THE STRATEGY - AIMS AND OBJECTIVES

The Homelessness and Rough Sleeping Strategy 2022-2027 aims to achieve a whole systems partnership approach to preventing and relieving homelessness and to end rough sleeping in the District, in harmony with the Council's corporate objectives and the Levelling Up agenda.

The Council's key corporate objectives are:

- People live longer, healthier and independent lives
- Adults and children are supported in times of need
- People and communities achieve their full potential
- Delivering effective core services that people want
- Improving the District housing offer

The purpose of the Strategy is to:

- Make a significant contribution to social and economic recovery and social mobility within the District to redress the impact of the pandemic.
- Support the Community and Wellbeing commitment to build strong, resilient, cohesive and healthy communities.
- Extend this commitment to our staff by providing the opportunities and environment to develop their skills, achieve their aspirations and thrive as a strong and motivated workforce.
- Help households that are homeless or at risk of homelessness in the District to access the appropriate support to enable them to live well and achieve their aspirations in suitable good quality affordable housing.
- Strengthen the partnerships and shared services that already exist within the District and create opportunities for new initiatives, partnerships and volunteers to jointly own the Strategy and be responsible for its delivery.

THE FIVE STRATEGIC PRIORITIES

Identifying the priorities

The Strategy is made up of five evidence-based priorities with associated themes and clear measurable outcomes that we aim to achieve over the next five years.

Priority 1 Working Together

Theme: Make every contact count

Priority 2 Preventing Homelessness

Theme: Early intervention

Priority 3 Building Resilience

Theme: Positive mental health, positive activities, positive community

Priority 4 Access to Suitable Accommodation and Support

Theme: More than bricks and mortar

Priority 5 Ending Rough Sleeping

Theme: Proportionate prevention, intervention and recovery

We have identified these priorities, themes and intended outcomes through a review of homelessness and rough sleeping in the District and additional research and analysis in collaboration with members of our community who have an interest in preventing and relieving homelessness.

Open consultation

We completed a 2-stage open consultation exercise between May and December 2021.

On-line consultation was combined with targeted events to enable residents, professional partners, other statutory services, staff and Members of the Council to express their ideas and views on what priorities should be included in the Strategy.

The events included bitesize briefing sessions, detailed workshops, webinars, surveys and smaller meetings; underpinned by a review of local and national statistical data and the lived experiences of homeless households.

We then went back to the same audience to consider and comment on the Councils proposals. comment.

The findings of the Review, and the outcome of the consultation form the evidence base for the Strategy and will be published in two standalone documents subject to Cabinet approval.

For the full list of partnerships and organisations consulted see Appendix 2

The action plan

Together with our key strategic partnerships we have agreed in principle a draft action plan that will include named leads and contributors' year 1 SMART targets relating to each priority (subject to Cabinet approval and final agreement from the contributors).

We will collectively record the progress of the actions, review the outcomes and update the targets on an annual basis for the duration of the Strategy.

PRIORITY 1: WORKING TOGETHER

Theme: Make every contact count

The Strategy has been developed in partnership with local organisations and individuals who are committed to preventing and relieving homelessness and ending rough sleeping in the District.

In addition to the 12 partner organisations that are based at the Epping Community Hub there is also the potential to strengthen collaborative working with over 150 statutory services, community groups, charities and social enterprises and countless individual volunteers to share skills, expertise and resources to make every customer contact count and maximise opportunities to secure funding and develop integrated services and improvements by working together.

Together we will:

Make Every Contact Count

More than half of residents who approach the Council due to homelessness or at risk of homelessness have one or more support needs. The most common issues include a history of mental health problems, physical ill health or disability, domestic abuse and/or substance misuse.

Making every contact count is an approach that uses the day to day interactions between organisations and people to support them with making positive changes to their physical and mental health and wellbeing. We propose to extend the make every contact count principle to become a whole systems approach to homelessness prevention that recognises the interdependencies between housing and the environment, income, vulnerability employment, education and crime in the wider determinants of health for our residents.

We will work with the Health and Wellbeing Board to develop a skilled workforce equipped with the knowledge, and tools to make every contact count in our interactions with residents so that we can offer the right support at the right time.

Review the Duty to Refer

Public authorities such as social service authorities, prison services, emergency departments and hospitals have a duty to refer service users who they consider may be homeless or at risk of homelessness to a local housing authority. Although the duty became effective from October 2018 the quality and number of referrals has increased over the last two years more work can be done with agencies to facilitate appropriate timely referrals. We will review the duty to refer arrangements with statutory and non-statutory services with a view to increasing the number of appropriate early interventions.

Develop a support service with the NHS for people with substance misuse

The link between mental health, substance misuse and homelessness is indisputable both locally and nationally. Not all people who become homeless struggle with their mental health or misuse drugs, alcohol or other substances. However; substance misuse can be both a cause and result of homelessness, and mental illness is often an underlying cause of substance misuse, and therefore homelessness as well. Around 10% of all households that approached the Council for help to prevent or relieve homelessness reported having either drug or alcohol

dependency needs. Public Health England statistics demonstrate that around 42% of people sleeping rough are likely to misuse alcohol and 41% misuse drugs.

Building on the success of the recently appointed mental health navigator we are planning to another joint venture with NHS to secure sufficient funds to recruit a substance misuse navigator to work directly with affected homeless households to help end the cycle of substance misuse, mental health and repeat homelessness.

Maximise opportunities for grant funding and shared resources

Our network of partners span an increasing range of statutory and non-statutory not-for-profit organisations, social enterprises, community interest groups and local businesses.

Much of the innovative partnership work that we do is made possible by successful multi-agency bidding for government and charitable trust grant funding as it becomes available, often at short notice, and we are keen to maximise access to these funds.

Grant funding has enabled us to convert two single dwelling homes into housing with support to end the cycle of rough sleeping, deliver community development projects at our temporary accommodation scheme, and co-locate the NHS Mental Health clinician to address the health and support needs of homeless households

The majority of our joint bids are made in collaboration with the Essex sector wide Homelessness and Rough Sleeper Partnership, members of the Health and Wellbeing Board and/or the Community Safety Partnership.

Collectively we have a powerful voice and comprehensive portfolio of skills experience and resources, but also acknowledge that bid submissions can be labour intensive and require flexible co-operation when dealing with competing priorities. We will continue to build on our shared and individual strengths to secure grant funding and deliver initiatives that are conducive to all five priorities within this strategy.

Promote social and economic mobility

In 2020/21 at least 32% of households who presented as homelessness or at risk of homelessness were registered unemployed. One of the main causes of homelessness was loss of rented accommodation in the private rented sector which has become increasingly unaffordable for many families. Despite being a relatively affluent district overall there are several neighbourhoods that fall in the bottom 30% of the most deprived areas in the Country.

A local and national skills shortage, fuel poverty and the increase in the cost of living is affecting all parts of the local economy and community.

Epping Forest District Council is one of a group of large not for profit organisations in Essex known as 'anchor organisations' that are working together to identify how our employment, procurement and workforce development practices can support local people.

A network of over 30 partners has begun working on several employment initiatives including the appointment of work coaches and arranging 'reverse job fairs. We are collectively bidding for funding to create similar employment opportunities for homeless households and those at risk of homelessness and rough sleeping.

PRIORITY 2 PREVENTING HOMELESSNESS

Theme: Early intervention

Where possible, we believe that the best way to tackle homelessness is to prevent it from happening in the first place. The purpose of early intervention is to prevent homelessness in the long term - not just the 56 days leading up to a household potentially losing their home. We want to minimise the risks of the problems that lead to homelessness and take action to prevent future homelessness that extends beyond the requirements of the Homelessness Reduction Act 2017.

Our early intervention will include:

Accessible community information and advice

The lived experiences of homelessness that Kiera, Ahmed and Somaiya and Tex shared in section 5 of the Strategy highlights that a whole systems approach to early intervention is dependent on good communication and easy access to information.

Kiera, Ahmed and Somaiya and Tex all had very different reasons for becoming homeless and all described how they benefited from multi-agency support.

We will establish what more we can do so that people finding themselves in these situations know who to approach for help before they reach crisis point. For example Tex knowing he could turn to the Council before turning to the street, and the range of people that are available for Kiera to talk to for emotional support, and Ahmed and Somaiya being aware of alternatives to temporary accommodation such as key worker housing or affordable home ownership.

We will continue to learn from lived experiences and talk to other agencies to find out where there are gaps in information or access to information and agree practical solutions to plug these gaps.

Identifying and removing barriers to digital inclusion

Digital inclusion or rather reducing digital exclusion is about making sure that residents have the capability to access the internet to do the things that benefit them, including access to information, advice and services.

Digital exclusion is linked to wider inequalities in society and is more likely to be faced by homeless households, those on low income, people over 65 and people with disabilities. When the pandemic hit in March 2020, nationally only 51% of households earning between £6,000 and £10,000 had internet access compared to 99% of households with an income over £40,000.

This strategy is being aligned with the Council's Digital Strategy 2022-2025 to reinforce wider practical measures for improved access to online services for vulnerable and disadvantaged residents. Central to this support will be the role of the staff responsible for providing customer facing services in the Community hub and those staff who provide outreach support.

Community responders at Voluntary Action Epping Forest (VAEF) will offer home visits or telephone support to anyone who is struggling with digital access and can provide free SIM cards with 6 months unlimited calls and texts and 20GB of data to qualifying vulnerable residents via their partner organisation WECAN.

VAEF and the Housing and Wellbeing Service will be looking at other ways of offering digital support to access housing related services.

Landlord incentives to provide settled accommodation

Private rented accommodation accounts for about 15% of all properties in the District, and over recent years has become increasingly unaffordable for residents on low incomes. Prior to the pandemic loss of private rented accommodation was the main reason for being threatened with homelessness.

The Council still depends on private sector landlords who provide decent affordable accommodation both to prevent people from becoming unnecessarily homeless and to assist the Council to discharge its main housing duty (by providing settled accommodation to those who have lost their home).

The Coronavirus Act 2020 provided protection to social and private tenants through a variety of restrictions between March 2020 and October 2021 to delay when landlords could evict tenants.

Once the restrictions were lifted and the backlog of bailiff eviction warrants subsided the Council anticipates an increase in homelessness, which is likely to be compounded by concerned landlords pre-empting the proposed abolition of s.21 no fault evictions.

The Housing Needs service employs a skilled negotiator to liaise with private sector landlords on a case by case basis to reconsider allowing tenants to stay who they'd asked to leave, or to charge an affordable rent and provide a tenancy for a minimum of 12 months to a household in need. This flexible bespoke approach is proving to be a very successful way of using limited homelessness prevention grant funding to provide help where it's needed to maximum effect.

Maximise support and accommodation options for people leaving institutions

The Council has protocols in place so that people leaving institutions including hospital, care, prison, and the armed forces do so in a planned way and have the necessary support plans and housing options arrangements in place to enable them to adjust and thrive.

Our profiling information shows that too many people leaving institutions still find themselves homeless and vulnerable to exploitation, addiction, poverty and mental and physical health problems either straight away, after a period of hidden homelessness such as sofa surfing, or after being granted a tenancy which they then struggle to sustain.

Over the period of the Strategy we will work with the Essex Housing Officers Group, the Essex Homeless Officers Housing Group and the relevant agencies to review the effectiveness of our protocols.

Raise awareness of homelessness

The donations, support and time that individual volunteers, local community groups and businesses give to our temporary accommodation scheme at Christmas and throughout the year reflects the social capital that exists within the District.

Part of the Strategy is to harness that social capital and raise awareness of homelessness, the causes, impact and lived experiences from a wide range of residents. We want to work with CHES to go into schools and colleges and talk with the students about homelessness from their perspective to really think about how it can be avoided.

PRIORITY 3 BUILDING RESILIENCE

Theme: Positive mental health, positive activities, positive community

The guiding principles of positive mental health, positive activities, positive community feature in all of the housing related services we provide as well as our plans for economic and social recovery from the pandemic.

We embrace our duty under the Health and Social Care Act 2012 to take appropriate steps for improving the health of the people in the District. Our review of homelessness informs, and is informed by, the Joint Strategic Needs Assessment; and our homelessness strategy is intended to achieve complete synergy with the current Health and Wellbeing Strategy and Levelling Up Essex White Paper.

We believe that building resilience within the community and amongst staff and partner organisations is central to diminishing the human cost of homelessness. We are keen to learn from peers in clinical and third sector services.

Our approach to building resilience will include:

Developing our workforce

The housing profession can be as physically and emotionally challenging as it is rewarding. We want to develop a resilient motivated and empowered workforce that is well equipped to meet the demands of the constantly changing environment, that recognises and understands vulnerability and the complexities of trauma that many of our customers have experienced, and has an awareness of neurodiversity including the associated strengths and weaknesses.

We will consult our Human Resources team and experienced partnership organisations to provide staff with suitable training to develop their skills and improve their communication with people who may be affected by trauma or neurodiversity.

Launch the 'Say Something' campaign

We have a moral and legal obligation to say something if we come across a potential safeguarding issue. This may be easier to do when something is obviously not right, for example if physical abuse is disclosed during an interview. However sometimes things just don't feel right, and sensitive curious questioning can help staff to establish whether there is cause for concern and the appropriate response.

The Domestic Abuse Act has highlighted the need for refresher training on data protection and when personal information can and should be shared without consent -if a lawful basis can be identified for example if an individual's safety is at risk.

The 'Say Something' campaign is not just speaking up about other people. Staff will be encouraged to let their managers know what their career aspirations are and have a safe space to say when they are struggling with their own mental health, workloads etc.

Promoting opportunities to engage in Health and wellbeing initiatives

Part of both the homelessness prevention duty and the homelessness relief duty includes agreeing a Personal Housing Plan with homeless households which sets out what the Council will do and what the household will do to address their housing needs. With the agreement and support of members of the Health and Wellbeing Board housing staff will receive training on how to offer to connect applicants to community groups and non-clinical statutory services for practical and emotional support with community health initiatives (e.g. weight management, stop smoking, diabetes reversal).

A whole systems approach to assisting residents with mental health needs

Funding has been secured to appoint a practitioner from the NHS to work as a specialist Mental Health Navigator across Epping Forest Braintree and Uttlesford to help homeless households to link with mental health services to prevent rough sleeping. The navigator works alongside mental health and primary care professionals the voluntary sector and family and friends to provide the relevant support and guidance to improve the applicant's mental wellbeing and quality of life. The shared learning includes a greater awareness of the link between mental health and homelessness, and staff training to deliver trauma informed services.

Meaningful participation and volunteering

Many homeless applicants in temporary accommodation mention feelings of loneliness and isolation, across all age groups and all personal circumstances. Kiera expressed this when sharing her story about becoming homeless and living in temporary accommodation that is featured in section 5 of the Strategy

As well as buddying schemes that put people in contact with volunteers, we will encourage people to consider the benefits of volunteering themselves and to speak to Voluntary Action Epping Forest who are based in the Community hu

PRIORITY 4 ACCESS TO SUITABLE HOUSING AND SUPPORT

Theme - More than bricks and mortar

The pandemic has brought into sharp focus the role of the home as a place of safety and the need to access to the right statutory services and community support when and where it's needed.

Suitable housing conditions and knowing who to talk to can save lives, prevent disease, increase quality of life, reduce poverty, protect the public purse and help alleviate climate change.

Our focus on access to suitable housing will include:

Making the best use of all available housing

We will continually review our practices and supply and demand across all tenure types to ensure we are making the most effective use of all available accommodation including temporary accommodation, private rented sector, supported housing, the housing register and home ownership in the context of both financial and human resources, and based on the needs of the applicant.

Although the Housing Needs team has access to a wide range of temporary accommodation, we will always consider Council owned temporary accommodation in the first instance, and avoid placing anyone in Bed and Breakfast unless it's due to an emergency, and there is nothing else suitable and immediately available.

We will make the best use of the resources that are available to provide disability adaptations and safety measures in both Council owned stock and the private sector to enable people to remain living in their home where it is reasonable to do so.

We will review average waiting times on an annual basis and incentivise downsizing for tenants who are under-occupying family sized accommodation to maximise the availability of stock that is in shortest supply.

The right support at the right time

In 2020/21 More than half of applicants reported having one or more support needs either at the point of application or prior to becoming homeless or being at risk of homelessness. The most commonly reported needs related to mental health, physical ill health, disability or domestic abuse.

We will collaborate with Social Care and Health Care to ensure that wherever possible residents are offered the opportunity to receive support interventions to prevent or recover from crisis whilst remaining in their own homes. We will encourage multi-agency working to enable people to move on from supported housing to achieve greater independence when they are ready to do so.

Support for victims and survivors of domestic abuse

The number of applicants who become homeless due to domestic abuse has continued to increase in recent years. The Domestic Abuse Act 2022 brought with it an allocation of New Burdens Funding that the Council will use to employ a Domestic Abuse Safeguarding Officer who will join the Community Safety Unit and provide a service to victims of domestic abuse across the District.

We will pursue Domestic Abuse Housing Alliance (DAHA) accreditation, the UK benchmark for how housing providers should respond to domestic abuse in the UK and build in processes that help guide staff to adequately address the needs of survivors and hold abusers to account.

Synergy with the National Disability Strategy

18% of applicants seeking help with homelessness or the threat of homelessness informed the council of physical ill health or disability.

We will incorporate the housing related elements of the national disability strategy into this strategy. We will review our policies on the use of Disabled Facilities Grants, provide the appropriate supported housing for people with specific needs and ensure that measures are in place to ensure disabled people can be fully involved in consultation and share their stories as part of the lived experience activities.

Our Aging Population

Epping Forest has an aging population and it is estimated that by 2033 there will be an increase of circa 22% in the 65+ household population and circa 24% in the 75+ household population.

Very few people over the age of 65 present as homeless or at risk of homeless and there is an oversupply of sheltered housing for rent although conversely there is an undersupply of 'retirement homes' in the private sector.

Our staff will continue to receive training on what it means to create dementia friendly communities and we are considering the feasibility of including sheltered housing schemes in our regeneration plans. We are also proposing to offer better incentives and more options for older people to downsize to accommodation that meets their assessed needs and their personal preferences where it is reasonable to do so.

The needs of Gypsies and Travellers

Between 2018/19 and 2020/21 two households who identified as Gypsies or Travellers approached the Housing Needs service for assistance due to homelessness or the threat of homelessness and one person approached to flee domestic abuse.

Very few Gypsies and Travellers present to the Housing Needs Team. the Essex Countywide Traveller Unit (ECTU) supports Gypsies and Travellers to access services and accommodation related issues including 12 local authority sites across the County.

We shall continue to develop a co-ordinated approach with the ECTU for the services we provide for Gypsies and Travellers with particular focus on support for women who experience domestic abuse, and the Covid-19 vaccination programme.

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PRIORITY 5 ENDING ROUGH SLEEPING

Theme: Proportionate prevention, intervention and recovery

Historically relatively few people have been known to be sleeping rough in the District on any given night. However; one person sleeping rough is one too many. Our approach to ending rough sleeping will be proportionate and focus on prevention intervention and recovery.

Prevention – Stopping people from sleeping rough for the first time

Intervention – Support to those currently sleeping rough to move off the streets

Recovery – Support to those who have slept rough to ensure they don't return to the streets

We know that rough sleepers are largely transient travelling from district to district across the County. We are part of the Essex Homelessness and Rough Sleeping Group and are able to pool resources, share expertise and pursue joint funding bids.

Our commitment to achieving the Government's target of ending rough sleeping will be underpinned by a holistic approach to improving the life chances of individuals with a history of sleeping rough or who are at risk of sleeping rough.

Our plans to end rough sleeping will include:

Collaborative working with our neighbours

We are keen to continue to build on the success of the sector wide Essex Homelessness Officers Group and the Greater Essex Rough Sleeper Strategy Group to secure RSI funding and taking a co-ordinated approach to working with potential rough sleepers who are often transient.

By pooling resources and expertise, we are able to see the proportionate benefits of joint initiatives like the Horizons scheme where intensive support is provided to a small cohort of individuals impacted by significant multiple disadvantage (homelessness, offending and substance misuse).

Learning from lived experiences

We will expand the learning from lived experiences to understand the stories of those rough sleepers who have returned to the streets on more than one occasion with those who avoided doing so and will look at whether people who are happy to share their stories may also be interested in participating in future reverse job fairs

Expanding the outreach service to include supporting former rough sleepers

We are keen to follow up on the success of the everyone in programme which accommodated 23 people and granted settled tenancies to 12 people who had been previously sleeping rough. We are arranging to collaborate with Peabody Outreach Team to develop an enhanced outreach service for former rough sleepers to provide longer term support if and when its needed that compliments the work of the mental health navigator and the planned substance misuse navigator.

Understanding the impact of hidden homelessness e.g. sofa surfing and sleeping in cars

We recognise from the increase in numbers of people who became street homeless during the pandemic that hidden homelessness is still an issue - and we are working with the Community Safety Unit to ensure that anyone who is found to be sleeping in a car is referred to the Housing Needs service in the first instance - so that all residents without a settled home can access the appropriate information and advice on the options that are available to them. We will also develop a publicity programme about sofa surfing and the early intervention measures for single homeless people to avoid having to rely on friends and associates to put them up for a few nights here and there.

CASE STUDIES – LEARNING FROM LIVED EXPERIENCES

Lived Experiences of Homelessness

During the consultation a variety of residents said they were happy to give in depth accounts of their experiences of becoming homeless in Epping Forest to help us to gain insight into the causes and help that's available from their perspective.

We asked the following questions and considered the feedback when formulating the strategy;

- What were the main reasons you became homeless?
- What have you found to be most challenging and have you overcome these challenges?
- How do you think your homelessness could have been prevented or avoided?
- What organisations or services have been particularly helpful?
- What do you think could help you to keep somewhere settled to live?

We are very grateful to the residents who shared their stories so openly and honestly. With their permission we have published the accounts of three different households whose names we have changed to protect their privacy.

Lived Experience 1

Keira

Keira became homeless as a young adult. She was living with her mum and younger siblings until Children's Social Care intervened. Keira was too old to go into foster care and was suffering mental ill health so she was referred to the Council's Housing services who provided temporary accommodation.

Keira said that her homelessness was caused by complex family issues so she doesn't think it could have been avoided. She said the help she received from the winter clothes fund, food from the foodbank and donations to the temporary accommodation have kept her going and she has managed to stay in full time education.

Keira still struggles with her mental health and is currently dealing with this on her own. She said she is worried about how she will manage when she moves out of temporary accommodation and into a settled home. Keira said she finds being homeless with no family support very lonely and she is anxious that this will increase if she moves to an area she doesn't know.

Keira would like to find an organisation that could help her to find someone to talk to. She suggested more activities for single people in temporary accommodation to connect and make friendships and perhaps motivational monthly challenges like cooking or exercises.

Lived experience 2

Ahmed and Somaiya

Ahmed and Somaiya have two children and have always lived in private rented accommodation. Their landlord decided to sell the house and gave them notice to leave. Despite both being in employment Ahmed and Somaiya could not find somewhere affordable to rent that was within travelling distance of work and school.

Ahmed and Somaiya said the biggest challenge was trying to find somewhere else to live with such short notice, because rents had increased so much and they didn't have enough time to find higher paid jobs

and get the money together in time. They went to the Citizens Advice Bureau who they found were very helpful and are now in Council owned temporary accommodation.

Ahmed and Somaiya would still like to live in private rented accommodation that was affordable but worry that most landlords only offer 1-year tenancies so they could find themselves in the same position within 12 months which is no good for their children.

Lived experience 3

Tex

Tex is an older male who had been living in accommodation tied to his low paid job, until the company went into liquidation without warning. Tex found himself homeless and with no money and began sleeping rough. He said his health quickly deteriorated and his overwhelming memories were of being cold and fearing that he wouldn't survive.

Tex had been sleeping in a variety of parks and open spaces for about three weeks when a minister from the Church approached him and offered practical and emotional support to get back on his feet.

The minister made a referral to the Council's outreach team who provided Tex with temporary accommodation and arranged for Peabody Housing Association to give housing related support - including access to benefits and help to move into the temporary accommodation.

Tex has now left the temporary accommodation and has moved into a settled home with support. He said that the temporary accommodation made him feel secure and everyone had been really nice and supportive.

We will continue to listen to and learn from the lived experiences of our residents as part of our strategy to work together to prevent and tackle homelessness.

ACHIEVING THE INTENDED OUTCOMES

Monitoring arrangements and accountability:

- The plan will be updated every quarter.
- Lead organisations and officers will be identified for each task on the delivery plan.
- The lead organisation for each action will be responsible for informing partners of any issues or risks between quarterly progress update with a view to resolving.

ORGANISATIONS PARTNERS SIGNED UP TO THE STRATEGY

The following key strategic partnerships have signed up to this strategy (in principle subject to reviewing the final draft and detailed delivery plan)

- *CHESS Homelessness
- *EFDC Community Safety Partnership
- *EFD Cultural Forum
- *EFD Health and Wellbeing Board
- *EFD Tenant and Leaseholders Panel
- Epping Community Hub (individual members to be listed pending confirmation of agreement)
- *Epping Team Ministry
- *Essex County Council Adult Social Care
- *Essex County Council Children's Services
- *Essex County Council Disability and Autism Team
- *Essex County Council Housing Growth Lead
- *Essex Partnership University NHS Foundation Trust
- * Peabody Outreach Support
- * Voluntary Action Epping Forest

STRUCTURE CHART

INFORMATION SHARING PROTOCOLS

- Essex Prisoner Release Housing Protocol
- Essex Joint 16-17 Housing Protocol
- London Essex Bi-lateral Agreement
- Essex Homeless Families Protocol
- Essex Hospital Discharge Housing Protocol has been developed and currently out for consultation.

APPENDIX 1 - DELIVERY PLAN – 2022/23

PRIORITY 1 – WORKING TOGETHER – Make every contact count

REF	TASK	START	END	LEAD PARTNER & OTHER PARTNERS	SMART TARGET	PROGRES (RAG) & COMMENT
	Launch Make Every Contact Count campaign			<u>Lead</u>		
	Review the Duty to Refer (DTR) working arrangements and incorporate the principles of the proposed Duty to Collaborate if introduced			<u>Lead</u>		
	Joint venture between Housing Needs and Health Services to fund and recruit a Substance Misuse Navigator			<u>Lead</u>		
	Maximise opportunities for grant funding through multi-agency bids			<u>Lead</u>		
	Promote social and economic mobility by bridging the gap between skills shortage and employment and training			<u>Lead</u>		

PRIORITY 2 – PREVENTING HOMELESSNESS- Early intervention

REF	TASK	START	END	LEAD PARTNER & OTHER PARTNERS	SMART TARGET	PROGRES (RAG) & COMMENT
	Information and Advice: Review the levelling up, wellbeing and homelessness prevention and housing advice that is available at all touchpoints			<u>Lead</u>		
	Ensure the needs of people most at risk of homelessness are fully catered for as part of the Corporate Digital Strategy			<u>Lead</u>		
	Landlord incentives to maximise access to affordable private sector rented accommodation			<u>Lead</u>		
	Maximise accommodation options for those leaving institutions to reduce hidden homelessness and the need to sleep rough			<u>Lead</u>		
	Raise awareness of Homelessness: Schools and Colleges and Museum programme			<u>Lead</u>		

PRIORITY 3 – BUILDING RESILIENCE

REF	TASK	START	END	LEAD PARTNER & OTHER PARTNERS	SMART TARGET	PROGRES (RAG) & COMMENT
	Develop a resilient motivated and empowered workforce skilled in curious questioning and respectful of neurodiversity and vulnerability			<u>Lead</u>		
	Launch the ‘Say Something’ campaign			<u>Lead</u>		
	Promote opportunities to engage in health and wellbeing initiatives through personal housing plans			<u>Lead</u>		
	Develop a whole systems approach to assisting clients with mental health needs			<u>Lead</u>		
	Reduce the stigma of homelessness and rough sleeping through initiatives that are informed by people with lived experiences			<u>Lead</u>		

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PRIORITY 4 – ACCESS TO SUITABLE HOUSING AND SUPPORT

REF	TASK	START	END	LEAD PARTNER & OTHER PARTNERS	SMART TARGET	PROGRES (RAG) & COMMENT
	Make the most effective use of temporary accommodation in the context of both financial and human resource			<u>Lead</u>		
	Secure Domestic Abuse Housing Alliance (DAHA) accreditation			<u>Lead</u>		
Page 451	Incorporate the Housing related aspects of the National Disability inclusion programme into the service			<u>Lead</u>		
	Ensure the right support is provided at the right time and in the right place			<u>Lead</u>		
	Make the best use of resources available to provide adaptations to enable people to remain living in their own home			<u>Lead</u>		

PRIORITY 5 – END ROUGH SLEEPING

REF	TASK	START	END	LEAD PARTNER & OTHER PARTNERS	SMART TARGET	PROGRES (RAG) & COMMENT
	Continue to maximise the successful shared outcomes from working with our neighbours across the County			<u>Lead</u>		
	Learn from the lived experiences of homelessness of the widest range of residents			<u>Lead</u>		
	End the cycle of homelessness by working with partners to expand the outreach service to include former rough sleepers			<u>Lead</u>		
	Understand the scale and impact of hidden homelessness across the District			<u>Lead</u>		
	Develop pathway to homelessness prevention, domestic abuse and health services for Gypsies and Travellers					

Organisation
Ability Housing
Active Essex
Adult Social Care
Age Well Action Group
Alzheimer's Society
B3 Housing
Barnardo's
Basildon Council
Be Well Action Group
Braintree Council
British Red Cross
Castlepoint Council
Chamber of Commerce
Changing Pathways
Chelmsford Council
CHESS Homeless
Children's Social Care
16+ Accommodation Team – Essex County Council
Churches Together in Epping and District
Citizens Advice Bureau Epping Forest District
City of London Corporation
Colchester Council
Community, Culture and Wellbeing – EFDC
Community Safety Partnership
Community Tree Network
Creative Network
Cultural Forum
Department of Work and Pensions
Disability and Autism Team- Essex County Council
DLUHC – Rough Sleeping Advisor
Epping Forest Foodbank
Epping Forest Ministry
Epping Forest ReUSE
Epping Forest Tourism Group
Epping Forest Youth Council
Epping Team Ministry
Essex Child & Family Wellbeing Service
Essex Developers Group
Essex Fire & Rescue
Essex Housing Officers Group
Essex LGBTQ+ Alliance
Essex LOC
Essex Partnership University NHS Foundation Trust
Essex Police
Estuary Housing
Frontline
Futures in Mind
Genesis Housing
Harlow Council
Hastoe Group Housing

Home Group Housing
Housing Growth and Strategy - Essex County Council
Independent Living - Essex County Council
Kings Medical Centre
London & Quadrant Housing
Looked after children – NHS West Essex CCG
Maldon Council
MAPPA Crime & Public Protection
Mental Health Navigator – NHS
Mental Health - NHS West Essex CCG
Mental Health Recovery and Accommodation
MIND
MOAT Housing
Nacro
Neighbourhood Watch
Occupational Therapist - Essex County Council
Older Peoples Services – Essex County Council
Optometry - NHS England & NHS Improvement
Orbit Housing
Peabody Housing
Peabody Outreach Support
Phoenix Futures
Places for People Housing
Primary Care Commissioning – NHS West Essex CCG
Probation Services
Public Health – Essex County Council
Red Balloon Foundation
Relate
Revenue and Benefits -EFDC
Rochford Council
Royal British Legion
St Claire's Hospice
Safeguarding -EFDC
Safeguarding - NHS West Essex CCG
Safer Places
Sanctuary Housing
Start Well Action Group
Strategic Commissioning and Policy - Essex County Council
Tendering Council
Transformation (Primary Care, Adult Mental Health & Vulnerable Adults) – NHS West Essex CCG
United in Kind
Uttlesford Council
Voluntary Action Epping Forest
Warm Works
Wellbeing and Public Health – Essex County Council
Youth and Community Commissioner - Essex County Council
Zinc Arts

Version Control Log

Version	Date	Details of changes included in update	Author

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Draft REVIEW OF
HOMELESSNESS AND ROUGH SLEEPING
IN THE DISTRICT OF EPPING FOREST
2021-2022

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REVIEW OF HOMELESSNESS IN EPPING FOREST DISTRICT – 2021/2022

Introduction

This review of Homelessness and Rough Sleeping in the District of Epping Forest (the District) was carried out between May and December 2021 to inform the Council's Homelessness and Rough Sleeping Strategy for 2022-2027.

The Review seeks to:

- Assess the comparative levels of homelessness or risk of homelessness between 2018/19 and 2020/21
- Establish the direction of travel to anticipate likely future levels of homelessness
- Identify what is being done and by whom, and the resources available to prevent and tackle homelessness
- Form part of the evidence base for the Homelessness and Rough Sleeping Strategy 2022-2027

Summary

In 2020/21 a total of 567 households approached (or were referred to) the Council for assistance to prevent or resolve homelessness.

Of these, 186 households were provided with information and advice, 123 households received assistance to prevent or delay them from becoming homeless and 258 households who were homeless at the point of contact were provided with temporary relief (generally in temporary accommodation) and help to find somewhere to live. The Council assessed whether it owed a main housing duty to 143 households and accepted a main duty to make an offer of settled accommodation for 96 households.

The majority of approaches were made by households that had been living with family or friends who were no longer willing or able to accommodate them, or households that had been asked to leave private rented accommodation.

The pandemic had a notable impact on the profile of households seeking help from the Council. Fewer households were asked leave private rented accommodation and more households told to move out by family and friends. Homelessness due to domestic abuse and non-violent relationship breakdown also increased as did the number of households placed in temporary accommodation, although the use of Bed and Breakfast reduced to emergencies only.

Many more people were found to be sleeping rough or at risk of sleeping rough than pre-pandemic (where typically very few if any were identified on a given night), and 23 people were identified provided with accommodation and support as part of the Everyone In campaign.

The council has been particularly effective at preventing homelessness and supporting families and single people in temporary accommodation to build resilience and providing activities to improve the wider determinants of long-term health and wellbeing across all sections of the community.

Evidence base

Statistics

The evidence base for the review draws statistical information from a variety of local and national sources including periodic submissions to Department of Levelling Up Homes and Community ((DLUHC) formerly Ministry for Housing and Local Government (MHCLG)), independent data gathered by the Office of National Statistics (ONS), cross cutting multi-agency needs assessments such as the Joint Strategic Needs Assessment (JSNA), statutory planning documents like the Local Plan, and routine financial and performance management information.

Wherever possible the most up to date and consistently defined data has been used to identify trends and patterns and make projections. However, allowances should be made for variations depending on the source and data definitions at the point of collection.

(e.g. the latest Local Authority Profiling information relate to 2020/21 whereas the Census data typically used for control purposes was gathered in 2011)

Consultation

The statistical evidence has been combined with qualitative information gathered through surveys, meetings, personal accounts, lived experiences and comprehensive formal and informal consultation events with partner organisations, statutory agencies, residents, and community groups. The outcome of the consultation has been published alongside this review.

Research

The qualitative and quantitative data has been supported by research of social policy publications and peer comparisons.

Analysis

The information has been analysed by a multi-skilled team of in-house professionals including officers responsible for delivering the service in conjunction with strategists and those responsible for governance and budgets. The review and associated documents have been scrutinised by the Housing Growth Lead at Essex County Council acting in the capacity of an external critical friend.

Findings of the review

Achievements and positive outcomes

The following positive outcomes have been achieved since April 2020

Accommodation solutions

- 23 people sleeping rough were accommodated as part of the Government's 'Everyone In' initiative.
- 12 people sleeping rough were granted tenancies of settled accommodation.
- 2 people sleeping rough were reunited with their families.
- A 6-bed property was purchased and converted into a House in Multiple Occupation (HMO) to provide affordable accommodation for former rough sleepers or those at risk of sleeping rough.

- A Council house was converted into a 4-bed HMO and leased to CHES (the Council's commissioned rough sleeper service) to provide supported housing pathway for rough sleepers (or those at risk) with multiple and complex needs.
- There was a 73% reduction in the use of Bed and Breakfast accommodation which is now only used in emergencies if nothing else is available.

Funding solutions

- The Essex Rough Sleeping Initiative (RSI) partnership successfully bid for RSI year 4 funding in 2021/2022.
- Additional RSI funding was secured to appoint a mental health specialist to work within the homelessness team in 2021/2022.

Practical solutions

- During the first lockdown, 200 cooked meals per week provided by 3Food4All were distributed to Norway House temporary accommodation scheme (Norway House) and three local sheltered housing schemes.
- Over 100 toilet rolls were donated to residents.
- Activity packs and craft kits were donated to children living in temporary accommodation.
- Norway House continued to receive 2-3 food donations per week of fresh fruit and vegetables, bread, dried foods and canned goods from local businesses and members of the community.
- Christmas food hampers distributed to 76 households in need.
- Upper Clacton Rugby Club provided a Christmas present for every child living in Norway House.

Inclusion solutions

- All residents at Norway House received weekly welfare calls since being introduced in March 2020.
- Fully inclusive Community Culture and Wellbeing projects, activities and courses were provided for households in temporary accommodation including:
 - Garden Project
 - Arts Projects
 - Cooking and nutrition courses
 - Enrichment after school clubs
 - Trauma awareness training for staff

The Homelessness Reduction Act and the Council's duties

The HR Act increased the duties placed on the Council and other statutory bodies primarily to intervene at an earlier stage, to prevent and relieve homelessness, in addition to the established main housing duty to provide somewhere settled to live for those who qualify.

The Council is also now obliged to provide tailored support to those without a priority need, typically single people who are homeless or at risk of homelessness, and applicants who are classed as intentionally homeless. However; those seeking assistance are required to actively co-operate with an agreed personal housing plan. There are 12 duties in total and associated measures.

Comparative data 2018/19-2020/21

The measures are designed to identify the reasons why people become homeless or are at risk of becoming homeless, the numbers and characteristics of the people who approach the Council for help, and the Council's activity in regards to preventing, relieving and securing housing where it has a duty to do so.

A cautionary note

The Government staggered the introduction of the HR Act in recognition of the burden that it would place on local housing authorities. Therefore conclusions drawn from the early data should be made with caution as the figures do not include legacy cases (applications received prior to the new duties) and may not account for retrospective adjustments (following data consolidation exercises).

Number of assessments and duties owed

Households assessed under the Homelessness Reduction Act 2017 and duty owed

Households assessed and duty owed	2018/19	2019/20	2020/21
Total number of households assessed	335	378	389

Reason for prevention or relief duty decision

Total households assessed as owed a duty	331	99%	376	99%	381	98%
Prevention duty owed - (Threatened with homelessness)	189	56%	216	57%	123	32%
Relief duty owed - (Homeless)	142	42%	160	42%	258	66%
Not threatened with homelessness within 56 days - no duty owed	4	1%	2	1%	8	2%

Overall, the number of households presenting to the Council and receiving a homelessness assessment has increased over the last three years from 335 in 2018/19 to 389 in 2020/21.

There was a reduction in the number of households threatened with homelessness and owed a 56-day homelessness prevention duty which went from 189 in 2018/19 to 123 in 2020/21. This was largely attributed to the Coronavirus Act 2020 as amended which provided protection to social and private tenants between March 2020 and October 2021 by delaying when landlords could evict tenants.

However, the number of households presenting to the council as homeless, increased from

160 in 2019/20 to 258 in 2020/21, primarily due to being asked to leave by friends or family, domestic abuse and non-violent relationship breakdown

Reason for risk of loss of last settled home – Prevention duty

Risk of loss of last settled home – Prevention duty	2018/19		2019/20		2020/21	
Family or friends no longer willing or able to accommodate	58	31%	77	36%	49	40%
End of private rented tenancy - assured shorthold	91	48%	79	37%	31	25%
Domestic abuse	7	4%	2	1%	8	7%
Non-violent relationship breakdown with partner	3	2%	13	6%	13	11%
End of social rented tenancy	3	2%	6	3%	0	-
Eviction from supported housing	3	2%	3	1%	2	2%
End of private rented tenancy - not assured shorthold	2	1%	1	0.5%	3	2%
Other violence or harassment	0	-	1	0.5%	3	2%
Left institution with no accommodation available	0	-	2	1%	0	-
Required to leave accommodation provided by Home Office as asylum support	0	-	0	-	0	-
Other reasons / not known ⁶	22	12%	32	15%	14	11%

The main reason for the loss of the last settled home for people at risk of homelessness has changed over the past three years. In 2018/19 the main reason was the end of a private rented tenancy (48%) followed by family or friends no longer willing to accommodate (31%).

By 2020/21 the trend had reversed with the main reason being friends or family no longer willing to accommodate (40%) then end of private rented tenancy (25%). The largest increase was due to non-violent relationship breakdown which rose from 2% to 4%.

Ending the prevention duty

	2018/19	2019/20	2020/21
Total households where prevention duty ended^{1,2}	151	223	108

Reason for households' prevention duty ending:	2018/19		2019/20		2020/21	
Secured accommodation for 6+ months	76	50%	95	43%	57	53%
Homeless (including intentionally homeless)	50	33%	76	34%	18	17%
Contact lost	7	5%	13	6%	9	8%
56 days elapsed and no further action	11	7%	25	11%	10	9%
Withdrew application / applicant deceased	4	3%	10	4%	13	12%
No longer eligible	1	1%	4	2%	1	1%
Refused suitable accommodation offer	1	1%	0	-	0	-
Refused to cooperate	1	1%	0	-	0	-
Not known ⁶	0	-	0	-	0	-

The Council was able to end its prevention duty in around half of all cases by successfully working with applicants for 56 days to stop them from becoming homeless (either by

negotiating to remain in their current home or finding alternative accommodation). Between 33% -34% of those receiving prevention support became homeless between 2018/19 and 2020/21. This reduced to 17% in 2020/21. This can be attributed in part to the success of the Councils interventions and the interim measures that the government introduced to prevent evictions during the peak of the pandemic.

Relief duty

Reason for loss of last settled home for households owed a relief duty:	2018/19	2019/20	2020/21
Family or friends no longer willing or able to accommodate	40 28%	52 33%	102 40%
End of private rented tenancy - assured shorthold	19 13%	15 9%	16 6%
Domestic abuse	12 8%	27 17%	51 20%
Non-violent relationship breakdown with partner	15 11%	19 12%	31 12%
End of social rented tenancy	10 7%	4 3%	5 2%
Eviction from supported housing	0 -	0 -	0 -
End of private rented tenancy - not assured shorthold	1 1%	2 1%	7 3%
Other violence or harassment	5 4%	4 3%	11 4%
Left institution with no accommodation available	4 3%	4 3%	2 1%
Required to leave accommodation provided by Home Office as asylum support	0 -	0 -	0 -
Other reasons / not known ⁶	36 25%	33 21%	33 13%

The majority of households to whom the Council owed a relief duty were already homeless when they first approached the Council. The main reason for homelessness being family or friends no longer willing to accommodate. The nom which increased between 2018/10 and 2020/21 from 28% to 40% and in real terms more than doubled from 40 households to 102 households.

The number of households becoming homeless due to domestic abuse significantly increased during the same period from 8% to 20 % and in real terms from 12 households to 51 households.

The percentage of social rented tenancies that were ended reduced from 7% to 2% during the period.

Household type of households owed a prevention duty:	2018/19	2019/20	2020/21
Single parent with dependent children - Male	2 1%	8 4%	3 2%
Single parent with dependent children - Female	67 35%	72 33%	42 34%
Single parent with dependent children - Other / gender not known	4 2%	0 -	0 -
Single adult - Male	31 16%	46 21%	28 23%
Single adult - Female	40 21%	49 23%	36 29%
Single adult - Other / gender not known	0 -	0 -	0 -

Couple with dependent children	25 13%	19 9%	9 7%
Couple / two adults without dependent children	12 6%	15 7%	3 2%
Three or more adults with dependent children	6 3%	6 3%	0 -
Three or more adults without dependent children	2 1%	1 0.5%	2 2%
Not known ⁸	0 -	0 -	0 -

Female single parents with dependent children consistently formed the largest cohort of households to whom the council owed a prevention duty, followed by single adult females and single adult males. There has been a steady increase in the percentage of single adults qualifying for assistance compared to other cohorts.

Household type owed a relief duty:	2018/19	2019/20	2020/21
Single parent with dependent children - Male	5 4%	3 2%	10 4%
Single parent with dependent children - Female	39 27%	24 15%	49 19%
Single parent with dependent children - Other / gender not known	0 -	0 -	1 0.4%
Single adult - Male	43 30%	78 49%	118 46%
Single adult - Female	33 23%	38 24%	65 25%
Single adult - Other / gender not known	1 1%	0 -	0 -
Couple with dependent children	12 8%	12 8%	4 2%
Couple / two adults without dependent children	8 6%	5 3%	9 3%
Three or more adults with dependent children	0 0%	0 -	2 1%
Three or more adults without dependent children	1 1%	0 -	0 -
Not known ⁸	0 -	0 -	0 -

Single males formed the largest cohort of households requiring a relief duty, accounting for just under half of all applicants in 2019/20 (49%) and reducing slightly in percentage terms in 2020/21 (46%) – but increasing in real terms from 78 to 118 during the period.

Support needs

Support needs of households owed a prevention or relief duty⁷:	2018/19	2019/20	2020/21
History of mental health problems	95 29%	81 22%	104 27%
Physical ill health and disability	58 18%	49 13%	67 18%
At risk of / has experienced domestic abuse	40 12%	29 8%	52 14%
Offending history	25 8%	20 5%	20 5%
History of repeat homelessness	23 7%	12 3%	16 4%
Drug dependency needs	13 4%	18 5%	16 4%
History of rough sleeping	10 3%	9 2%	18 5%
Alcohol dependency needs	10 3%	22 6%	19 5%
Learning disability	20 6%	13 3%	10 3%
Young person aged 18-25 years requiring support to manage independently	13 4%	10 3%	19 5%

Support needs of households owed a prevention or relief duty⁷:	2018/19	2019/20	2020/21
Access to education, employment or training	10 3%	4 1%	4 1%
At risk of / has experienced abuse (non-domestic abuse)	3 1%	13 3%	17 4%
At risk of / has experienced sexual abuse / exploitation	3 1%	6 2%	8 2%
Old age	4 1%	1 0.3%	6 2%
Care leaver aged 21+ years	4 1%	2 1%	3 1%
Care leaver aged 18-20 years	2 1%	4 1%	6 2%
Young person aged 16-17 years	2 1%	3 1%	6 2%
Young parent requiring support to manage independently	9 3%	5 1%	2 1%
Former asylum seeker	2 1%	3 1%	2 1%
Served in HM Forces	1 0.3%	3 1%	2 1%

More than half of applicants had one or more support needs. The most commonly reported being a history of mental health problems which remained fairly constant at between 29% - 27%, followed by physical ill health or disability of around 18% and between 12-14% at risk of or having experienced domestic abuse.

There was a notable increase in the number of people who reported being at risk of or having experienced abuse (non-domestic abuse) and a slight increase in the number of applicants reporting sexual abuse/exploitation, both of which may correlate with the increase in single homeless males and females over the same period.

The percentage of people with learning disabilities who became homeless or threatened with homelessness reduced from 6% to 3%. This may have been due to the reduction in evictions and a reluctance to exclude vulnerable people from the family home during the pandemic.

Temporary Accommodation

Homeless Households in Temporary Accommodation	2018/19	2019/20	2020/21
Norway House Council owned hostel	36	30	33
Hemnall House self-contained block with floating support	4	8	7
Council owned self-contained general needs housing	29	51	50
Brook Haven and Women's refuge	3	3	2
Nightly purchased self-contained private sector units	N/A	5	14
Zinc Arts Charity temporary accommodation	1	4	12
Other registered providers	1	3	4
Bed and Breakfast	25	11	1
Total	99	115	123

The Council has access to a range of temporary accommodation units at its disposal including council owned a general needs hostel, pods and chalets with shared facilities and on-site housing support staff at Norway House, a block of self-contained flats at Hemnall House with out-reach support, and self-contained houses and flats pepper-potted across the Council stock.

This is supplemented where necessary with women's refuge spaces nightly purchased self-contained private sector housing, nominations to Zinc Arts Charity accommodation and as a last resort emergency bed and breakfast (which has all but been phased out).

Main housing duty decisions

	2018/19	2019/20	2020/21
Number of main duty decisions made	84	146	143
Main duty decision	2018/19	2019/20	2020/21
Homeless + priority need + unintentionally homeless (accepted*)	60 71%	99 68%	96 67%
Homeless + priority need + intentionally homeless	7 8%	8 6%	7 5%
Homeless + no priority need	10 12%	36 25%	31 22%
Not homeless	7 8%	3 2%	9 6%

The number of main duty decisions that were recorded for 2018/19 presents a false low as it only included cases assessed under the HR Act, excluding legacy cases.

The number of main duty assessments and acceptances have remained stable over the last two years. In 2019/20 146 decisions were made and a main duty was accepted for 99 households or 68% and in 2020/21 143 decisions were made and 67% were accepted.

Priority need of households owed a main duty:	2018/19	2019/20	2020/21
Household includes dependent children	47 78%	58 59%	28 29%
Mental health problems	2 3%	15 15%	13 13%
Physical disability / ill health	6 10%	16 16%	20 21%
Household includes a pregnant woman	0 -	2 2%	4 4%
Domestic abuse	0 -	2 2%	4 4%
Young applicant	0 -	1 1%	7 7%
Old age	1 2%	0 -	1 1%
Homeless because of emergency	0 -	0 -	3 3%
Other	3 5%	3 3%	11 12%
Vulnerable with children	1 2%	2 2%	5 5%

The most common priority need for being owed a main housing duty remains being a household with young children. However the ratio has reduced significantly from 78% of all cases in 2018/19 to 29% in 2020/21.

Referrals from other agencies

Households assessed as a result of a referral, including under the Duty to Refer	2018/19	2019/20	2020/21
Total number of assessments following Duty to Refer		12	32

Households assessed as a result of a referral, including under the Duty to Refer	2018/19	2019/20	2020/21
Adult Secure Estate (prison)	No data*	0 -	2 4%
Youth Secure Estate	No data*	0 -	0 -
National Probation Service	No data*	2 12%	3 6%
Community Rehabilitation Company	No data*	0 -	3 6%
Hospital A&E, Urgent Treatment Centres or in-patient care	No data*	3 18%	4 8%
Mental Health in-patient care	No data*	0 -	4 8%
Jobcentre Plus	No data*	3 18%	5 10%
Adult Social Services	No data*	1 6%	2 4%
Children's Social Services	No data*	1 6%	6 12%
Nil Recourse Team	No data*	0 -	0 -
Secretary of State for defence in relation to members of the armed forces	No data*	0 -	0 -
Other / not known	No data*	2 12%	6 12%
Households referred by an agency (not subject to the Duty to Refer)	No data*	5 29%	15 29%
Households referred by another local authority	No data*	0 -	2 4%

There is no data for 2018/19 as the duty to refer was not introduced until 2019/20
There has been an increase in referrals as agencies have become familiar with the process.
Further work is required to increase the referrals that are made via this route to make every contact count.

Profile of households who have experienced homelessness

Employment status

Employment status of main applicants owed a duty⁷:	2018/19	2019/20	2020/21
Registered unemployed	73 22%	66 18%	121 32%
Not working due to long-term illness / disability	74 22%	94 25%	66 17%
Full-time work	45 14%	57 15%	38 10%
Part-time work	47 14%	57 15%	46 12%
Not seeking work / at home	54 16%	48 13%	48 13%
Not registered unemployed but seeking work	8 2%	11 3%	22 6%
Retired	6 2%	10 3%	12 3%
Student / training	5 2%	12 3%	2 1%
Other	19 6%	21 6%	19 5%
Not known ⁸	0 -	0 -	7 2%

In 2018/19 22% of accepted applicants were registered as unemployed and an equal number were not working due to long term illness or disability. By 2020/21 this had changed to 32% registered unemployed and 17% not working due to long term illness or disability.

Ethnicity

Ethnicity of main applicants owed a prevention or relief duty⁷:	2018/19	2019/20	2020/21
White	262 79%	315 84%	307 81%
Black / African / Caribbean / Black British	35 11%	34 9%	26 7%
Asian / Asian British	13 4%	4 1%	11 3%
Mixed / Multiple ethnic groups	13 4%	8 2%	13 3%
Other ethnic groups	7 2%	5 1%	6 2%
Not known ⁸	0 0%	10 3%	18 5%

The data on the above table has been reproduced and published by DLUHC from more detailed ethnicity classifications that the Council routinely gathers.

The vast majority of households described their ethnicity as white at between 79% and 84%. Black/African/Caribbean/Black British saw a marked decrease from 11% in 2018/19 to 7% in 2020/21 and the 'Not known' cohort increased from 0% to 5% over the same period.

Age

Age of main applicants owed a prevention or relief duty⁷:	2018/19	2019/20	2020/21
16-17	3 1%	7 2%	3 1%
18-24	62 19%	58 15%	86 23%
25-34	108 33%	122 32%	117 31%
35-44	69 21%	75 20%	73 19%
45-54	60 18%	65 17%	53 14%
55-64	19 6%	37 10%	37 10%
65-74	8 2%	11 3%	10 3%
75+	2 1%	1 0.3%	2 1%
Not known ⁸	0 -	0 -	0 -

The majority of households fall within the 25-34 age group over the three year period and remaining fairly constant, decreasing slightly from 33% in 2018/19 to 31% in 2020/21.

The most significant variation is in the percentage aged between 18-24 which has increased from 19% to 23% and aged between 55-64 which has increased from 6% to 10% over the same period.

Sexual identification

Sexual identification of main applicants owed a duty⁷:	2018/19	2019/20	2020/21
Heterosexual	No data*	No data*	326 86%
Homosexual (Gay/Lesbian)	No data*	No data*	5 1%
Other	No data*	No data*	8 2%

Prefer not to say	No data*	No data*	42	11%
Not known	No data*	No data*	0	0%

The sexual identification of the main applicants was not captured in this format until 2020/21 when 86% identified as heterosexual, 1% as homosexual 2% as other and 11% preferred not to say.

People sleeping rough

Compared to neighbouring London Boroughs and several of the other Local Authority Areas in Essex, there are typically very few if any people known to be sleeping rough in the District on any given night.

The data is gathered from a variety of sources. One night a year a snapshot is taken of the whole area where volunteers count the number of people they find bedded down in the open. This is combined with the numbers of people who are found to be sleeping rough by Chess the Councils commissioned outreach service or approach the service for assistance.

When the MET office forecasts the temperature dropping to zero or below (or 'feels like' zero or below) the Council triggers the Severe Weather Emergency Protocol and offers immediate temporary accommodation to everyone sleeping rough until the temperature rises above zero once more.

Emergency Covid Accommodation (1 ST wave)	Temporary Accommodation (s188/s193)	Temporarily staying with friends	NSAP, Project Protect etc.	Move-on Accommodation
	2	4	0	20

Gypsies, travellers and boat moorings

Homelessness

Year	Amount	Outcomes
2018/2019	1	Homelessness prevented
2019/2020	0	N/A
2020/2021	1	Case closed - no contact

In 2018/19 one household that approached the Councils Housing Needs service for help with homelessness prevention identified as a member of the Gypsy and Traveller community and another household presented in 2020/21.

Domestic Abuse

Year	Amount	Outcomes
2018/2019	0	N/A
2019/2020	0	N/A
2020/2021	1	Lost contact

One household from the Gypsy and Traveller community approached the Councils Housing Needs service fleeing domestic abuse in 2020/21

Source - Management Information

Factors affecting future levels of homelessness in the District

Top 10 most deprived neighbourhoods in Epping Forest

The table below lists the 10 most deprived neighbourhoods in EFDC in 2019 and the wards where they are located.

	LSOA Name	Ward Name	Rank	Decile
10 Most Deprived Areas	Epping Forest 013A	Loughton Alderton	5,221	2
	Epping Forest 007E	Waltham Abbey Paternoster	6,610	3
	Epping Forest 009A	Waltham Abbey High Beach	8,666	3
	Epping Forest 003C	Passingford	9,468	3
	Epping Forest 007A	Waltham Abbey North East	9,594	3
	Epping Forest 017A	Grange Hill	9,597	3
	Epping Forest 011C	Loughton Broadway	10,408	4
	Epping Forest 009B	Waltham Abbey North East	10,509	4
	Epping Forest 011B	Loughton Broadway	10,606	4
	Epping Forest 011A	Loughton Broadway	11,012	4

Social and economic mobility

In 2019 Loughton Alderton was ranked in the most deprived 20% of areas in England, with a population of 1647 people.

Between 2015 and 2019 Waltham Abbey Paternoster moved up from being ranked in the bottom 20% of the most deprived areas of England to the bottom 30%.

Between 2015 and 2019 a total of 48 neighbourhoods increased in their rank and 30 decreased their rank.

The neighbourhood which saw the most improvement between 2007 and 2019 was in the ward of Lower Sheering.

Population growth

The age distribution of the estimated population of 131,137 in 2018 was 0-15 (18.9%) 16-64 (61.4%) older people 65+ (19.6%).

All age categories

EFDC household population for all age categories was projected to increase to approximately 131,695 people in 2021 then by 3.9% to 136,762 people by 2033 and by 4.9% to 138,197 people by 2037.

Older people

It is estimated that by 2033 there will be an increase of circa. 22% in the 65+ household population and circa.24% increase in the 75+ household population.

By 2037 it is estimated that there will be an increase of c.29% in the projected 65+ household population and a circa.34% increase in the projected 75+ household population

Source: Assessment of need for housing and accommodation for older people in Epping Forest District to 2033 Housing LIN December 2021

Housing supply for older people

The Council has a relative undersupply of housing for older people for sale/shared ownership, compared to its comparator authorities, and to the all-England average. However, it has an oversupply of housing for older people to rent.

The Council also has a relative undersupply of housing with care compared to both its comparator authorities and to the all-England average and a substantially higher prevalence of residential care beds. Conversely it has a relative undersupply of nursing care beds compared to comparator authorities, but a higher prevalence compared to the all-England average.

Older people and disability

There are approximately 11,000 people 65+ in Epping Forest District with a long-term disability or health problem who experience limitations in terms of their day-to-day activities.

Dementia

There are approximately 1,052 people 65+ with dementia in Epping Forest District, projected to rise to 1,639 by 2033 and 1,879 by 2037.

Source: Assessment of need for housing and accommodation for older people in Epping Forest District to 2033 Housing LIN December 2021

Council housebuilding scheme

The Council is undertaking an ambitious housebuilding programme and plans to develop circa 195 homes for affordable housing between 2021/22 and 2025/26.

More than Bricks and Mortar estate regeneration schemes

Major regeneration schemes are currently underway at Limes Farm in Chigwell and Nine Fields in Waltham Abbey.

Garden Towns

Harlow and Gilston is a designated Garden Town with sites in EFDC, Harlow and East Herts. The intention is to develop around 3,900 new homes in EFDC between 2020 and 2033.

- 2,100 in Water Lane (to the south west of Harlow)
- 1,050 in Latton Priory (to the south of Harlow)
- 750 in East Harlow (the site will provide 3,350 new homes in total. The remaining 2,600 will be delivered on land within Harlow district)

For further information please contact the Housing Strategy Team
Housingstrategy@Eppingforestdc.gov.uk

Communities and Wellbeing

21 February 2022

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Homelessness and Rough Sleeping Strategy 2022-2027

Equality Impact Assessment

1. Under s.149 of the Equality Act 2010, when making decisions, Epping District Council must have regard to the Public Sector Equality Duty, i.e. have due regard to:
 - eliminating unlawful discrimination, harassment and victimisation, and other conduct prohibited by the Act,
 - advancing equality of opportunity between people who share a protected characteristic and those who do not,
 - fostering good relations between people who share a protected characteristic and those who do not, including tackling prejudice and promoting understanding.
2. The characteristics protected by the Equality Act are:
 - age
 - disability
 - gender
 - gender reassignment
 - marriage/civil partnership
 - pregnancy/maternity
 - race
 - religion/belief
 - sexual orientation.
3. In addition to the above protected characteristics you should consider the cross-cutting elements of the proposed policy, namely the social, economic and environmental impact (including rurality) as part of this assessment. These cross-cutting elements are not a characteristic protected by law but are regarded as good practice to include.
4. The Equality Impact Assessment (EqIA) document should be used as a tool to test and analyse the nature and impact of either what we do or are planning to do in the future. It can be used flexibly for reviewing existing arrangements but in particular should enable identification where further consultation, engagement and data is required.
5. Use the questions in this document to record your findings. This should include the nature and extent of the impact on those likely to be affected by the proposed policy or change.
6. Where this EqIA relates to a continuing project, it must be reviewed and updated at each stage of the decision.
7. All **Cabinet, Council, and Portfolio Holder reports must be accompanied by an EqIA**. An EqIA should also be completed/reviewed at key stages of projects.
8. To assist you in completing this report, please ensure you read the guidance notes in the Equality Analysis Toolkit and refer to the following Factsheets:
 - Factsheet 1: Equality Profile of the Epping Forest District
 - Factsheet 2: Sources of information about equality protected characteristics
 - Factsheet 3: Glossary of equality related terms
 - Factsheet 4: Common misunderstandings about the Equality Duty
 - Factsheet 5: Frequently asked questions
 - Factsheet 6: Reporting equality analysis to a committee or other decision-making body

Section 1: Identifying details
Your function, service area and team: Housing Strategy Manager Communities and Wellbeing
If you are submitting this EqIA on behalf of another function, service area or team, specify the originating function, service area or team:
Title of policy or decision: Allocations Scheme 2022-2027
Officer completing the EqIA: Janice Nuth Tel: 01992 564 000 Email: Jnuth@eppingforestdc.gov.uk
Date of completing the assessment: 22.02.2022

Section 2: Policy to be analyzed	
2.1	<p>Is this a new policy (or decision) or a change to an existing policy, practice or project? This is a review and update of the Homelessness and Rough Sleeping Strategy for the period 2022 -2027.</p>
2.2	<p>Describe the main aims, objectives and purpose of the policy (or decision): The Homelessness and Rough Sleeping Strategy 2022-2027 aims to achieve a whole systems partnership approach to preventing and relieving homelessness and to end rough sleeping in Epping Forest District in line with the Council’s corporate objectives and the levelling up agenda.</p> <p>What outcome(s) are you hoping to achieve (i.e. decommissioning or commissioning a service)? The intended outcomes of the Homelessness and Rough Sleeping Strategy are to:</p> <ul style="list-style-type: none"> • Reduce the number of people who become homeless or threatened with homelessness in the district • Increase the percentage of people to whom the council has a prevention duty that are prevented from becoming homeless • End any need to sleep rough sleeping in the district • Maximize the best use of all available accommodation and services in the context of both financial and human resources.
2.3	<p>Does or will the policy or decision affect:</p> <ul style="list-style-type: none"> • service users • employees • the wider community or groups of people, particularly where there are areas of known inequalities?

	<p>The strategy affects residents and other registered providers of housing, community groups, statutory agencies and organizations with an interest in social housing in the district.</p> <p>Will the policy or decision influence how organizations operate? The strategy will influence how organizations operate.</p>
2.4	<p>Will the policy or decision involve substantial changes in resources? The strategy scheme will involve substantial changes in resources by increasing access to grant funding and pooled resources through partnership working with other organizations.</p>
2.5	<p>Is this policy or decision associated with any of the Council's other policies and how, if applicable, does the proposed policy support corporate outcomes?</p> <p>The Homelessness and Rough Sleeping Strategy is linked to:</p> <ul style="list-style-type: none"> • Epping Forest District Council Corporate Strategy 2018-2023 • The Social Recovery Map for Epping Forest District • The Allocations Scheme 2022-2027 (draft) • The Tenancy Policy 2022-2027 (draft) • The Overarching Housing Strategy 2022-2027 (draft) • Levelling Up Essex – An Essex White Paper 2022 • The Health and Wellbeing Strategy 2018-2028 (which is due to be refreshed in 2022) • The Essex County Council Housing Strategy 2021-2025 • The Local Plan • The More than Bricks and Mortar Estate Improvement Program 2020 <p>The Scheme supports the following Corporate outcomes:</p> <ul style="list-style-type: none"> • People live longer, healthier and independent lives • Adults and children are supported in times of need • People and communities achieve their full potential • Delivering effective core services that people want • Improving the districts Housing offer

Section 3: Evidence/data about the user population and consultation¹

As a minimum you must consider what is known about the population likely to be affected which will support your understanding of the impact of the policy, e.g. service uptake/usage, customer satisfaction surveys, staffing data, performance data, research information (national, regional and local data sources).

<p>3.1</p>	<p>What does the information tell you about those groups identified?</p> <p>The evidence to support the Council’s understanding of the impact of the Strategy is based on:</p> <ul style="list-style-type: none"> • profiling information that is routinely gathered for people who approach the Council for assistance to prevent or relieve homelessness • profiling information that is routinely gathered for people who apply to join the Housing Register and are allocated social housing in the district including mandatory statistical returns such as HClic • Government and industry publications about the characteristics of those households most in need of affordable housing, including those who are homeless or at risk of homelessness and/ or to whom a reasonable preference must be given to join the waiting list • The Review of Homelessness and Rough Sleeping 2020/21(draft) • The Epping Forest Social Housing Annual Lettings Report 2020/21
<p>3.2</p>	<p>Have you consulted or involved those groups that are likely to be affected by the policy or decision you want to implement? If so, what were their views and how have their views influenced your decision?</p> <p>Yes, open consultation was carried out in two stages with the following groups:</p> <ul style="list-style-type: none"> • People with lived experience of homelessness • Residents • The Tenant and Leaseholders Panel • Registered providers of social housing in the district • The clerks to the town councils and parish councils in the district • The Community Safety Partnership and other statutory services • Community groups including the Faith Covenant • Essex County Council and the district, borough and city councils in Essex • Third sector partners with an active interest in Housing in the district • All elected Members of the Council and Council staff <p>Stage 1 consultation sought views on</p> <ul style="list-style-type: none"> • What help the Council should offer households who are threatened with homelessness to prevent them from becoming homeless • What help the Council should offer households who are homeless • What steps the Council should take to end rough sleeping <p>The report on the outcome of the Stage 1 consultation is available on the Council’s website.</p> <p>This information was considered in conjunction with legislation, regulatory guidance on homelessness and rough sleeping, the Corporate strategy and management information including the Review of Homelessness and Rough Sleeping 2020/21, and the</p>

	<p>Social Housing Annual Report 2020/21 to produce a draft Homelessness and Rough Sleeping Strategy along with a draft Allocations Scheme, and a draft Tenancy Policy for 2022-2027.</p> <p>Stage 2 consultation sought detailed consideration of five proposed priorities and themes for the Allocations and Rough Sleeping Strategy and invited contributors to work in partnership with the Council to formulate the delivery plan agree SMART targets and take collective responsibility for achieving the outcomes.</p> <p>The report of the outcome of the Stage 2 consultation is currently in draft form and will be published alongside this Equalities Impact Assessment subject to approval by Stronger Communities Select Committee and Cabinet in March 2022.</p>
3.3	<p>If you have not consulted or engaged with communities that are likely to be affected by the policy or decision, give details about when you intend to carry out consultation or provide reasons for why you feel this is not necessary:</p>

Section 4: Impact of policy or decision

Use this section to assess any potential impact on equality groups based on what you now know.

The proposed priorities, themes and actions included in the draft Homelessness and Rough Sleeping Strategy for 2022-2027 have been specifically designed to level up the effect of inequalities that are known to contribute to homelessness and the risk of homelessness and rough sleeping.

These inequalities which include people with one or more protected characteristic have been further highlighted during the pandemic. This strategy takes a whole systems approach to improve the health, wellbeing and resilience of residents across the district

Description of impact	Nature of impact Positive, neutral, adverse (explain why)	Extent of impact Low, medium, high (use L, M or H)
Age	<p>Positive – The impact of a whole systems approach to homelessness particularly with regards to building resilience for the individuals affected is in turn likely to have a positive impact on the wellbeing of their dependents such as children and/or elderly relatives.</p> <p>Early intervention and the increased focus on single homeless households and hidden homeless is likely to improve access to services for younger adults under 24.</p> <p>Reducing digital exclusion will have a positive impact on the over 65's who require access to services and are statistically more likely to require support to access on-line services than people of working age</p>	H
Disability	<p>Positive- more than half the households who approached the Council for help to prevent or relieve homelessness had one or more support needs, including mental health, physical disability, and or learning disability.</p> <p>Each of the five priorities incorporates housing related aspects of the National Disability Strategy, and staff development will include a greater understanding of neurodiversity and mental health.</p>	H
Gender	<p>Positive – the commitment to pursuing Domestic Abuse Housing Alliance (DAHA) Accreditation will have a positive impact</p>	H

	victims and survivors of domestic abuse who are predominantly women and their dependents	
Gender reassignment	Neutral – There is limited data to evaluate the impact of the Scheme on people with this defined characteristic.	L
Marriage/civil partnership	Positive – The focus on early intervention improved health and wellbeing, substance misuse and debt management are likely to have a positive impact on relationships between couples who are married or in civil partnerships	L
Pregnancy/maternity	Positive – Improved access to services through the use of Frontline, and increasing the choice that is available to homeless women who are pregnant or with an infant child is likely to have a positive impact on their wellbeing during this vulnerable period.	M
Race	Positive – the partnership working with the Gypsy and Traveler Unit and members of the Health and Wellbeing Board will have a positive effect on those Gypsies and Travelers who are victims or survivors of domestic abuse, or homeless and do not approach the Housing Needs service.	M
Religion/belief	Positive – Lived experiences of people with a range of religious (or other) beliefs will have a positive impact on the Councils understanding and response to varied belief systems when seeking to prevent or resolve homelessness.	H
Sexual orientation	Neutral – There is limited data to evaluate the impact of the scheme on people with this defined characteristic.	L

Section 5: Conclusion			
		Tick Yes/No as appropriate	
5.1	Does the EqlA in Section 4 indicate that the policy or decision would have a medium or high adverse impact on one or more equality groups?	No <input type="checkbox"/>	No
			If ' YES ', use the action plan at Section 6 to describe the adverse impacts and what mitigating actions you could put in place.

Section 6: Action plan to address and monitor adverse impacts

What are the potential adverse impacts?	What are the mitigating actions?	Date they will be achieved.

Section 7: Sign off

**I confirm that this initial analysis has been completed appropriately.
(A typed signature is sufficient.)**

Signature of Head of Service: 	Date: 23.02.22
Signature of person completing the EqlA: Janice Nuth	Date: 22.02.22

Advice

Keep your director informed of all equality & diversity issues. We recommend that you forward a copy of every EqlA you undertake to the director responsible for the service area. Retain a copy of this EqlA for your records. If this EqlA relates to a continuing project, ensure this document is kept under review and updated, e.g. after a consultation has been undertaken.

Report to the Cabinet

Report reference: C-047-2021/22

Date of meeting: 07 March 2022



**Epping Forest
District Council**

Portfolio: Housing Services – Cllr. H Whitbread

Subject: Review of the Tenancy Policy

Responsible Officer: Jennifer Gould Director of Community and Wellbeing (Tel: 07548145639)

Democratic Services: Adrian Hendry (01992 564246).

Recommendations/Decisions Required:

- (1) That Cabinet considers the review of the current Tenancy Policy;**
- (2) That Cabinet approves the proposal for two amendments to be made to the terms of the current policy that reflect the Council's statutory obligations;**
- (3) To renew the Tenancy Policy for the period 2022-2027; and**
- (4) To approve the publication of the draft refreshed Tenancy Policy 2022 -2027 at Appendix 1**

Executive Summary:

As a stockholding Local Housing Authority Epping Forest District Council has a statutory duty to publish both a Tenancy Strategy or framework (setting out the matters to which the registered providers of social housing within its district are to have regard when formulating their tenancy policies), and a Tenancy Policy with regards to its own stock.

The current Tenancy Policy is due for review by July 2022; the same calendar year as the Housing Allocations Scheme, the Homelessness and Rough Sleepers Strategy, and the overarching Housing Strategy.

A review of all four strategies and policies commenced in May 2021. The draft Tenancy Policy is being presented to Cabinet with two proposed amendments to take account of legislative changes along with the draft Allocations Scheme and draft Homelessness and Rough Sleeping Strategy for the same 5-year period.

The proposals for the overarching Housing Strategy are due to be presented to Cabinet in July 2022.

Reasons for Proposed Decision:

To enable the Council to publish the refreshed Tenancy Policy 2022-2027

Other Options for Action:

- (i) Not to approve the recommendation to renew the Tenancy Policy without making any amendments
- (ii) To make other changes to the draft Tenancy Policy (subject to further consultation where appropriate)

Report:

1. The Tenancy Policy must incorporate:
 - a. the kind of tenancies that will be granted
 - b. the circumstances in which a tenancy of a particular kind will be granted
 - c. where tenancies are granted for fixed terms, the lengths of the terms
 - d. the circumstances in which a further tenancy will be granted upon expiry of the existing tenancy.
2. EFDC adopted the West Essex Tenancy Strategy on 22 October 2012 and published Version 1 of the current Tenancy Policy on 27 July 2015. The Tenancy Policy was originally due for review in July 2020.
3. In July 2020 the Portfolio holder for Housing agreed minor changes to the Tenancy Policy including the extension of 2-year tenancies to 10-year tenancies, and to postpone the full periodic review of the policy by two years to July 2022 (to take account of the impact of Covid 19 on the consultation process).
4. The full review of the Tenancy Policy began in May 2021 along with simultaneous reviews of the Housing Allocations Policy, the Homelessness and Rough Sleeping Strategy and the overarching Housing Strategy (as there are a number of interdependencies and they are all due for renewal in 2022). A series of consultation events took place between July 2021 and August 2021 including bitesize briefing sessions with Members of the Council, residents, professional partners, other statutory services and staff, and an on-line survey which closed on 30 August 2021.
5. The initial stage 1 consultation found the majority of respondents thought that EFDC should continue to issue 10-year fixed term tenancies for general needs applicants. Half of the respondents said some tenancies should be longer or shorter than 10 years depending on the household circumstances. Typically suggesting longer or lifetime tenancies for elderly or vulnerable people, and shorter tenancies for families who may eventually be able to afford to buy or downsize as their children move out.
6. A Government Equalities Impact Assessment in 2016 found that nationwide far fewer councils and housing associations had introduced fixed term tenancies than had been anticipated. A recent desk-top analysis of councils in Essex found that of the other stockholding councils Castlepoint, Colchester, Basildon and Harlow are issuing lifetime tenancies rather than flexible tenancies. And whilst Rochford is not a stockholder it has reported that many of the Registered Providers operating in the area have ceased issuing flexible tenancies because of the disproportionate burden of the review process on their resources.
7. To date none of the 10-year fixed term tenancies in EFDC have reached the point of review. The first reviews are due in October 2022 (six months prior to the first fixed term tenancies coming to an end).

8. Between the time of preparing the draft recommendations for APG and preparing the report for Executive Briefing a letter was issued by the Department of Levelling Up Housing and Communities (DLUHC) highlighting Section 79 of the Domestic Abuse Act 2021 which places new obligations on social landlords to ensure that, where they are offering a new tenancy to existing lifetime social tenants as a result of domestic abuse, such tenancies are granted on a lifetime basis.
9. The DLUHC has updated the Statutory Guidance Improving Access to Social Housing for Victims of Domestic Abuse to say;

‘The lifetime tenants who suffer domestic abuse will retain lifetime security if they are granted a new tenancy by a local authority for reasons connected with the abuse.

This protection applies to victims who have a lifetime tenancy, or victims who have had a lifetime tenancy in the past and have fled their social home to escape domestic abuse.

The protection also applies to victims of domestic abuse who have a joint lifetime tenancy and who wish to continue living in their home after the perpetrator has left.

The provisions apply to lifetime tenants of local authorities and private registered providers of social housing.’
10. It is recommended that point 3.5 of the Tenancy Policy be inserted to reflect this requirement (Appendix 1).
11. The current Tenancy Policy makes reference to the Race Relations Code of Practice in Social Housing which has been superseded by the Public Sector Duties placed on the Council under the Equalities Act 2010. It is recommended that point 13 of the Tenancy Policy is updated to reflect this (Appendix 1).

Resource Implications:

None

Legal and Governance Implications:

Section 79 of the Domestic Abuse Act 2021 came into force on 1 November 2021. It places new obligations on social landlords to ensure that, where they are offering a new tenancy to existing lifetime social tenants as a result of domestic abuse, such tenancies are granted on a lifetime basis.

Legal services have reviewed the report and confirmed that they have no comments or suggested amendments.

Safer, Cleaner and Greener Implications:

None

Consultation Undertaken:

The recommendations within this review have been subject to a comprehensive public consultation exercise which included; bite-size briefings, webinars, workshops, surveys,

on-line questionnaires, small meetings and one to one conversations.

In total 325 people were directly invited to participate in the consultation including:

- Council tenants, leaseholders and residents
- Partner agencies and community groups with an interest in housing
- Private registered providers of social housing
- EFDC staff and other statutory services
- Members of the Council
- Clerks of parish and town councils to forward to their respective elected members
- District, borough and city councils in the county

The consultation did not include reference to the two proposed changes that are recommended in this report.

A full report on the outcome of the consultation can be found at Appendix 2

Background Papers:

None

Risk Management:

None

Appendix 1 Draft Tenancy Policy 2022 – 2027 Attached

Appendix 2 Consultation Report – Attached

Appendix 3 Equalities Impact Assessment – Attached



Tenancy Policy

2022-2027

Tenancy Policy

1. Introduction

1.1 The effective date of this Tenancy Policy is xxx

1.2 Under the Localism Act 2011 and the Homes England's Regulatory Framework for Social Housing in England, Registered Providers (predominantly, but not exclusively, housing associations and local authorities) must publish clear and accessible policies which outline their approach to tenancy management, including interventions to sustain tenancies, preventing unnecessary evictions and tackling tenancy fraud and set out:

- The types of tenancies granted
- Circumstances where a tenancy of a particular type will be granted, and the length of the term
- Circumstances where a Flexible (fixed-term) Tenancy term of less than 5 years will be granted
- Circumstances where another tenancy will be granted on expiry on the same or another property
- How applicants/tenants can appeal against the length or type of tenancy or the decision not to grant a further tenancy
- Taking account of the needs of vulnerable people
- Provision of housing advice and assistance if another tenancy is not granted at the end of the term; and
- Discretionary succession rights

1.3 This Tenancy Policy, in conjunction with the Tenants' Handbook and the Council's Housing Allocations Scheme, meets with the requirements of:

- The Localism Act 2011
- The Guidance for Local Housing Authorities in England on the Allocation of Accommodation June 2012 (as amended)
- The Right to Move 2015; and
- Section 79 of the Domestic Abuse Act 2021 which came into force on 1 November 2021 places new obligations on social landlords to ensure that, where they are offering a new tenancy to existing lifetime social tenants as a result of domestic abuse, such tenancies are granted on a lifetime basis.

2. Tenancy Strategy

2.1 The Localism Act 2011 requires local authorities to publish a Tenancy Strategy, which must set out the matters to which Registered Providers are to have regard in formulating their tenancy policies relating to:

- The types of tenancies they grant
- The circumstances in which they will grant a tenancy of a particular type
- Where they grant tenancies for a certain term, the lengths of those terms and
- The circumstances in which they will grant a further tenancy on the coming to an end of an existing tenancy

2.2 The West Essex Housing Forum, comprising the three local authorities in West Essex, being Epping Forest, Harlow and Uttlesford District Councils has adopted one joint West Essex Tenancy Strategy.

2.3 All Registered Providers with housing stock in West Essex are required by the Localism Act 2011 to have regard to the West Essex Tenancy Strategy when formulating and implementing their own Tenancy Policies. The Tenancy Strategy was produced to give guidance to Registered Providers on the 3 councils' expectations of how their Tenancy Policies should be framed. The Council has had regard to the West Essex Tenancy Strategy when formulating this Tenancy Policy.

3. The Types of Tenancies Granted

Introductory Tenancy Scheme

3.1 The Council operates an Introductory Tenancy Scheme whereby all new potentially Secure Tenants (sometimes referred to as lifetime tenants) and Flexible Tenants (fixed-term tenants) are on trial for a period of 12 months in order that the Council can satisfy itself that the introductory tenant can sustain a tenancy and meet with the conditions of the Council's Standard Tenancy Agreement. Should any conditions be breached, the Council will be able to seek possession of the property through the County Court with the judge having to grant possession, provided all of the procedures have been followed correctly.

In circumstances where the Council has concerns about an introductory tenant, but not serious enough to apply to the County Court for possession, the introductory period can be extended by a further 6 months. If the trial period is successfully completed, Introductory Tenancies automatically become either Secure Tenancies or Flexible (fixed-term) Tenancies.

Introductory, Potentially Secure, Periodic (Lifetime) Tenants

3.2 Introductory, potentially Secure Tenancies will be granted to appropriate home seekers in accordance with this Tenancy Policy. The legislation governing Secure Tenancies is found in Part IV of the Housing Act 1985. The rights of a Secure Tenant are set out in the Act and are commonly referred to as the Tenants Charter. A Secure Tenancy can only be ended by way of a Possession Order granted by the County Court.

Existing Secure Tenants Who Transfer or Mutual Exchange

Transfers

3.3 Under the Localism Act 2011, all tenants who signed up to their tenancy prior to 1 April 2012 will be given a tenancy with no less security where they choose to move to another social rented home. This means that such tenant's security of tenure is protected if they transfer to another social rented home. Such protection only applies on one occasion.

Although such tenants will retain their secure tenancy status, there will be a reduction in tenancy rights. This is due to their new tenancy being a tenancy granted after the commencement of the provisions of the Localism Act 2011 on 1 April 2012 which,

although secure, will have reduced succession rights for family members. This does not apply where tenants choose to move to accommodation let on Affordable Rent terms.

In addition to the statutory requirement above, the Council will generally grant its existing Post-Act Secure Tenants who are under-occupying their current accommodation and are transferring to a property with less bedrooms (where both properties are owned by the Council), a Secure Tenancy on their new smaller accommodation. As with pre 1 April 2012 tenancies, such protection will only apply on one occasion.

Mutual Exchanges

- 3.4 Where any tenant enters into a mutual exchange, in law, this is done by way of an assignment of the tenancy. However, it is important to note that if one of the exchange partners is a Flexible (fixed-term) Tenant then, in law, the tenancy of each party will end and an appropriate new tenancy will be granted on the new property. The Council offers HomeSwapper, an internet-based mutual exchange service, free of charge to assist qualifying tenants who want to enter into a mutual exchange. Any tenant who does not have access to the internet will be provided with support on request.

New Tenancies as a result of Domestic Abuse

- 3.5 Lifetime tenants who suffer domestic abuse will retain lifetime security if they are granted a new tenancy by a local authority for reasons connected with the abuse.

This protection applies to victims who have a lifetime tenancy, or victims who have had a lifetime tenancy in the past and have fled their social home to escape domestic abuse.

The protection also applies to victims of domestic abuse who have a joint lifetime tenancy and who wish to continue living in their home after the perpetrator has left.

The provisions apply to lifetime tenants of local authorities and private registered providers of social housing.

Advice on transfers, mutual Exchanges and new tenancies as a result of domestic abuse

- 3.6 The law on transfers and mutual exchanges is complicated. Any tenants who are considering either a transfer or a mutual exchange should seek advice from their Housing Officer.

Introductory, Potentially Secure, Flexible (fixed-term) Tenancies

- 3.7 The Localism Act 2011 provides for a new type of fixed-term tenancy to Council tenants – the Flexible Tenancy. Flexible Tenancies (or Fixed-Term Tenancies) are tenancies that are offered for a specified period of time, as opposed to traditional lifetime tenancies. A Flexible (fixed-term) Tenancy is a form of secure tenancy, and generally, tenants with a Flexible (fixed-term) Tenancy have the same rights as other secure tenants (as set out in the Tenants Charter under the Housing Act 1985).
- 3.8 The Localism Act 2011 amends the Housing Act 1996 to allow Introductory Tenancies to become Flexible (fixed-term) Tenancies at the end of the introductory

period, if local authorities wish to provide Flexible (fixed-term) Tenancies. All Flexible (fixed-term) Tenancies granted in accordance with this Tenancy Policy will have an introductory period of 12 months added to the beginning of the fixed term, which may be extended by a further 6 months where there are minor breaches of tenancy conditions. A written notice will be served before the Introductory Tenancy is granted making clear the arrangements for the transition from Introductory to Flexible status providing no possession proceedings have been commenced, setting out the length of the fixed term and other expressed terms of the tenancy. Tenants have the right to request a review of an extension to the introductory period (review procedure - paragraph 3.14).

Assessment Criteria – Decision on re-granting a Flexible (fixed-term) Tenancy

3.9 At the commencement of each Flexible (fixed-term) Tenancy, the tenant will be informed of the assessment criteria that will be applied to determine, at the end of the flexible term, if a further tenancy will be granted. At least 6 months prior to the ending of the fixed term, the Council will provide Notice in writing to the tenant stating that it either proposes to grant a further tenancy (Flexible or Secure – on the same or another property) on the expiry of the existing fixed term, or that it intends to end the tenancy. Prior to serving the Notice, the Tenant will be assessed against the assessment criteria. The general presumption will be that a further tenancy is granted. However, a further tenancy (Flexible or Secure) will generally not be granted in the following circumstances:

- Where the tenant (or a member of their household) who, during the Flexible (fixed-term) Tenancy term, has been guilty of serious unacceptable behaviour. Such behaviour is behaviour that would give sufficient grounds to issue possession proceedings if they were a Secure or Flexible (fixed-term) Tenant and includes rent arrears (including housing benefit and court cost arrears), and other breaches of tenancy conditions.
- Where the tenant is under-occupying the accommodation (when taking into account people required to live with the tenant, for example family members and not lodgers), then a further Flexible or Secure Tenancy (as appropriate) will be offered on a suitable smaller property, provided all of the other requirements of the assessment criteria are met.
- Where the tenant is statutorily overcrowded in the accommodation a further Flexible (fixed-term) Tenancy will be granted on a larger property, subject to availability and provided all of the other requirements of the assessment criteria are met.
- Where the property has been extensively adapted and there is no one in occupation who is in need of these adaptations, and there is an applicant on the Housing Register who is in need of the adapted accommodation, then a further Flexible or Secure Tenancy (as appropriate) of an alternative suitable property will be offered, provided all of the other requirements of the assessment criteria are met.
- Where, from the effective date of this Policy, in accordance with the Council's Housing Allocations Scheme (in force on the date when the 6 months' Notice is served), the Flexible (fixed-term) Tenant, in the opinion of the Council, has sufficient income and/or assets to enable them to meet their housing need themselves.

3.10 At the end of the Flexible (fixed-term) Tenancy term, where the tenant meets one or more aspects of the above assessment criteria but there are special circumstances including, where:

- the tenant is an active Foster Carer;
- the Council's Medical Advisor confirms that the tenant, or member of their household, has a terminal illness or a long-term disability;
- the tenant is a care leaver who is still in need of support; and/or
- there are dependent vulnerable children.

3.11 In such special circumstances, a further Flexible (fixed-term) Tenancy term of 10 years may be granted. This is in order for the special circumstances to be monitored and re-assessed at a later date.

3.12 The Council recognises that there may be exceptional circumstances not covered by this Tenancy Policy. In such instances, the Housing and Property Service Director will have delegated authority (subject to the provisions made under Paragraph 7.2 of the Council's Housing Allocations Scheme), to make decisions as considered appropriate.

Flexible (fixed-term) Tenancies (Review Procedures)

3.13 All Flexible (fixed-term) Tenancy reviews will be undertaken in accordance with The Flexible Tenancies (Review Procedures) Regulations 2012 as follows:

Start of the fixed term

3.14 There is no right to a review of the type of tenancy offered. There is only one ground for a review at the commencement of the Flexible (fixed-term) Tenancy, being that the length of the tenancy offered is inconsistent with the Council's published Tenancy Policy. In these circumstances, the Flexible (fixed-term) Tenant (the applicant) must make an application for a review in writing including:

- The applicant's name and address;
- A statement of the reasons why, in the applicant's opinion, the length of the tenancy does not accord with the Tenancy Policy as to the length of the term of the Flexible (fixed-term) Tenancy it grants;
- A statement to the effect that the applicant does, or does not, require the review to be conducted by way of an oral hearing; and
- A statement to the effect that the applicant does, or does not, agree to receive communications relating to a review by email and, if so, the email address to which such communications should be sent.

End of the fixed term – decision not to grant a further tenancy

3.15 If a further Flexible (fixed-term) Tenancy is not granted, a written Notice informing the tenant will be served at least 6 months before the expiry of the tenancy term. The Notice will set out the reasons for the decision and, at the same time, notify the

tenant of their right to request a review and the time within which a request may be made. An application for a review must be made in writing and include:

- The applicant's name and address;
- A description of the original decision in respect of which the review is sought, including the date on which the decision was made;
- A statement of the grounds on which the review is sought;
- A statement to the effect that the applicant does, or does not, require the review to be conducted by way of an oral hearing; and
- A statement to the effect that the applicant does, or does not, agree to receive communications relating to a review by email and, if so, the email address to which such communications should be sent.

3.16 Following receipt of the application, if the review is to be undertaken without an oral hearing, the Council will:

- Send a written Notice to the applicant stating that the applicant may make written representations in support of the application (which will be taken into account by the person undertaking the review) not less than 5 days after the day on which the Notice is received by the applicant.

3.17 Following receipt of the application, if the review is to be undertaken by way of an oral hearing, the Council will, in addition to sending the Notice referred to in paragraph 3.16 above:

- Notify the applicant of the day on which, and the time and place at which, it is proposed that the oral hearing is to take place, which will not be earlier than five days after the day on which Notice is received by the applicant.

Procedure at the hearing

3.18 The hearing will be conducted by an officer senior to the officer who made the original decision and who was not involved in the original decision. The tenant will be given every opportunity to make written or oral representations and be able to call persons to give evidence on any matter relevant to the decision to be made on review and put questions to any person who gives evidence at the hearing. The applicant will be able to be accompanied or represented by another person (appointed by the applicant) who will have the same rights and obligations as the applicant for the purposes of the conduct of the hearing.

3.19 If the applicant fails to attend the hearing, the person conducting it will either proceed with the hearing or re-arrange the hearing if it is considered appropriate. If the hearing is adjourned for more than one day, the person conducting the hearing will specify the date on which it will be resumed by sending a Notice in writing to the applicant.

3.20 The decision on review will be made by the person conducting the review who will notify the applicant in writing of the decision.

3.21 If, generally, there is no engagement from the tenant in the review process then the Council (if considered appropriate) will commence possession proceedings.

Ending the Flexible (fixed-term) Tenancy

- 3.22 The Council, when it considers appropriate, during or at the end of the tenancy will apply for a Court Order to end any Flexible (fixed-term) Tenancy during the fixed term if any of the grounds for possession (being the same grounds available for a Secure Tenancy) can be proven following any breaches of tenancy conditions.
- 3.23 If, in accordance with this Tenancy Policy, a further Flexible (fixed-term) Tenancy is not granted, and the tenant has either requested a review and it is dismissed, or decided not to seek a review, the Council will seek possession of the property. The tenant will then be given no less than 2 months' Notice in writing stating that the Council requires possession of the property, prior to starting an ordinary claim for possession in the County Court.
- 3.24 If the tenant refuses to vacate when the Notice period expires, possession proceedings will be taken. A Court can only refuse possession if the correct procedures have not been followed or if the decision was wrong in law.
- 3.25 A Flexible (fixed-term) Tenant may give 4 weeks' Notice in writing to end the Flexible Tenancy at any time during the fixed term; this may only be accepted by the Council provided there are no arrears outstanding and any other breaches of tenancies are remedied.

Advice and Assistance if a further tenancy is not granted

- 3.26 Where a further tenancy is not granted, the Council will provide advice and assistance to the tenant at least 56 days prior to the ending of the fixed term to help the tenant find alternative housing.

This advice and assistance will be provided by the Council's Homelessness Team and will include:

- Assistance with securing privately rented accommodation;
- Assessing eligibility for a rental loan, damage deposit guarantee, a discretionary housing payment to assist with securing accommodation in the private rented sector, or any other forms of assistance available at the time;
- Advice on securing owner-occupied accommodation; and
- Advice on joining the Council's Housing Register.

- 3.27 Tenants should contact the Council to arrange a housing advice interview. The Council has a Service Agreement with the Epping Forest Citizens Advice Bureau in the District, who tenants can contact and be provided with a range of independent advice and support.

Flexible (fixed-term) Tenancies and the Right to Buy

- 3.28 The Right to Buy extends to Flexible (fixed-term) Tenancies, subject to the same qualifying criteria for Secure Tenancies.

4. Demoted Tenancies

Secure Tenancies

4.1 If the Council has concerns about the way in which a Secure Tenant has been conducting their tenancy, but the concerns are such that seeking possession is not felt appropriate, it may proceed to Court and seek a Tenancy Demotion Order. If the tenancy is demoted, the tenant will hold a lesser form of tenancy with reduced security of tenure for a period of 12 months. During this period, Demoted Tenants do not have the same rights as secure tenants, for example they do not have:

- The right to exchange;
- The right of succession;
- The right to take in lodgers; or
- The right to buy which is suspended until the tenancy is no longer demoted.

4.2 If the tenant continues to breach their tenancy conditions, then the Council can proceed to Court for possession when the Judge will have no alternative, providing the correct procedures have been followed, other than to grant the Council possession.

Flexible (fixed-term) Tenancies

4.3 In the case of Flexible (fixed-term) Tenants, if the 12 month demotion period is successfully completed, then the Council will serve the Demoted Tenant with a Notice stating that the tenancy is to be restored from a Demoted Tenancy to a Flexible (fixed-term) Tenancy and specifying the length of the fixed term and other express terms of the tenancy.

5. Joint Introductory Potentially Secure and Flexible Tenancies

5.1 A Secure or Flexible (fixed-term) Tenancy can be held by one person or by up to four joint tenants all of whom must be qualifying persons. However many tenants there are, there is still only one tenancy and the rights and duties relating to the tenancy apply jointly and severally to all joint tenants.

5.2 When a joint tenant dies, the remaining tenant/s will continue to hold the tenancy by survivorship. The names of any joint tenants cannot be removed from the tenancy unless by an Order of the Court. If one joint tenant surrenders the tenancy, then the tenancy comes to an end.

5.3 Introductory potentially secure joint tenancies will be offered to:

- (a) married couples or civil partners, provided that both home seekers are named on the application form, unless both parties request the tenancy to be granted in a sole name;
- (b) unmarried couples, or those living as civil partners who can demonstrate a relationship similar to marriage or a civil partnership, providing that both request it and the partner of the lead home seeker is registered on the application form; and

(c) home seekers and their live-in carers, where the live-in carer has occupied the property as their only or principal home for over 12 months and the Council considers it to be justified.

5.4 When an existing tenant applies to change their sole tenancy to a joint tenancy, this will be subject to any new joint applicant meeting with the Local Eligibility Criteria of the Council's Housing Allocations Scheme apart from the housing need element.

In all other circumstances, sole tenancies will be offered to the lead applicant.

6. Non-secure Tenancies

6.1 Non-secure tenants have less security of tenure than Secure, Introductory and Flexible (fixed-term) Tenants and normally apply where short-term temporary accommodation is provided.

7. Circumstances where a tenancy of a particular type will be granted and the length of the term

Introductory, Potentially Secure Periodic (Lifetime) Tenancies

7.1 The Council will grant Introductory potentially Secure Tenancies to home seekers allocated permanent accommodation in sheltered housing or grouped dwelling schemes.

5.4 In addition to the above, the Council will generally grant its existing Post-Act Secure Tenants who are under-occupying their current accommodation and are transferring to a property with less bedrooms (where both properties are owned by the Council), a Secure Tenancy on their new smaller accommodation. As with pre 1 April 2012 tenancies, such protection will only apply on one occasion.

Introductory Potentially Secure Flexible (fixed-term) Tenancies

7.3 Introductory potentially Secure Flexible Tenancies (fixed-term tenancies) will be granted to all home seekers who sign-up to a tenancy of any property. The fixed term for the Flexible Tenancy will generally be 9 years subject to paragraphs 7.1, 7.2 and 7.6.

7.4 An introductory tenancy term of 12 months (or 18 months where the term is extended due to minor breaches of tenancy conditions) will be added to the 9-year Flexible Tenancy making a total fixed term of 10 years. The Flexible Tenancy term will be for 8 ½ years where introductory tenancies are for 18 months. At the commencement of the Introductory Period, the Council will serve a Notice on the tenant stating that a Flexible Tenancy will be granted at the end of the introductory period and what the length of the fixed term will be, provided the terms of the Introductory Tenancy are not breached.

7.5 Flexible (fixed-term) Tenants will be granted, through their Tenancy Agreement, both the Right to Improve and the Right to Compensation for Improvements. The financial incentives under the Council's Housing Allocations Scheme for council tenants to transfer to smaller accommodation will apply to Flexible Tenants during the fixed term, but only within the first 7 years of the fixed term (inclusive of the Introductory Tenancy period).

8. Non-secure Tenancies

- 8.1 Non-secure tenancies may be granted when a tenant is moved to alternative accommodation whilst major works are undertaken or in extremely rare circumstances in order for the Council to provide temporary housing under its homelessness duties. The Council shall grant tenants who have been moved into alternative accommodation during any redevelopment or other works a tenancy with no less security of tenure on their return to settled accommodation.

9. Contractual Succession Rights – Family Members

Pre-April 2012 Tenancies

- 9.1 All of the Council's secure tenants who signed up to their tenancy prior to 1 April 2012 enjoy many rights under the Housing Act 1985 Part IV (Tenants Charter). One of these is the right of succession to a tenancy which takes place upon the death of the tenant. Any successor tenant who is either a spouse or a Civil Partner is able to remain at the accommodation regardless of any under-occupation. Under the legislation, in the case of succession by a family member who meets all of the rules, if the accommodation afforded by the dwelling-house is more extensive than is reasonably required by the tenant, then the Council can serve a Notice of Seeking Possession more than 6 months but less than 12 months after becoming aware of the tenant's death. The Notice requires the tenant to vacate and move to smaller accommodation unless the Council's under-occupation policy applies.

Post April 2012 Tenancies

- 9.2 Under the Localism Act 2011, for all tenancies (including Flexible Tenancies) commencing after 1 April 2012, the right to succeed was repealed for family members. However, from 1 April 2012, all of the Council's secure tenants have been granted additional contractual succession rights within their Tenancy Agreement, in addition to those set out in the Localism Act. If at the time of the tenant's death, the dwelling-house is occupied by a family member (as defined by Section 113 of the Housing Act 1985) and not occupied by a spouse or a civil partner of the tenant as their only or principal home, the following additional rights will apply through the terms of the Tenancy Agreement:

- Provided there is no under-occupation, a family member will be allowed to succeed to the tenancy provided they meet all of the succession rules set out under the Housing Act 1985 Part IV and has been residing at the property as their only or principal home for over 3 years
- Where the property is under-occupied by a family member, if the family member meets all of the succession rules set out under the Housing Act 1985 Part IV and has been residing at the property as their only or principal home for over 3 years, they will be made one offer of suitable alternative accommodation. If the successor tenant refuses to move, then the Council will take court action to seek possession under Ground 16 of the Housing Act 1985
- Where the property is under-occupied by a family member who has resided at the property for less than 3 years then they be required to vacate. If the occupier refuses to vacate, then the Council will take court action to seek possession

10. Tenancy Management

10.1 The Council offers a range of support to tenants in order to assist them in sustaining their tenancy and preventing evictions, including:

- Undertaking in-depth sign up interviews with all new tenants to ensure the tenant understands the terms and conditions of their tenancy
- Housing Officers undertaking new tenant visits within 12 weeks of the commencement of the tenancy to offer advice and support and to clarify the conditions of tenancy
- Recognising that early identification and intervention in response to unpaid rent can prevent long term difficulties for the tenant, including the use of standard letters, regular rent statements, home visits, office interviews and pre-court visits
- Housing Officers undertaking visits to all tenants who have been identified as being affected by the social sector size limits of the Welfare Reforms to discuss their options and to offer advice and support
- Working in partnership with the floating support provider Peabody, who provide support to vulnerable tenants
- Housing Management working closely with the Council's Homelessness Team
- Safeguarding polices including staff training and reporting procedures;
- Undertaking in-depth special needs assessments whereby an officer visits a prospective tenant of sheltered accommodation to ensure the property will meet their needs
- All tenants receiving the Council's tenant newsletter 'Housing News' which includes articles on tenancy issues
- Offering mediation services to assist in resolving neighbour disputes
- Liaising regularly with the Council's Safer Communities Team and Environment and Neighbourhood Team in order to design out anti-social behaviour, working in partnership to seek methods to avoid neighbour conflict and attend network meetings with partner agencies to resolve cases
- Meeting regularly with representatives from the Epping Forest Citizens Advice Bureau in the District to give them an opportunity to raise any concerns and to update them on major issues and policy changes; and
- Meeting regularly with senior staff in the Council's Benefits Team to raise any concerns and to update on policy changes.

11. Tackling Social Housing Fraud

11.1 The Council employs a Corporate Fraud Team as part of the Government's national initiative to tackle social housing fraud, which in the main includes:

- The unlawful sub-letting of Council properties
- The detection of Right to Buy fraud
- The detection of fraudulent housing register applications
- The detection of fraudulent grant applications
- The investigation of all joint tenancy applications
- The investigation of all applications for succession to a tenancy; and
- The investigation of all mutual exchange requests

11.2 As social housing is a very valuable asset, the Council considers it is important to ensure that properties are let fairly and are occupied by legitimate tenants. For this reason, all applications listed above are subject to anti-fraud vetting.

11.3 During the tenancy, the tenant must inform the Council if they own a residential property or have another residential lease or tenancy.

12. Taking account of the needs of tenants with care and support needs

12.1 When a Flexible (fixed-term) Tenancy comes to an end, in accordance with the assessment criteria, if the Council's Medical Advisor confirms that the tenant or a member of their household:

- has a terminal illness or a long-term disability;
- is a care leaver who is still in need of support; and/or
- there are dependent vulnerable children.

12.2 A further Flexible Tenancy for a fixed term of 10 years will be granted. This is in order for the exceptional circumstances to be monitored and re-assessed.

12.3 The Council has granted all new tenants whose tenancy commences after 1 April 2012, additional contractual succession rights to family members above those set out in the Localism Act 2011. This will ensure that family members in the district will continue to be housed by the Council provided that they meet the requirements of the Policy.

12.4 The Council's Introductory Tenancy Scheme has been successful in reducing anti-social behaviour and neighbour nuisance and continues to allow the Council to ensure that unsuitable tenants do not cause difficulties to tenants with care and support needs.

12.5 The Council has a comprehensive Flexible (fixed-term) Tenancy review process which will take into account the needs of any tenants with care and support needs prior to any decision not to grant a further tenancy. In addition, the circumstances of tenants with care and support needs will be taken into account with any Introductory Tenancy review decisions.

12.6 A range of support is offered to tenants which are set out under the Tenancy Management section of this Tenancy Policy.

13. Equal Opportunities

The Council is committed to fulfilling its public sector duty under the Equalities Act 2010 to :

- eliminate unlawful discrimination, harassment and victimisation, and other conduct prohibited by the Act,
- advance equality of opportunity between people who share a protected characteristic and those who do not,
- foster good relations between people who share a protected characteristic and those who do not, including tackling prejudice and promoting understanding.

To this effect an Equalities Impact Assessment has been carried out and published alongside the publication of the Tenancy Policy 2022-2027

13.3 As an aid to ensuring that home seekers are not discriminated against on the grounds of their protected characteristics, the Council will monitor the protected characteristics of home seekers on the Housing Register and home seekers allocated housing.

13.4 The practices and procedures of the Housing and Property Service will be monitored by the appropriate Service Manager to ensure that they do not discriminate directly or indirectly.

14. Consultation on the Tenancy Policy

14.1 The Council sent a copy of a draft version of this Tenancy Policy to all of the following interested parties giving them a reasonable opportunity to comment:

- Every private Registered Provider of social housing;
- Local Councils;
- The Tenants and Leaseholders Panel; and
- Partner Agencies with an interest in the management of the Council's housing stock.

15. Publishing the Tenancy Policy

15.1 The final version of this Policy was sent to all those consulted above. It is also published on the Council's website at www.eppingforestdc.gov.uk/housing

16. Reviewing the Tenancy Policy

16.1 This Policy will be reviewed after 5 years of commencement. The review will be

undertaken by the Council's Stronger Communities Select Committee in consultation with the interested parties outlined in paragraph 14.1 above. It will then be agreed by the Council's Cabinet.

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17. Types of Tenancy - Overview

Tenancy type	Who can be offered	Property type	Length of tenancy
Introductory Tenancy	Those who are not already a Secure (Lifetime) tenant with the Council or another Registered Provider. Applies to Flexible and Secure Tenancies.	All properties	12 months (or 18 months where the term is extended due to minor breaches of tenancy conditions).
Secure (Lifetime) Tenancy Pre 1 st April 2012	Those who were either Council or Registered Providers' Lifetime tenants before 1st April 2012.	All properties	No limit on the length of tenancy.
Secure (Lifetime) Tenancy Post 1 st April 2012	Those who have successfully completed an Introductory Tenancy in sheltered housing or grouped dwelling schemes. Under-occupiers who transfer to another council property with less bedrooms.	Sheltered housing or grouped dwelling schemes All properties	No limit on the length of tenancy.
Secure (Lifetime) Tenancy New Tenancy for victims of domestic abuse	Lifetime tenants who suffer domestic abuse will retain lifetime security if they are granted a new tenancy by a local authority for reasons connected with the abuse. This protection applies to victims who have a lifetime tenancy, or victims who have had a lifetime tenancy in the past and have fled their social home to escape domestic abuse. The protection also applies to victims of domestic abuse who have a joint lifetime tenancy and who wish to continue living in their home after the perpetrator has left. The provisions apply to lifetime tenants of local	All properties	No limit to the length of tenancy.

	authorities and private registered providers of social housing.		
Secure Flexible (fixed-term) Tenancy	Those who are not already a pre 1st April 2012 Secure (Lifetime) tenant with the Council or another Registered Provider.	All properties	9 years plus introductory term of 12 months, making a total fixed-term of 10 years.

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Tenancy Policy 2022- 2027

Epping Forest District Council
Civic Offices, High Street, Epping, Essex CM16 4BZ

Email: housingstrategy@eppingforestdc.gov.uk

www.eppingforestdc.gov.uk/housing

Draft 15 February 2022

DRAFT

Tenancy Policy 2022-2027

Equality Impact Assessment

1. Under s.149 of the Equality Act 2010, when making decisions, Epping District Council must have regard to the Public Sector Equality Duty, i.e. have due regard to:
 - eliminating unlawful discrimination, harassment and victimisation, and other conduct prohibited by the Act,
 - advancing equality of opportunity between people who share a protected characteristic and those who do not,
 - fostering good relations between people who share a protected characteristic and those who do not, including tackling prejudice and promoting understanding.
2. The characteristics protected by the Equality Act are:
 - age
 - disability
 - gender
 - gender reassignment
 - marriage/civil partnership
 - pregnancy/maternity
 - race
 - religion/belief
 - sexual orientation.
3. In addition to the above protected characteristics you should consider the cross-cutting elements of the proposed policy, namely the social, economic and environmental impact (including rurality) as part of this assessment. These cross-cutting elements are not a characteristic protected by law but are regarded as good practice to include.
4. The Equality Impact Assessment (EqIA) document should be used as a tool to test and analyse the nature and impact of either what we do or are planning to do in the future. It can be used flexibly for reviewing existing arrangements but in particular should enable identification where further consultation, engagement and data is required.
5. Use the questions in this document to record your findings. This should include the nature and extent of the impact on those likely to be affected by the proposed policy or change.
6. Where this EqIA relates to a continuing project, it must be reviewed and updated at each stage of the decision.
7. All **Cabinet, Council, and Portfolio Holder reports must be accompanied by an EqIA**. An EqIA should also be completed/reviewed at key stages of projects.
8. To assist you in completing this report, please ensure you read the guidance notes in the Equality Analysis Toolkit and refer to the following Factsheets:
 - Factsheet 1: Equality Profile of the Epping Forest District
 - Factsheet 2: Sources of information about equality protected characteristics
 - Factsheet 3: Glossary of equality related terms
 - Factsheet 4: Common misunderstandings about the Equality Duty
 - Factsheet 5: Frequently asked questions
 - Factsheet 6: Reporting equality analysis to a committee or other decision-making body

Section 1: Identifying details
Your function, service area and team: Housing Strategy Manager Communities and Wellbeing
If you are submitting this EqIA on behalf of another function, service area or team, specify the originating function, service area or team:
Title of policy or decision: Refresh the Tenancy Policy 2022-2027
Officer completing the EqIA: Janice Nuth Tel: 01992 564 000 Email: Jnuth@eppingforestdc.gov.uk
Date of completing the assessment: 24.02.2022

Section 2: Policy to be analyzed	
2.1	Is this a new policy (or decision) or a change to an existing policy, practice or project? The existing Tenancy Policy is due to expire in July 2022 and has been refreshed for 2022- 2027 subject to Cabinet approval.
2.2	<p>Describe the main aims, objectives and purpose of the policy (or decision): To reissue the Tenancy Policy with two adjustments</p> <p>a) In response to a letter from the Department of Levelling Up Housing and Communities (DLUHC) with regards to the Domestic Abuse Act</p> <p>“Lifetime tenants who suffer domestic abuse will retain lifetime security if they are granted a new tenancy by a local authority for reasons connected with the abuse.</p> <p>This protection applies to victims who have a lifetime tenancy, or victims who have had a lifetime tenancy in the past and have fled their social home to escape domestic abuse.</p> <p>The protection also applies to victims of domestic abuse who have a joint lifetime tenancy and who wish to continue living in their home after the perpetrator has left.</p> <p>The provisions apply to lifetime tenants of local authorities and private registered providers of social housing.</p> <p>b) To update the statement on the Council’s duties in respect of the Equalities Act 2010</p> <p>The Council is committed to fulfilling its public sector duty under the Equalities Act 2010 to:</p> <ul style="list-style-type: none"> • eliminate unlawful discrimination, harassment and victimization, and other conduct prohibited by the Act, • advance equality of opportunity between people who share a protected characteristic and those who do not, • foster good relations between people who share a protected characteristic and those who do not, including tackling prejudice and promoting understanding.

	<p>What outcome(s) are you hoping to achieve (i.e. decommissioning or commissioning a service)?</p> <p>To reissue a legally compliant Tenancy Policy.</p>
2.3	<p>Does or will the policy or decision affect:</p> <ul style="list-style-type: none"> • service users • employees • the wider community or groups of people, particularly where there are areas of known inequalities? <p>The scheme affects service users who have lost their home due to domestic abuse. Statistically women are far more likely to be victims of domestic abuse.</p> <p>Will the policy or decision influence how organizations operate?</p> <p>The policy will influence how organizations operate.</p>
2.4	<p>Will the policy or decision involve substantial changes in resources?</p> <p>The scheme will not involve substantial changes in resources.</p>
2.5	<p>Is this policy or decision associated with any of the Council's other policies and how, if applicable, does the proposed policy support corporate outcomes?</p> <p>The Tenancy Policy is linked to:</p> <ul style="list-style-type: none"> • The West Essex Tenancy Strategy • The draft Allocations Scheme 2022-2027 • The draft overarching Housing Strategy 2022-2027 <p>The policy supports the following Corporate outcomes:</p> <ul style="list-style-type: none"> • People live longer, healthier and independent lives • Adults and children are supported in times of need • People and communities achieve their full potential • Delivering effective core services that people want • Improving the districts Housing offer

Section 3: Evidence/data about the user population and consultation¹

As a minimum you must consider what is known about the population likely to be affected which will support your understanding of the impact of the policy, e.g. service uptake/usage, customer satisfaction surveys, staffing data, performance data, research information (national, regional and local data sources).

3.1	<p>What does the information tell you about those groups identified?</p> <p>The evidence to support the Council's understanding of the impact of the Strategy is based on:</p> <ul style="list-style-type: none"> • profiling information that is routinely gathered for people who apply to join the Housing Register and are allocated social housing in the district including mandatory statistical returns such as HCLic.
3.2	<p>Have you consulted or involved those groups that are likely to be affected by the policy or decision you want to implement? If so, what were their views and how have their views influenced your decision?</p> <p>We carried out initial consultation when we were first reviewing the tenancy agreement to establish views on the length of time a tenancy should be granted for, and before the directive about lifetime tenancies was issued.</p> <p>Over half of the respondents said ten years which is the current practice. We took a proposal to Stronger Communities Select Committee to extend the current policy with no changes, which was approved.</p> <p>The two changes in this report became apparent after the consultation period had ended.</p>
3.3	<p>If you have not consulted or engaged with communities that are likely to be affected by the policy or decision, give details about when you intend to carry out consultation or provide reasons for why you feel this is not necessary</p> <p>We do not consider it to be necessary to carry out further consultation as both are statutory requirements.</p>

Section 4: Impact of policy or decision

Use this section to assess any potential impact on equality groups based on what you now know.

Description of impact	Nature of impact Positive, neutral, adverse (explain why)	Extent of impact Low, medium, high (use L, M or H)
Age		
Disability		
Gender	Positive - Women are statistically far more likely to be victims of domestic abuse and therefore more likely to benefit from this measure	H
Gender reassignment		
Marriage/civil partnership		
Pregnancy/maternity		
Race		
Religion/belief		
Sexual orientation		

Section 5: Conclusion			
		Tick Yes/No as appropriate	
5.1	Does the EqIA in Section 4 indicate that the policy or decision would have a medium or high adverse impact on one or more equality groups?	No <input type="checkbox"/>	
			If ' YES ', use the action plan at Section 6 to describe the adverse impacts and what mitigating actions you could put in place.

Section 6: Action plan to address and monitor adverse impacts

What are the potential adverse impacts?	What are the mitigating actions?	Date they will be achieved.

Section 7: Sign off

**I confirm that this initial analysis has been completed appropriately.
(A typed signature is sufficient.)**

Signature of Head of Service:



Date: 23.02.22

Signature of person completing the EqIA: Janice Nuth

Date: 22.02.22

Advice

Keep your director informed of all equality & diversity issues. We recommend that you forward a copy of every EqIA you undertake to the director responsible for the service area. Retain a copy of this EqIA for your records. If this EqIA relates to a continuing project, ensure this document is kept under review and updated, e.g. after a consultation has been undertaken.

Report to the Cabinet

Report reference: C-049-2021/22

Date of meeting: 7th March 2022



**Epping Forest
District Council**

Portfolio: Finance, Qualis Client and Economic Development – Cllr J. Philip

Subject: Proposed Site Disposals to Qualis for Redevelopment

Responsible Officer: Andrew Small (07548 145665).

Democratic Services: Adrian Hendry (01992 564246).

Recommendations/Decisions Required:

- (1) Agree to the disposals of Pyrles Lane to Qualis for £900,000 and;
- (2) Agree to dispose of Units 50, 51-52, 60 and Unit 10 Cartersfield Road, Waltham Abbey to Qualis for £2,930,000.

1. Executive Summary

- 1.1. Qualis was created by the Council primarily to act as the Council's development arm for regeneration and other schemes within the district. By using Qualis the Council expects to bring forward redevelopments more quickly, have a greater influence over the form of development and to benefit indirectly from the developer profits.
- 1.2. Officers have been working with Qualis to evaluate redevelopment opportunities that exist within its land and property portfolio ahead of consideration as to whether the Council might wish to transfer all of its non-operational assets to Qualis. Initially two opportunities have been identified that would benefit from immediate disposal to Qualis at book value.
- 1.3. This report presents the two proposals put forward by Qualis for Cabinet consideration and decision.

2. Pyrles Lane, Loughton

- 2.1. This site is the former Council plant nursesey in Pyrles Lane, Loughton. It was identified as a potential development site and an option for transfer to Qualis for housing redevelopment at the time the Council created Qualis.
- 2.2. The site has a number of conditions that make this harder to develop, principally the topography but also limited access to the site. It had previously been offered to the market and sale terms agreed but the potential buyer had withdrawn their interest because of the difficulty in developing this site.

- 2.3. Frustration with the market for not flexing their profit requirements nor for taking on more challenging opportunities was one of the reasons that the Council created Qualis.
- 2.4. Subject to agreement on price, this has always been a site that it was envisaged Qualis could redevelop. It appears in their 4 approved year Business Plan as a proposed housing development.
- 2.5. Qualis presented development ideas to Overview and Scrutiny Committee on 8th June 2021. The number of issues were raised around, design options, ownership and transport links, all of which will be taken into account in the submission of a Planning application if Cabinet agrees to the sale of the site.
- 2.6. The proposed development is for residential housing that will meet sustainability guidance and include provision for affordable housing. The exact detail of the proposed development will be the subject of a planning permission once ownership is obtained.
- 2.7. Qualis has prepared a financial development assessment for consideration by their Board. This is essentially a viability assessment which arrives at a residual value for the site of £881,865. Qualis has also offered an overage clause which will share any additional development profit 50:50 with the Council once their developer return of 15% profit on cost has been achieved.
- 2.8. The Qualis viability test is provided in the table below;

Gross Development Value	£17,392,400
Costs	£13,934,441
Costs including finance	£15,123,823
Residual land value	£881,865
Profit on Cost	15%

- 2.9. The Council is bound by the requirements of Section 123 of the Local Government Act 1972 which states that the Council cannot dispose of land or building for less than Fair Value (Market Value). An independent valuation of the site has been commissioned to see if the price proposed by Qualis meets the criteria laid down in the Act.
- 2.10. The independent valuation puts a value on the Pyrles Lane site at £900,000 and to conform with the requirement of the Section 123 Qualis has agreed to match the valuation price for the site.
- 2.11. The land is mainly General Fund but there are elements which belong to the HRA. The capital receipt will be allocated in accordance with the valuation report.

3. Units 50, 51-52, 60 and Unit 10 Cartersfield Road, Waltham Abbey

- 3.1. The second site proposed for sale to Qualis is one that the Council had previously identified for redevelopment amongst its commercial property holdings.
- 3.2. Units 50, 51-52, 60 and Unit 10 are industrial warehouse units located at Brooker Road Industrial Estate, Waltham Abbey. They form part of the long-term commercial property investment holdings of the Council.
- 3.3. The Council's Asset Management Team had previously identified an opportunity for redevelopment following a substantial fire in March 2018, a subsequent demolition and the forthcoming expiry of a number of the commercial lease agreements.
- 3.4. A market appraisal at the time confirmed that there is opportunity to demolish the remainder of the site, re-develop into modern industrial units and thereby improve the regeneration of the area, the employment prospects and the rental income and capital value of EFDCs property holdings.
- 3.5. In September 2020 planning consent was granted for a scheme of light industrial units.
- 3.6. Cabinet received a report on 11 February 2021 proposing that provision of £2.511 million be made in the Capital Programme for the redevelopment of this site and the provision was made and agreed by Council as part of budget setting.
- 3.7. Since Council gave the scheme approval little progress has been made. As part of its review of the Council's holdings Qualis has identified this as a potential development site which they could bring forward at speed.
- 3.8. Qualis have provided the summary viability assessment considered by their Board. This is presented in the table below and arrives at a Land Value of £2,888,131.

Gross Development Value	£9,998,123
Costs	£6,065,000
Costs including finance	£8,694,020
Residual land value	£2,888,131
Profit on Cost	15%

- 3.9. The paper considered by Cabinet in February 2021 valued the development at a lower sum than that assessed by Qualis. Thereby, disposal to Qualis will return a higher value for the Council than had been assumed.
- 3.10. As set out in 2.9 above, the Council is required to obtain Fair Value for any disposal of land or assets. The Cartersfield site was given a book value of £2,930,000 by Carter Jonas as at March 2021 for the purposes of preparing the Council's Accounts. Even though this is higher than their assessed value for the site Qualis will match it in order to meet the requirements of S123 of the Local Government Act 1972.

- 3.11. Disposal will mean the Council will receive a capital receipt of £2.93 million, the site will be redeveloped faster and it will avoid the need to borrow £2.5 million (as provided for within the capital programme) to fund the redevelopment.
- 3.12. It is recommended that the site be sold to Qualis for £2,930,000.

4. Resource Implications

- 4.1. As part of its agreement of the 4 year Business Plan the Council agreed to lend Qualis a further £35 million in order that it could acquire and progress redevelopment opportunities within the District. The site at Pyrles Lane was identified as one of the potential opportunities which would be funded from this sum. The Cartersfield site is a new acquisition but has planning permission and meets the Council's ambition of Qualis bringing forward stalled redevelopments and capturing the developer profits associated with it.
- 4.2. As the lender, the Council gains from the interest on the loan to Qualis for the acquisition of these sites and this more than offsets the current rental income derived from the Cartersfield site.

5. Legal and Governance Implications

- 5.1. Contained within the body of this report.

6. Safer, Cleaner and Greener Implications

- 6.1. None.

7. Consultation Undertaken

- 7.1. None

Background Papers