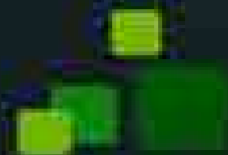


elmhurst *National* conference



Introduction

Amo Sihra, Elmhurst Energy



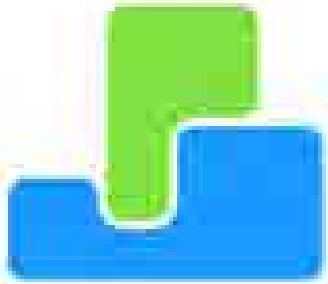
General Information



- **Refreshments:** Available in the room next door. **Lunch will be served at 12:00.**
- **Parking:** Please register your vehicle by scanning the QR codes on your tables, or via the parking kiosks on the ground floor (opposite the lifts).
- **Fire safety:** Fire exit doors are clearly marked. No alarm is scheduled today.
- **Wi-Fi:** Open network, no password need **“CBS-Arena-Free-Wifi”**
- **CPD:** Today’s presentations will be emailed to attendees, along with a link to download your CPD certificate in the **week commencing 16th February.** **Please collect your name badge to receive CPD!**

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Ask your questions with Slido



- Instructions available on your table and in the conference brochure
- Use your phone or laptop to submit questions that you would like to ask each Q&A panel
- Up vote/like questions – the most popular will be read to our panel
- We have 3 Q & A Sessions today

Conference Agenda – Session 1

09:30 - 10:30	Registration
10:30 - 10:40	Conference Opening Aino Sibba (Elmhurst Energy)
10:40 - 11:30	The Warm Homes Plan: key Updates on EPC Reform, HEM and MEES Matt Carey (DESNEZ) & Harrison Cutler (MHCLG)
11:30 - 12:00	Session 1 Q&A All Session 1 Speakers
12:00 - 13:00	Lunch

Conference Agenda – Session 2

13:00 - 13:20

The Future Homes Standard from a Building Control and Warranty Perspective

Richard Smith (NHBC)

13:20 - 13:40

The Importance of Independence and Competencies

Hywel Davies OBE (CABE)

13:40 - 14:00

New Build: The Next Chapter

Jason Hewins (Elmhurst Energy)

14:00 - 14:20

Session 2 Q&A

All Session 2 Speakers

14:20 - 14:35

Afternoon Break

Conference Agenda – Session 3

14:35 - 14:50

The Airtightness of the GB Housing Stock

Ben Roberts (Loughborough University)

14:50 - 15:05

Energy and Climate Resilience in Historic Buildings

Joanne Williams (Historic England)

15:05 - 15:20

Net Zero and Decarbonisation within the UK – Healthy Homes

Erinna Fletcher (Octopus Energy)

15:20 - 15:35

Retrofit Roundup

Simon Flint (Elmhurst Energy)

15:35 - 15:55

Session 3 Q&A

All Session 3 Speakers

15:55 - 16:00

Conference Close

Simon Fairbrother – Elmhurst Energy

The Warm Homes Plan: Key updates on EPC Reform, HEM & MEES for Energy Professionals

Matt Carey - Deputy Director, Energy Performance & Standards, DESNZ

Harrison Cutler - Head of Energy Performance of Buildings Regulations and Operations, MHCLG

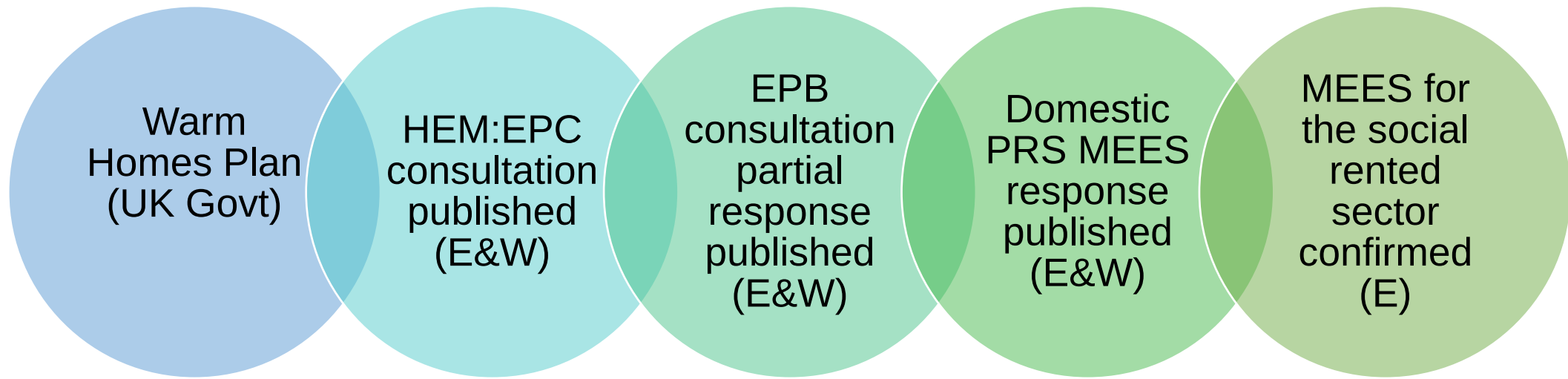


Overview

- **Context for Energy Performance and Standards**
- **The Warm Homes Plan Overview**
- **Spotlight on:**
 - o **SAP and HEM**
 - o **The Future Homes Standard**
 - o **EPC Reform**
 - o **PRS MEES and SRS MEES**
- **What happens next**



Recent Developments



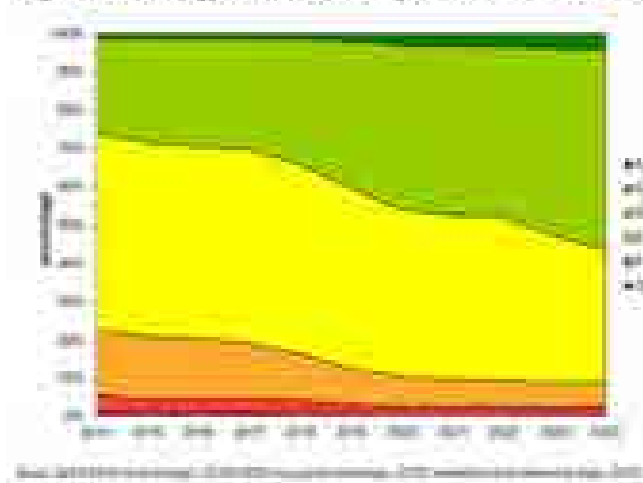
Context for Energy Performance and Standards



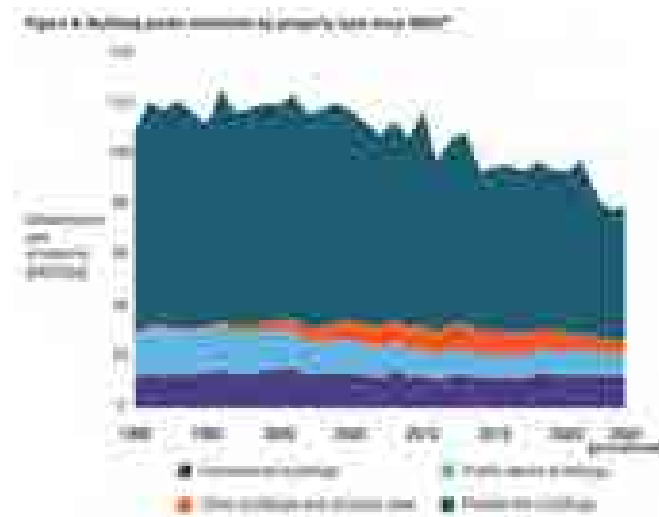
Context for Energy Performance & Standards Reform: The Opportunity

Accelerate improvements of energy performance

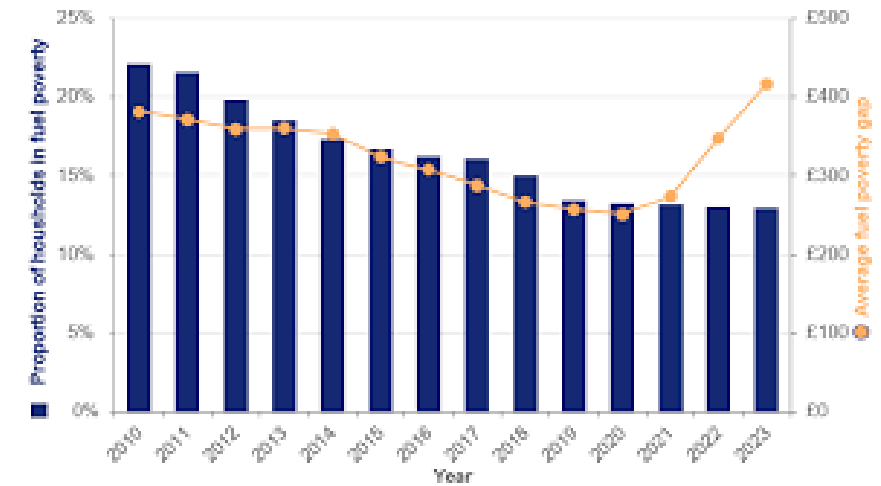
Figure 2.2: Energy efficiency rating bands, 2014 to 2024



Support reduction of domestic carbon emissions



Support reduction of fuel poverty



Context for Energy Performance & Standards Reform: The Opportunity

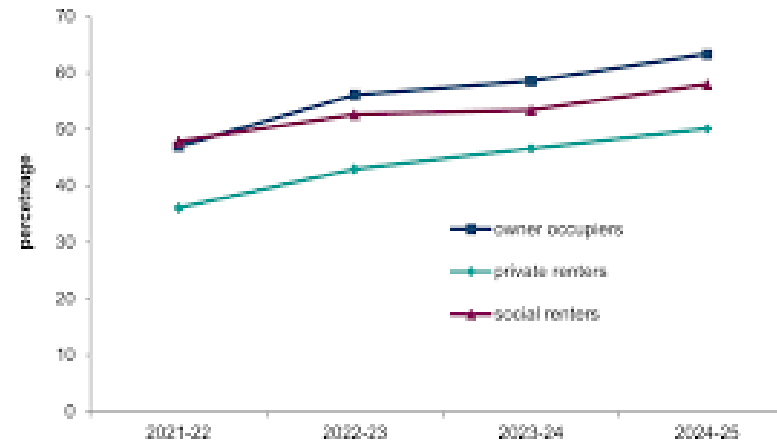
Accelerate installation of clean heat (graph 23/24)

Source of heating in homes (23/24)



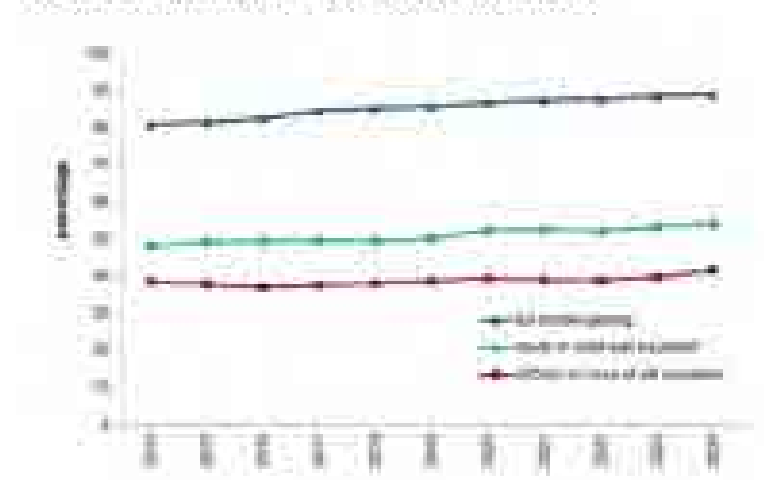
Accelerate installation of smart technology

Electricity smart meters, 21-22 to 24-25



Accelerate installation of fabric measures

Figure 2.7: Insulation measures, 2014 to 2024

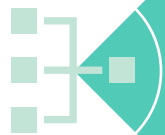




Context for Energy Performance & Standards Reform: The Approach



Helping people make informed retrofit choices in a complex landscape



Implementing new policies which have the right impacts while managing existing ones



Working with industry partners to manage and monitor risks and ensure the skills and supply chain are in place



Harnessing the best ideas from industry and academia



Warm Homes Plan Overview



The Warm Homes Plan

- Our ambition in the WHP: cut energy bills, tackle fuel poverty, create good jobs, and deliver energy security whilst addressing the climate crisis.
- We have already taken £150 of costs off energy bills from April 2026 – but we need to go further.
- Solar, batteries, heat pumps, and insulation can save families hundreds of pounds per year.
- Largest ever public investment in home upgrades - £15 billion
- An offer for every household – homeowners, private renters, and social housing residents.

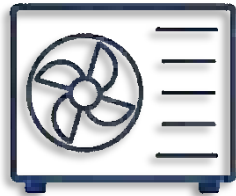




By 2030, we will:



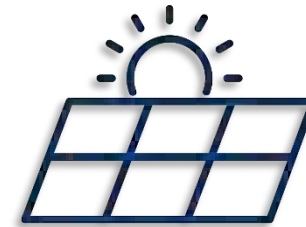
Upgrade up to 5 million homes



Deliver over 450,000 heat pump installations per year



Help lift up to 1 million households out of fuel poverty



Triple the number of homes with **solar** today by deploying panels on the rooftops of up to **3m more homes**



Create up to 180,000 high-quality jobs



The 'three pillars' of the WHP

An offer for everyone



- First ever zero & low interest loans for bill saving home upgrades e.g. solar and battery.
- Warm Homes Fund (£5bn) to make investments in sector, w/ £600m to support low-income.
- Expanding the BUS scheme with £2.7bn to 2030. A £7,500 grant for heat pumps and first ever offer for air-to-air heat pump.

Direct support for low-income families



- Free packages (backed by £5bn of government investment) for low-income households, depending on technology suitability.
- E.g. families could receive free solar panels and a battery, normally costing between £9,000-£12,000.
- Social housing could be upgraded by entire streets at a time.

New protections for renters



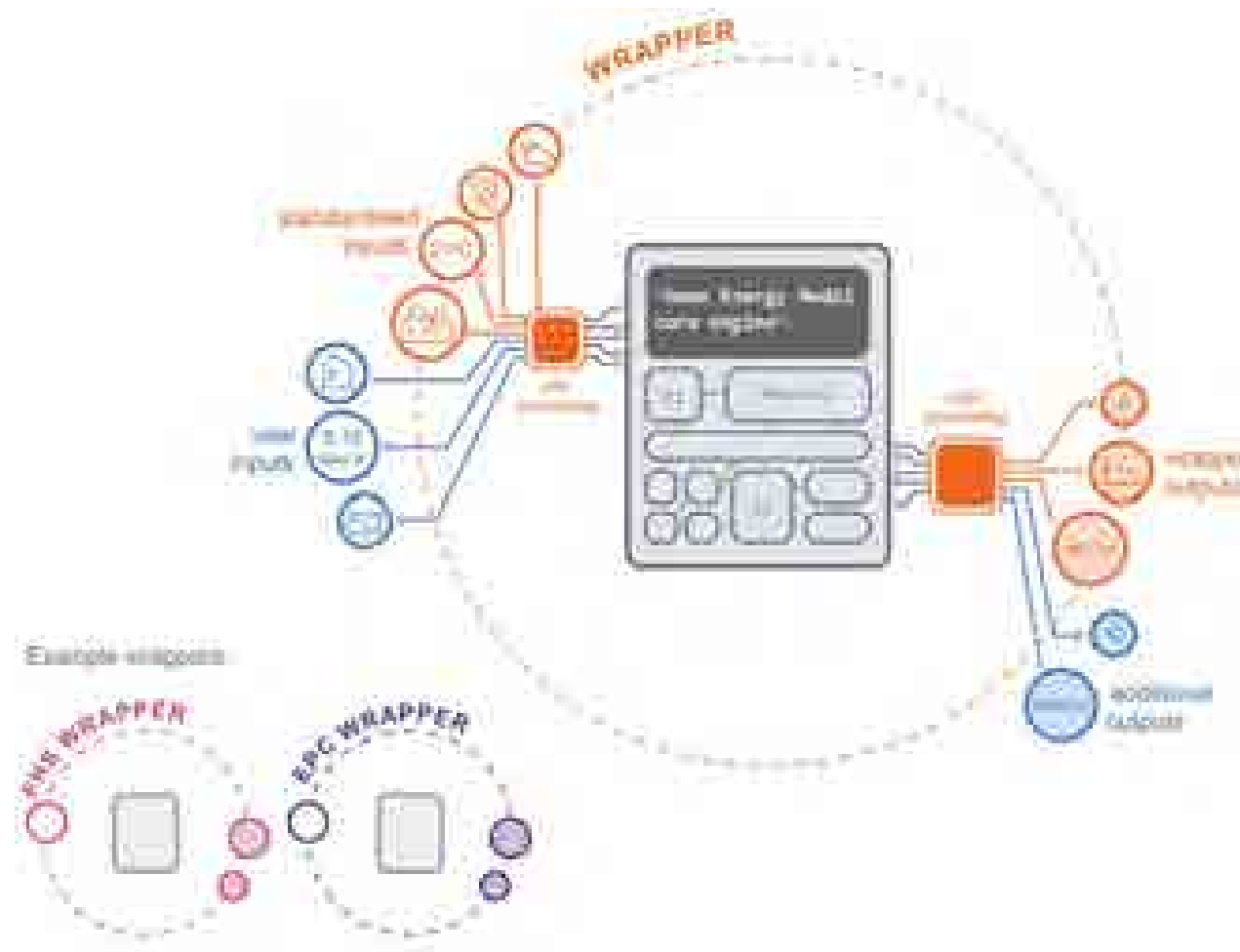
- New minimum energy efficiency standards for private landlords and proposed standards for social landlords.
- Private renters could save on average £210 per year on energy bills.
- Taken together, will help lift up to 1 million out of fuel poverty.



Standard Assessment Procedure (SAP) & Home Energy Model (HEM)



HEM: Approach



The Future Homes Standard



The Future Homes Standard and SAP 10.3

- The FHS will cut emissions of new homes by at least 75% compared to 2013 standards.
- The FHS will be published in Q1 2026, providing the technical detail and timeline to support effective implementation
- SAP 10.3 will be available initially to support compliance checks, with HEM:FHS available as soon as possible afterward to support transition to HEM as the sole methodology



ECaaS

- Energy Calculation as a Service (ECaaS) is an energy performance calculator service that provides cloud-based implementation of the Home Energy Model
- It will produce Building Regulation England Part L (BREL) reports to support compliance with the FHS through the HEM:FHS wrapper
- It will be launched with a 'Check Part L compliance' front end service, whilst accreditation scheme front end software will link up using an API

Energy calculation as a service (ECaaS): Access the Home Energy Model

ECaaS provides an API to the Home Energy Model so users can produce software, and a basic frontend so users can validate building designs.



HEM:FHS

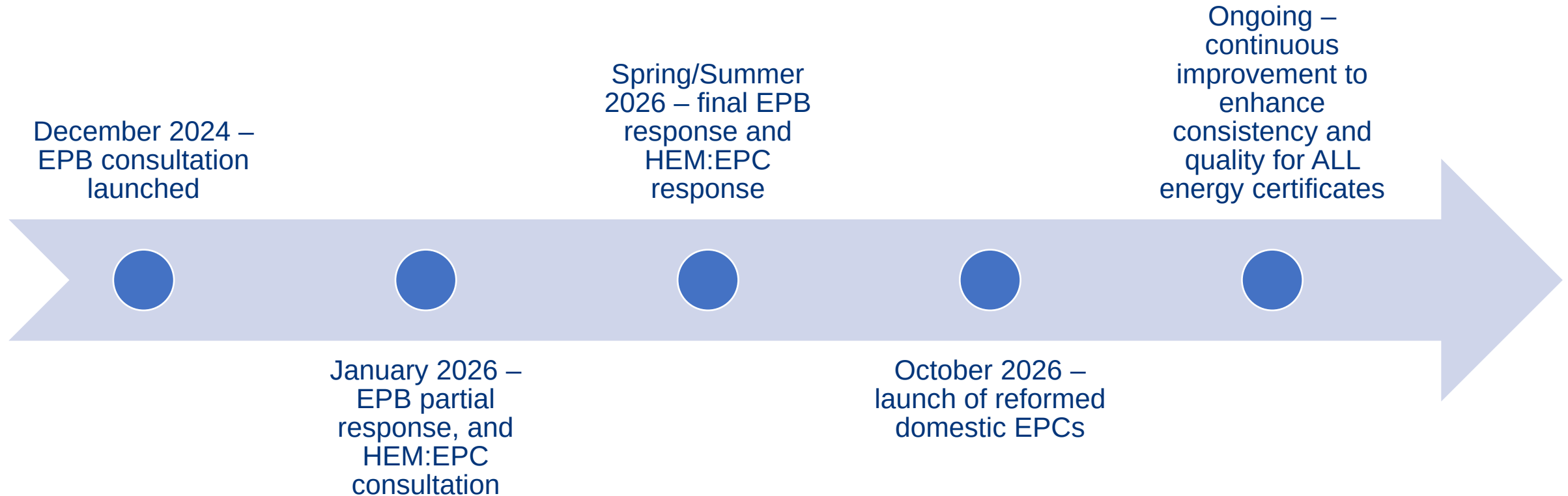
- We are engaging with accreditation schemes and PEPA to facilitate a shared approach to energy assessor upskilling to be ready for HEM:FHS
- This will include further engagement with schemes, OCDEAs, and the Future Homes Hub to finesse HEM guidance ahead of and after FHS launch



EPC Reform

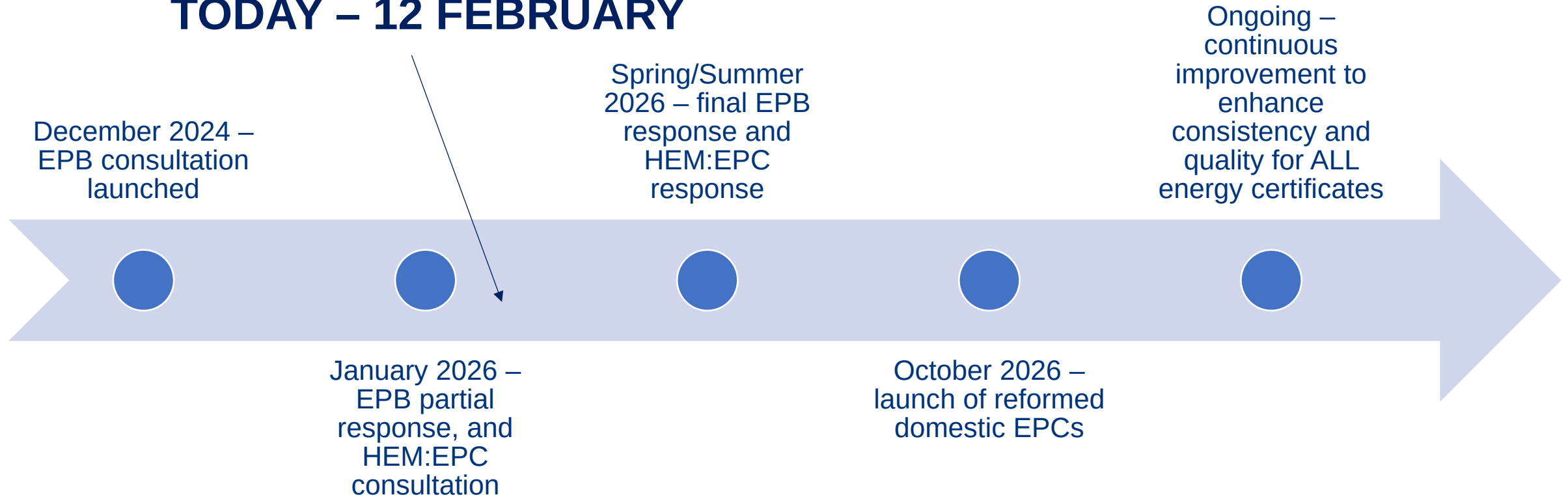


EPC reform timeline



EPC reform timeline

TODAY – 12 FEBRUARY





The Energy Performance of Buildings consultation

Updating metrics, and when EPCs are required

- Introducing four headline metrics for domestic EPCs
- Retaining the headline carbon metric for non-domestic
- Requiring EPCs at the point of marketing
- Requiring EPCs for heritage, holiday lets, and HMOs
- Retain 10-year validity period for EPCs

Improving EPB quality and compliance

- Reviewing effectiveness of training and CPD
- Exploring effectiveness of evidence and audit
- Increasing penalties for non-compliance

Improving access to EPB data

- Removing not for issue certificates from the Register
- Removing opt out from address searches
- Making Register data more accessible
- Enabling use of existing data in EPC assessments

Changes to DEC and ACIRs

- Exploring amending validity periods for DEC
- Working with industry to agree an ACIR design which drives action





The Energy Performance of Buildings consultation

Provide more useful and actionable information to homeowners and those making purchasing decisions

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The Energy Performance of Buildings consultation

Provide more useful and actionable information to homeowners and those making purchasing decisions

Increasing trust in EPC information

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The Energy Performance of Buildings consultation

Provide more useful and actionable information to homeowners and those making purchasing decisions

Increasing trust in EPC information

Enabling better use of EPC data to support retrofit

Providing more useful and actionable information to building owners and managers





The EPB partial response

Provide more useful and actionable information to homeowners and those making purchasing decisions

Updating metrics, and when EPCs are required

Introducing four headline metrics for domestic EPCs

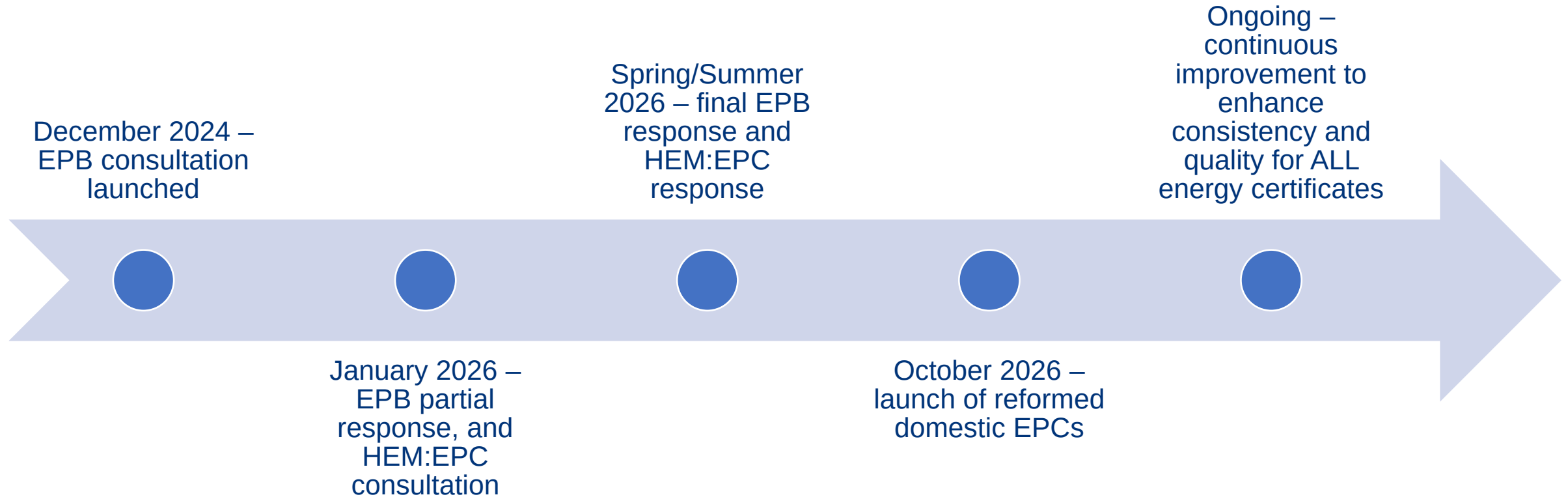
Retaining the headline carbon metric for non-domestic

Requiring EPCs at the point of marketing
Requiring EPCs for heritage, holiday lets, and HMOs

Retain 10-year validity period for EPCs



EPC reform timeline

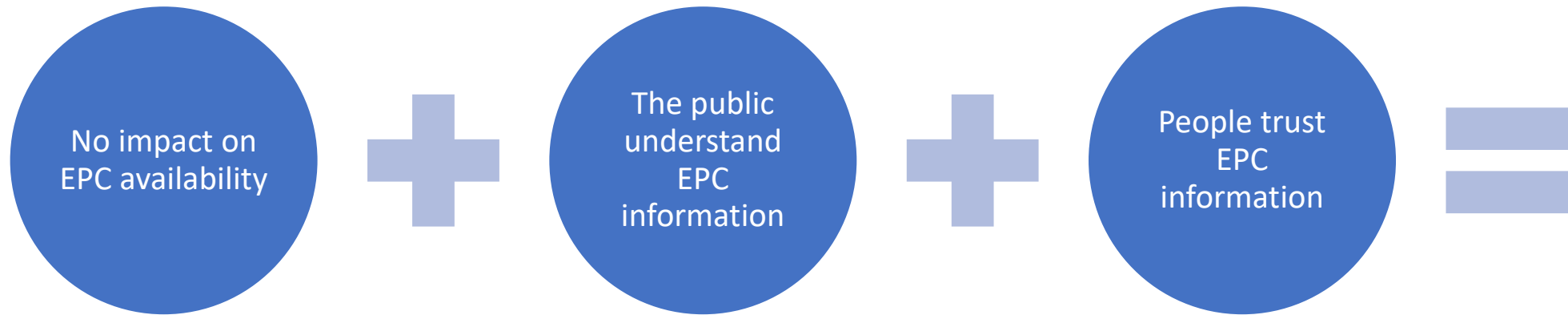


Government is working hard to deliver new EPCs from October 2026. We recognise the timeline is ambitious and want to work with industry to build a shared implementation plan and test our assumptions

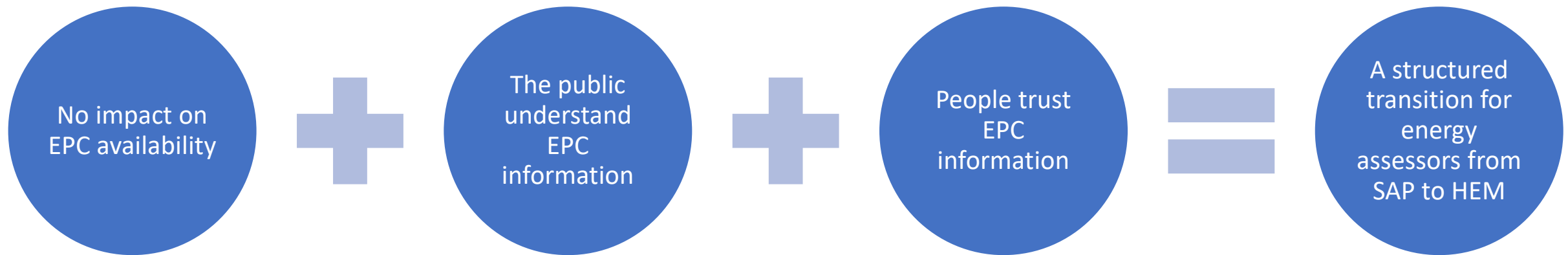
Energy Performance of Buildings partial response, and HEM:EPC consultation – 21 January 2026



What successful EPC reform looks like



What successful EPC reform looks like



We want to work with industry to build a shared implementation plan and test our assumptions

- Listening to feedback to proposals for HEM for existing buildings and EPC banding in the HEM:EPC consultation – **it's live now, and we want your views**
- Understanding what industry and energy assessors need and when, to ensure the right lead time is provided to deliver a stable and structured transition
- Engaging on the EPC wrapper at the right times to support parallel development, where viable, within government and in industry – on inputs, conventions, and output metrics to support training and preparation



HEM:EPC

- We are developing a HEM:EPC 'wrapper' - which defines inputs and outputs for the HEM core to produce EPCs
- The same EPC wrapper and underlying HEM core will be used for new and existing buildings, removing the current divergence in assumptions between EPCs produced with SAP and RdSAP
- We are developing the replacement for RdSAP, which will convert inputs about existing buildings into inputs for the EPC wrapper
- The wrapper and RdHEM code will be implemented in ECaaS, providing a central calculator service which commercial front ends will connect to via API, and to lodge EPCs to the Register



What HEM:EPC means for assessors

- On-construction inputs will be broadly similar to HEM:FHS inputs – with some additional requirements at design and completion to support production of EPC outputs, including elements not required for part L compliance checks
- Existing building assessments will remain, at their core, visual evidence-based assessments, requiring the hardware a DEA currently uses
- We're exploring where accurate tested evidence can be input where available – like current RdSAP conventions around inputting air pressure testing to override defaults
- This will enable more accurate assessments where robustly assured tested evidence is available, and can reduce the gap between EPCs for new and existing buildings



The transition from SAP to HEM for assessors

- We know we need to finalise the inputs, and issue draft conventions, to enable schemes to develop front-end software which will support assessor training and readiness
- This will be based on a shared understanding of the learning required to bridge between SAP and HEM, and common evidence requirements
- There will be additional inputs because of the different modelling that HEM does relative to SAP, and the technologies which will contribute to new metric outputs
- These will be proportionate – balancing replicability, consistency, and accuracy, and the time it takes to assess a building and produce an EPC



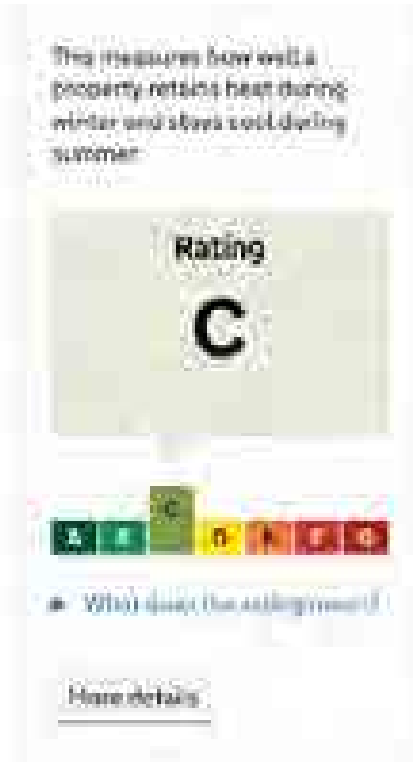
Respond to the consultation, and tell us:

- What benefits and challenges you foresee in the transition to new EPCs with HEM
- How ready you are to assess and input new technologies to generate new metrics
- How comfortable you feel about inputting tested evidence alongside visual surveys
- How you will find explaining the new EPC metrics to consumers
- ... And anything else you think will help make this transition a success, and you think we might have missed



EPC design – including naming the metrics

Fabric



Heat



Smart



Cost





The 'Fabric Performance' metric – how well a building retains heat in winter, and stays cool in summer

A. Fabric Performance

B. Heat Retention

C. Insulation

D. Warmth Retention





The ‘Heating System’ metric – the efficiency and emissions of the heating system

A. Sustainable Heating

B. Clean Heating

C. Warm Homes

D. Heating System



The 'Smart Readiness' metric – how well a dwelling uses technology to control use from the grid

A. Flex Potential

B. Flexible Energy Use

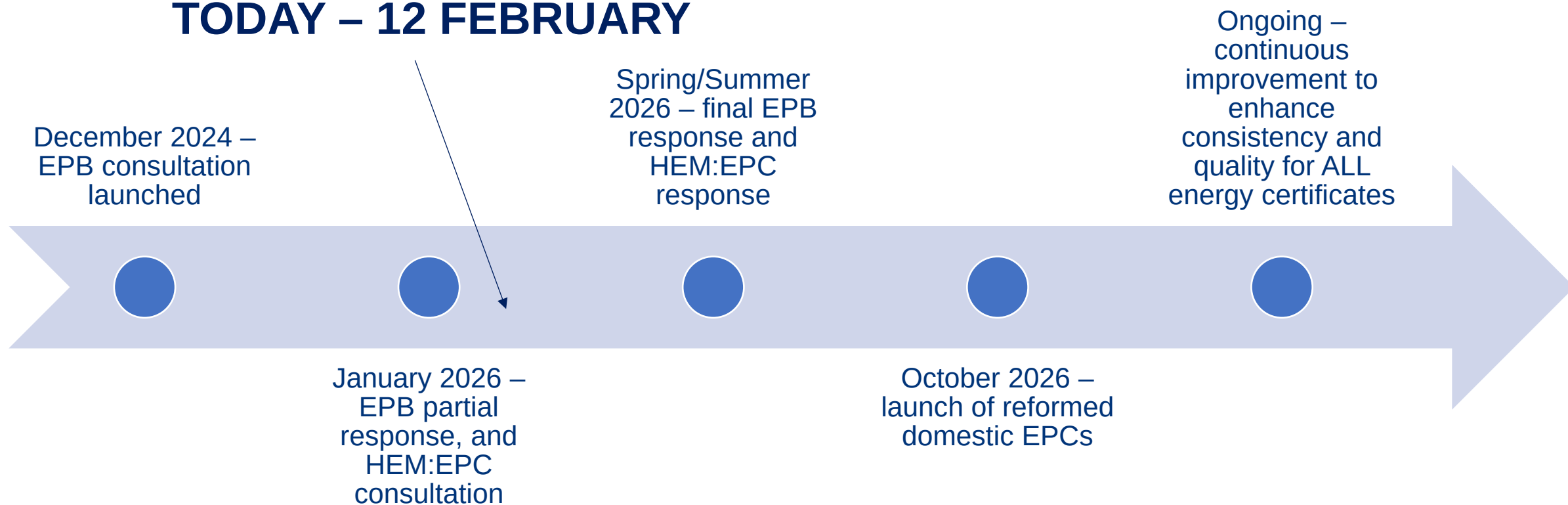
C. Smart Readiness

D. Smart Energy Use



EPC reform timeline

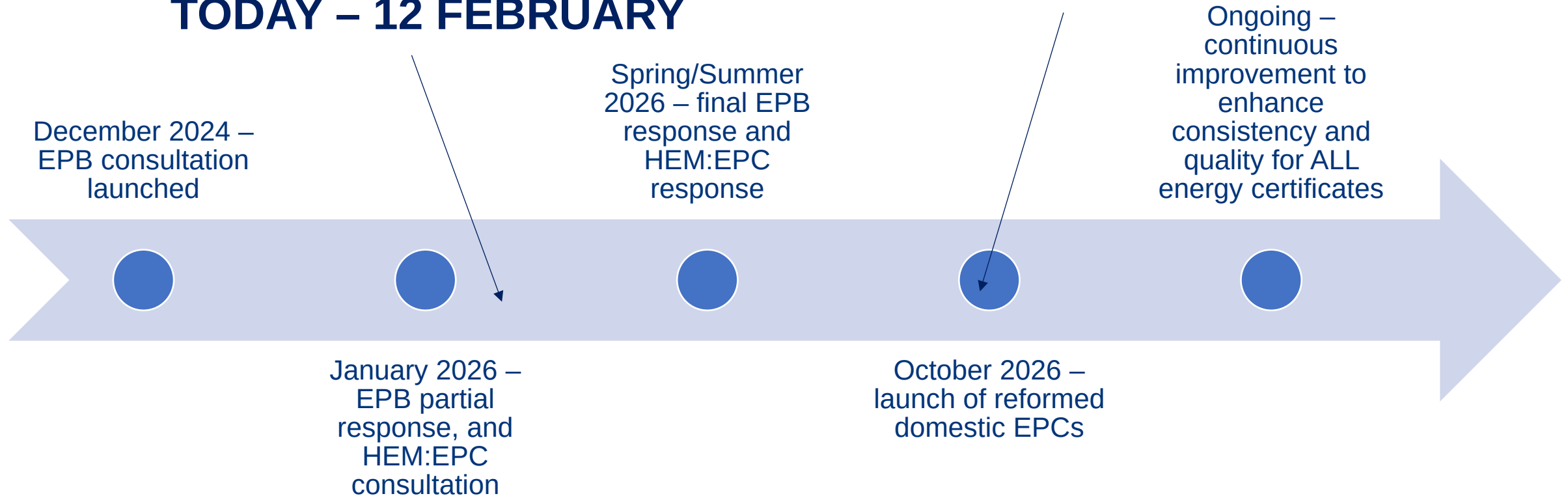
TODAY – 12 FEBRUARY



EPC reform timeline

LOTS OF SHARED WORK TO GET HERE

TODAY – 12 FEBRUARY



Minimum Energy Efficiency Standards for Private Rented Homes (PRS MEEES)



Domestic Private Rented Sector MEES

Government has committed to raising MEES in the domestic private rented sector (PRS) to the equivalent of EPC C by 2030. This was a manifesto commitment and is a key plank of the Warm Homes Plan.

English Housing Survey: 49% of PRS homes remain below EPC C as of 2024/25.

Annual Fuel Poverty Statistics: The highest rate of fuel poverty was in the private rented sector, with 24.1 per cent of these households being fuel poor, representing 35.1% of all fuel poor households in England.

Government published a consultation in 2025 on 'Improving the energy performance of privately rented homes', which ran from February to May. A government response to consultation was published 21 January 2026.

In January 2026, Government published a response to the consultation alongside the Warm Homes Plan.



PRS MEES Government Response

The government response confirmed:

- Standards will be set using **reformed EPCs**.
- A single compliance date of **1 October 2030** for all private rented tenancies.
- A requirement that properties meet EPC C against the **fabric performance metric**, then EPC C against either the **heating system or smart readiness metric** at the discretion of the landlord.
- A **£10,000** cost cap with a 10-year exemption period.
- A **grandparenting approach** which will allow properties with an existing EPC band C rating before 1 October 2029 to be compliant with the new standard until the EPC expires.
- A range of exemptions will remain available, and government will seek to introduce some new exemptions to manage impact on the sector.
- Short term lets will not be brought into scope of PRS MEES at this time.



PRS MEES – Next steps



Legislation to improve enforcement and raise minimum energy efficiency standards for privately rented homes. This includes requirements to commission a new EPC before initiating upgrades to a property.



Supporting policy development on EPCs, to make sure the use of EPCs in minimum energy efficiency standards is robust.



The right guidance, to the right people, at the right time

We need to provide guidance to landlords, local authorities, tenants and other key stakeholders.

Hearing the views of assessors will be hugely informative in understanding how we can best tailor guidance and ensure clear, effective communication.



Minimum Energy Efficiency Standards for Social Rented Homes (SRS MEEES)



Social Rented Sector MEES

Government has announced that MEES will be introduced for the SRS for the first time. The full government response will be published shortly. In the interim, government has confirmed the following policy position:

Social rented homes will be required to reach EPC C against any one metric (fabric, smart readiness or heating system) by 2030 and then reach EPC C against a second metric by 2039, subject to a spend exemption of £10k per property.

Compliance will be assessed using reformed EPCs, introduced following EPC reform.

Homes that reach EER C under the current EPC system by 1 April 2030 will be accepted as compliant for the duration of the EPC's validity. This approach recognises early action and avoids penalising landlords upgrading ahead of EPC reform.

After the transition period, compliance with SRS MEES will be demonstrated using reformed EPCs and the new MEES metrics.



Non-Domestic Private Rented Sector Minimum Energy Efficiency Standards (Non- domestic PRS MEEs)



Non-Domestic PRS MEES

Government response update:

- Non-domestic buildings were not included in the Warm Homes Plan. We intend to publish the consultation response as early as possible.
- Following the government's Regulation Action Plan, we are working across government to ensure the policy aligns with the government's focus on reducing regulatory burdens to help drive economic growth.
- We recognise the impact of delays on this sector and are working to provide as much clarity as possible and, if regulations proceed, sufficient lead-in time.

MEES and EPC Reform

- In MHCLG's EPC consultation, Government proposed the carbon metric be maintained as the single headline metric on non-domestic EPCs at this time. These are already carbon focused and are in line with our net zero objectives. This will maintain some consistency in the short term, particularly in light of any regulations which they underpin, such as MEES.



What Happens Next



Next Steps: Implementation Phase



**Warm Homes Plan
Implementation**



**SRS Government
Response**



**Full EPB and
HEM:EPC responses**



**Future Homes
Standard Publication**



Q&A Session



Lunch Break

Our next speaker will be at: **13:00pm**

The Elmhurst National Conference is proudly
sponsored by:



The Future Homes Standard from a Building Control and Warranty Perspective

Richard Smith - NHBC



Contents



NHBC Background

NHBC and the Future Homes Standard

Building Control

Warranty Issues and Opportunities

Further Information



We are the UK's leading independent provider of warranty and insurance for new build homes. Our purpose is to raise standards in house building by championing high-quality homes and protecting homeowners. We do this through training and quality services and by assessing, inspecting and directly insuring new homes registered with us.



Who we are and what we do

NHBC is the UK's **largest independent** provider of **warranty and insurance** for new-build homes.

Purpose: to **raise standards in house building** by **championing high-quality homes** and **protecting homeowners**.

We achieve our purpose through **training** and **assesses, inspects and insures new homes** directly registered with us.

More than 70% **of new homes are protected** by NHBC's Buildmark cover.

NHBC **protects around 1.5 million** of the UK's new homes.

NHBC **looks after homeowners** and **promotes quality** above all else.

NHBC's **training programmes are closing the skills gap**. With a **growing network of training hubs**, we're shaping the rising generation of housebuilders

NHBC's experts carry out more than **one million site inspections each year** helping builders **get people's new homes right first time and built to the highest standards**

We don't build homes. We are **independent of builders**, and we make sure new **homes registered with us are built to our standards**.

A brief overview of NHBC

- NHBC is the UK's leading independent provider of warranty and insurance for new-build homes.
- More than 70% **of new homes are protected** by NHBC's Buildmark cover.
- NHBC **protects around 1.5 million** of the UK's new homes.
- **NHBC's** experts carry out more than **one million site inspections each year** at key stages of building a new home.
- NHBC helps builders **get people's new homes right first time and built to the highest standards.**
- NHBC's **training programmes are closing the skills gap.** With a **growing network of training hubs**, we're shaping the rising generation of housebuilder



Our purpose is to raise standards in house building by championing high-quality homes and protecting homeowners.



NHBC & The Future Homes Standard

- NHBC Support the Future Homes Agenda
- Provide financial and facilities support to the Future Homes Hub
- Working closely with Elmhurst to ensure effective implementation
- Challenges will be around guidance launch and transitional arrangements



NHBC Building Control



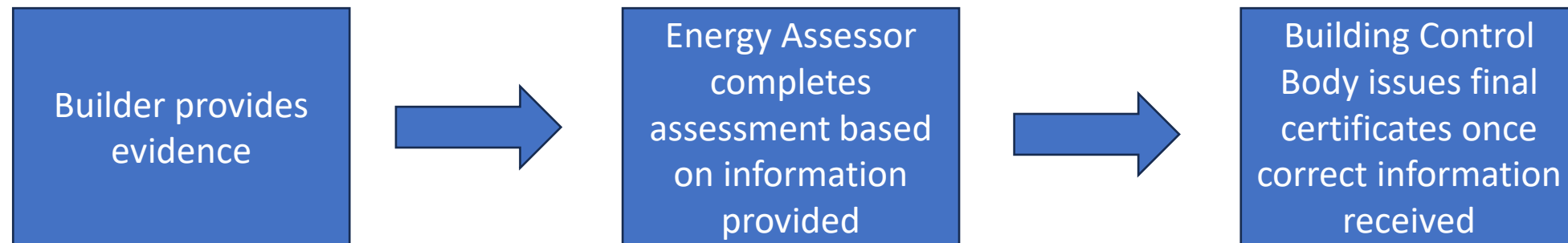
- NHBC have robust processes to gather as-built information
- Challenges are when information is missing such as photographic evidence
- NHBC have confidence in the current process

NHBC Building Control

Regulation 27 states

“A local authority is authorised to accept, as evidence that the requirements of regulation 26A have been satisfied, a certificate to that effect by an energy assessor who is accredited to produce energy performance certificates for that category of building.”

So what happens when as-built information is missing?
Who is responsible?





Insulation

Roof space from BREL report



Images showing contrasting workmanship from same builder, different sites.

One on the left is poor, likely to have voids (and will it link with the wall plate if it's this messy in the most accessible area?).

One on the right is neater standard of work, more likely to be continuity.



Insulation

Eaves detail from BREL report



Insulation

Pitched roof spaces



Image from a claim:

Uninsulated ceiling. Insulation from wall not meeting with insulation to ceiling



Image from a signed off BREL report

demonstrating the exact issue that is a common feature seen in claims – wall insulation not linking with ceiling insulation.

NHBC Building Control

Regulation 27 states

*“A local authority is **authorised to accept**, as evidence that the requirements of regulation 26A have been satisfied, a certificate to that effect by an energy assessor who is accredited to produce energy performance certificates for that category of building.”*

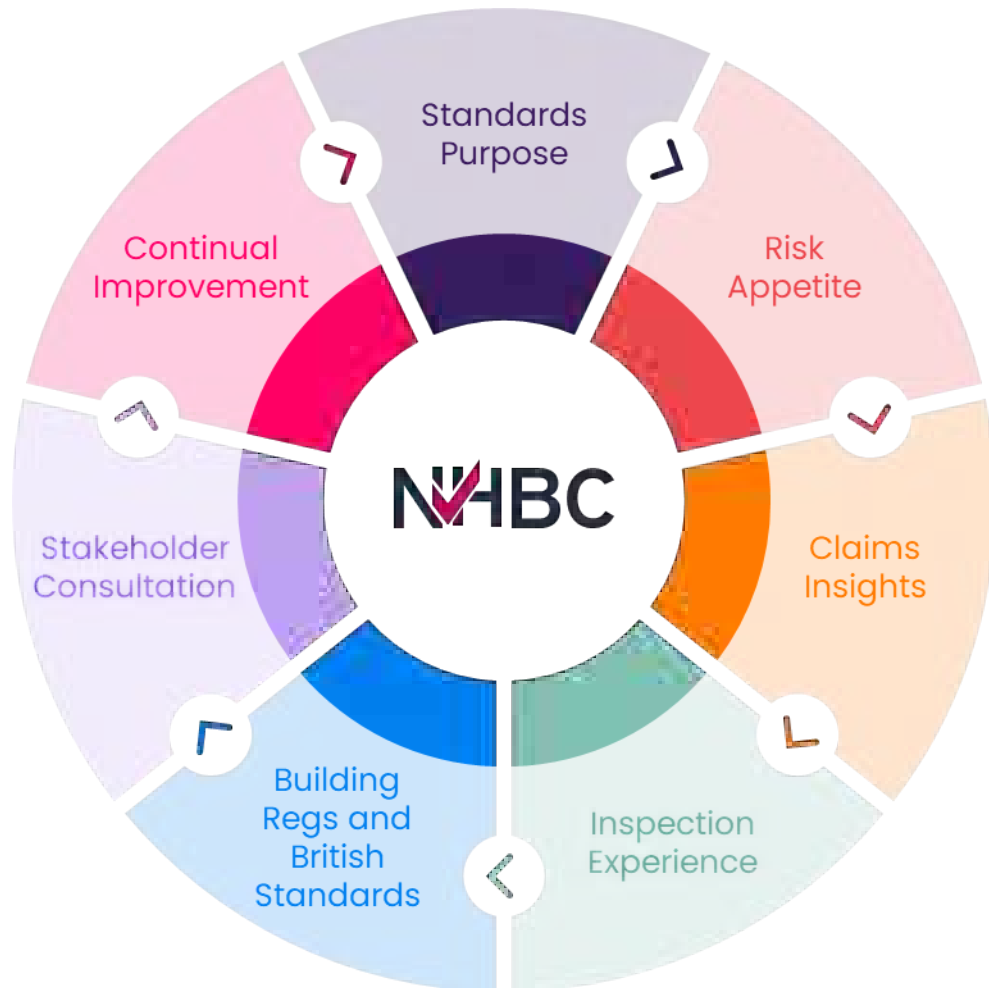
NHBC recognises the role that Elmhurst plays with respect accreditation and auditing that supports this process

2026

NHBC

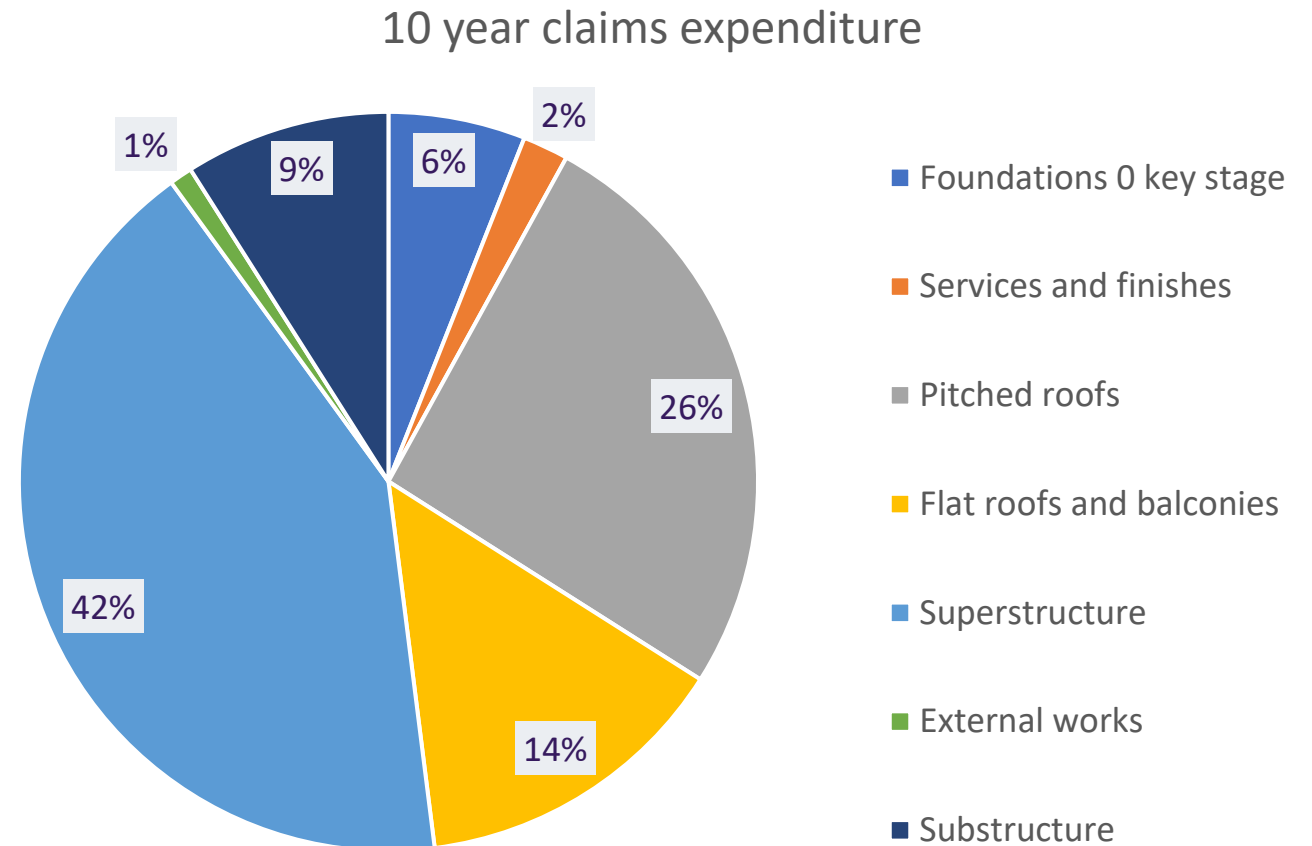
Standards

Effective from 1 January 2026



What is the claims data telling us?

- Over the past 10 years three areas of claims overshadow all others combined
- 42% Superstructure (External Walls)
- 26% Pitched Roofs
- 14 Flat Roofs & Balconies



NHBC Warranty Issues and Opportunities

- Future Homes brings uncertainty
- Mass implementation of heat pump installations
- Consumer behavior
- Changing construction methods
- In use performance is key moving forward



Weathertightness



Solar panels to rear



Full scaffold to gain safe access – significant inconvenience & cost



Weathertightness



Saturation of underlay across complete rear roof slope below solar panels – note tight underlay

NHBC Foundation

Future Homes - Avoiding unintended consequences

10 December 2024



The Future for Home Heating – life without fossil fuels

11 December 2024



Carbon Jargon: A glossary of carbon and energy related terms for the house-building community

12 December 2024



Watts in store? Introduction to energy storage batteries for homes

13 December 2024



BEYOND²⁶ LIVE

Future homes. Built better.

The agenda for BEYOND²⁶ LIVE is now available! From delivering responsible growth to climate resilience, construction quality, skills, building safety and product innovation - it's all covered with expert insights, panel debates and live demos.

4 stages

35+ speakers

30+ exhibitors

Your speaker line-up includes:



Nigel Carter
New Home
Ombudsman - NHBC

Insights from the New
Homes Ombudsman
Trends and tips to avoid
complaints



Jennie Dary
Chief Executive Officer
- Taylor Wimpey

Future of the new
homes market:
Perspectives on
delivering growth



Andrew Day
Sustainability Director
- The Hill Group

EMCD: Regulation
and innovation: the
roadmap to low-carbon
construction products



LOUISE WILKINSON
BEYOND²⁶ LIVE Host

Broadcasting journalist
and TV presenter



Sarah Garry
Chief Executive
Property Care
Association

Fixing the Gaps:
Raising standards and
competency in remedial
works and customer
care



Andrew George
Director of Industry
Action and Skills - MIF

The Home Building
Sector Skills Plan:
addressing workforce
challenges and building
capacity



Ian Workman
Chief Customer Officer
- Homes England

Future of the new homes
market: Perspectives on
delivering growth

Buy tickets and
see the agenda

nhbc.co.uk/beyond



Group booking
discount available

The Importance of Independence and Competence

Dr Hywel Davies OBE CChem MRSC HonFCABE HonFCIBSE

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14 June 2017

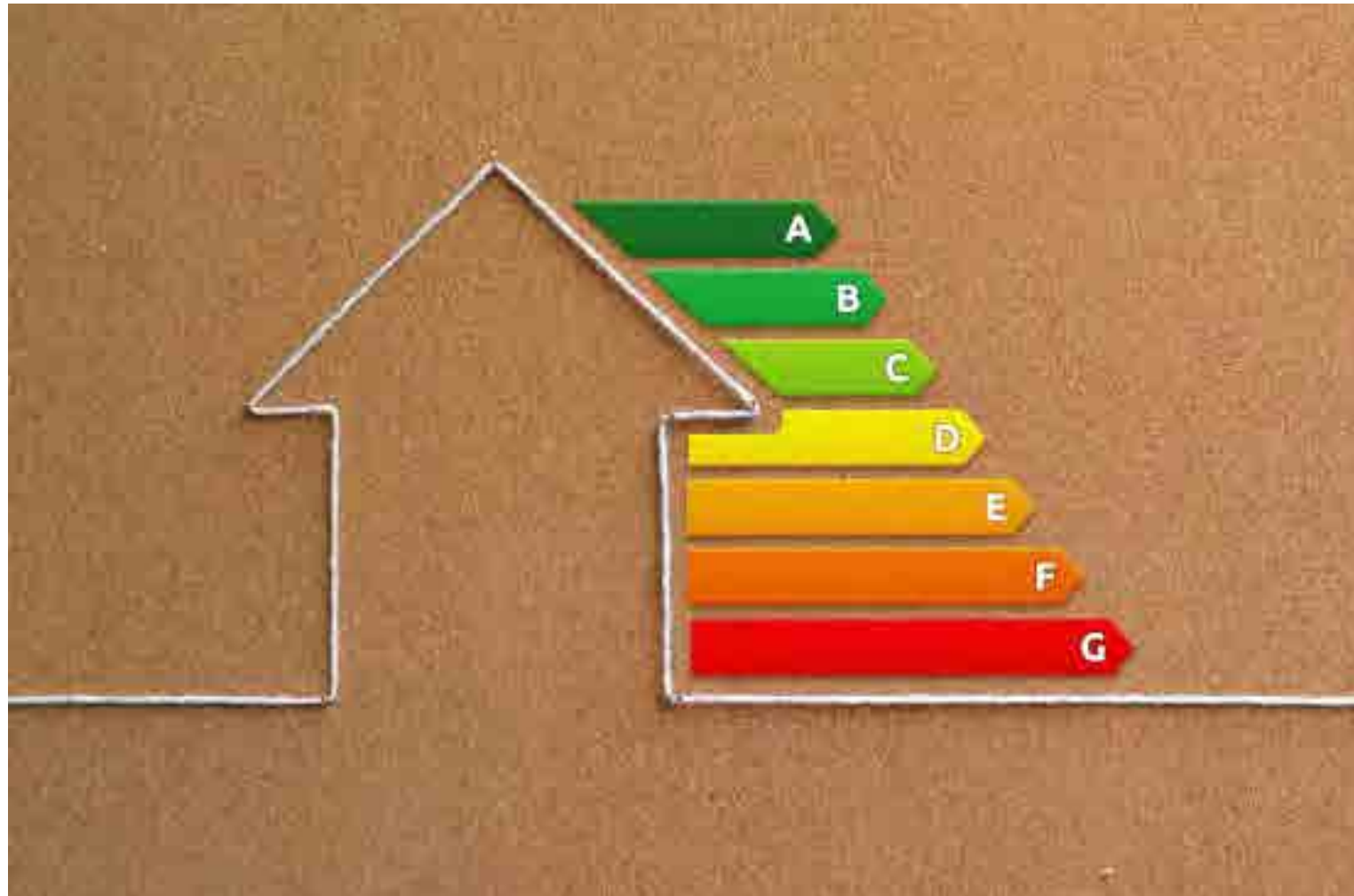


72 lives lost



“the deaths that occurred were all avoidable”

Energy Assessment



The Energy Assessment System

MHCLG

Energy Assessor Schemes

Energy Assessors

Clients

The Energy Assessment System

MHCLG

Energy Assessor Schemes

Independent

Energy Assessors

Competent

Clients

2018

Building a Safer Future

Independent Review of Building
Regulations and Fire Safety:
Final Report

Its complicated.....



Building Safety Reform

We face unprecedented change and uncertainty in our sector:

The Building Safety Act 2022 and supporting measures are now driving far-reaching changes to building control and fire-safety;

The Building Safety Act applies to **all building work**;

Government has recently consulted on reform of construction product regulation.

AND Greater digitalisation, modularisation, off-site fabrication and use of timber in construction are all government priorities
The Future Homes & Future Buildings Standards are due 'soon'
These must all be addressed alongside building safety reform.



Key issues underpinning system failure – Dame Judith:

Ignorance and misunderstanding of regulations and guidance

Indifference –to quality and safety and focus on speed and cost

Lack of clarity on roles and responsibilities and of accountability

Inadequate regulatory oversight, enforcement tools, enforcement action and deterrence – a view that compliance did not pay





Building Safety Act 2022

CHAPTER III

(Explanatory Notes have been produced to assist in the understanding of this Act and are available separately)

STATUTORY INSTRUMENTS
2023 No. 911

BUILDING AND BUILDINGS, ENGLAND The Building Regulations etc. (Amendment) (England) Regulations 2023

Made
by the Secretary of State
in exercise of powers
conferred by Parliament

29th August 2023
17th August 2023
1st October 2023

CONTENTS

PART 1 Introduction

PART 2

Amendment of the Building Regulations 2010

1. Citation, commencement, extent and interpretation
2. Amendment of the 2010 Regulations
3. Amendments to regulation 2
4. Amendments to regulation 10 and transitional provision
5. Amendments relating to depositors and competence
6. Amendments relating to depositors and building control
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PART 3

Amendment of other secondary legislation

1. Amendment of the Building (Local Authority Charge) Regulations 2010

**GRENFELL TOWER INQUIRY:
PHASE 2 REPORT**

REPORT of the PUBLIC INQUIRY into the
FIRE at GRENFELL TOWER
on 14 JUNE 2017

The Panel

Chairman: The Rt Hon Sir Martin Moore-Bick

Alli Akber OBE

Thomas Joseph

September 2024

Part 14

Recommendations

Grenfell Tower Inquiry



UK Government Response to the Grenfell Tower Inquiry Phase 2 Report

Policy paper

Grenfell Tower Inquiry Phase 2 Report: Government response (HTML)

Published 26 February 2020

Contents

Foreword from the Deputy Prime Minister

Executive summary

The government's response to the inquiry's Phase 2 report

Chapter 1: Government's response to the Grenfell Tower Inquiry Phase 2 report's recommendations

Chapter 2: Action taken since 2017

Chapter 3: Our commitment to go further

Chapter 4: Residents at the heart of the system

Chapter 5: Construction Product system reform

Chapter 6: Clear standards and expectations

Chapter 7: Competent professionals and trades

Chapter 8: Clear accountability and effective enforcement

Chapter 9: Cultural change

Chapter 10: Delivering together

Chapter 11: Our next steps



Ministry of Housing,
Communities &
Local Government



Cabinet Office



Department
for Work &
Pensions



Ministry
of Justice

Health and Safety
Executive



Department for
Business & Trade

Policy paper

Progress report: summary update

Updated 14 January 2026

[Contents](#)

[Overview](#)

[Introduction](#)

Overview

Last updated: 17 December 2025

Building Safety Regulator

[Home](#) > [Housing, local and community](#) > [Planning and building](#) > [Building regulation](#)

Press release

Reforms to Building Safety Regulator to accelerate housebuilding

Reforms to the Building Safety Regulator bring new leadership, investment and process to accelerate housebuilding

From: [Ministry of Housing, Communities and Local Government](#); [Health and Safety Executive](#) and [Alex Norris MP](#)

Published 30 June 2025



Office of Product Safety and Standards

The National Regulator for Construction Products operates within the Office of Products Safety and Standards.

MHCLG is responsible for construction products policy and MHCLG Ministers are accountable to Parliament.

The Building Safety Act gives the Secretary of State powers to regulate construction products for the whole of the United Kingdom, to enforce the regulations and to amend the current regime to ensure that it remains fit for purpose.





Department for Levelling Up,
Housing & Communities

Testing for a Safer Future

An Independent Review of the Construction Products
Testing Regime

Prepared by the Review panel: Paul Morris OBE (Chair) and Anneline Day KC

April 2025



Ministry of Housing,
Communities &
Local Government

Construction Products Reform Green Paper

FEBRUARY 2025

081220



The Government's Position

“The necessary changes will require significant, long-term effort from both government and industry. But shared responsibility does not mean diluted accountability. Each company, every person, must know precisely where they are responsible. If their products put safety in jeopardy or their work is substandard, there will be consequences.”

Construction Product Reform Green Paper, Deputy PM, Foreword

Building Regulations

Regulations and Guidance



A system of functional regulation

The legal requirement is to demonstrate 'reasonable provision' against the 'functional requirements' set out in the Building Regulations (Technical Standards in Scotland)

Permits a wider range of solutions - but requires a higher level of competence to achieve compliance.

Requires designers to assess whether products will contribute to a compliant design – designers need to understand the performance of the products that they specify and how that performance contributes to a compliant design.

Designers need accurate, reliable, up to date information from product manufacturers and suppliers to enable them to discharge their duties.

Dutyholders and Competence Regulations

Definitions

““client” means any person for whom a project is carried out;”

““contractor” means any person (including a client, but not a domestic client) who, in the course of a business, carries out, manages or controls any building work;”

““design work” means design of any building work;”

““designer” means any person (including a client, contractor or other person referred to

in Part 2A of these Regulations) who in the course of a business—

(a) carries out any design work, or

(b) arranges for, or instructs, any person under their control to do so;”

“domestic client” means a client for whom a project is being carried out which is not in the course or furtherance of a business of that client;



Building Regulations Part 2A: Dutyholders and competence

Designer duties: *Duties of dutyholders*

General duty

11J.—(1) Any person carrying out any building work must ensure the work carried out by them (and by any workers under their control) is planned, managed and monitored so as to be in compliance with all relevant requirements.

(2) Any person carrying out any design work must take all reasonable steps to ensure the design work carried out by them (and by any workers under their control) is planned, managed and monitored so that the design is such that if the building work to which the design relates were built in accordance with that design the building work would be in compliance with all relevant requirements.



Building Regulations Part 2A: Dutyholders and competence

Additional duties of designers

11K.—(1) A designer must not start design work unless satisfied that the client is aware of the duties owed by the client for the building work to which the design relates under all relevant requirements.

(2) When carrying out design work the designer must take all reasonable steps to ensure that the design is such that if the building work to which the design relates were built in accordance with that design the building work would be in compliance with all relevant requirements.

Changes you could make

▶ [Do I need to follow these steps in order?](#)

Step 1: Increase loft insulation to 270 mm

Typical installation cost £100 - £350

Typical yearly saving £76

Potential rating after completing step 1

54 E

Step 2: Internal or external wall insulation

Typical installation cost £4,000 - £14,000

Typical yearly saving £855

Potential rating after completing steps 1 and 2

↑ Back to

68 D

Questions

- Who is the designer?
- Who is responsible for building regulations compliance?
- Who carries the liability for the work?
- How will this all work in practice?

Its all about people



New Build: The Next Chapter

Jason Hewins, Elmhurst Energy





Agenda



Future Homes Standard

SAP 10.3

Home Energy Model

Transition from SAP to Home Energy Model

What are Elmhurst doing

Design HEM Update



An update on the Future Homes Standard

- The next revision to Part L in England.
- Expected Q1 2026.
- Key changes proposed;
 - Shift to low carbon heating (heat pumps/heat networks)
 - Expecting PV on majority of new homes
 - Use of the Home Energy Model to replace SAP*
 - Six or twelve month implementation phase
 - Sunsetting of older transitional arrangements



An update on SAP 10.3

- SAP 10.3 will be used to calculate compliance to the Future Homes Standard.
- SAP 10.3 is simply SAP 10.2 with minor changes including;
 - New notional dwelling used to set the compliance targets for the Future Homes Standard.
 - New carbon and primary energy factors for fuels.
- Our Design SAP 10 application is already BRE approved for SAP 10.3.
- It will be available once the Future Homes Standard is published.





An update on the Home Energy Model



- The Home Energy Model is a completely new methodology intended to replace SAP.
- Core model is based on modern international standards and 'open source'.
- Key differences in Home Energy Model with Future Homes Standard wrapper include;
 - Half hourly calculation timestep compared to monthly in SAP.
 - Shading from surrounding objects can be accurately modelled.
 - Thermal elements must be defined by orientation, pitch and surface colour.
 - Infiltration requires details of background ventilators.
 - Space heating emitters are assessed against the space heat demand to determine capacity.
 - Domestic Hot Water includes measurement of primary and secondary pipework characteristics.



An update on the Home Energy Model



- Development of Home Energy Model ongoing.
- The following need to be in place before launch;
 - ECaaS updated to reflect the final version of Home Energy Model used for Future Homes Standard
 - Final version of the Future Homes Standard wrapper released
 - The Home Energy Model PCDB
 - Future Homes Standard BREL report
 - HEM:FHS Conventions
 - HEM:FHS User guidance
 - Assessor competency requirements
- All 'in progress' but not yet complete or available.

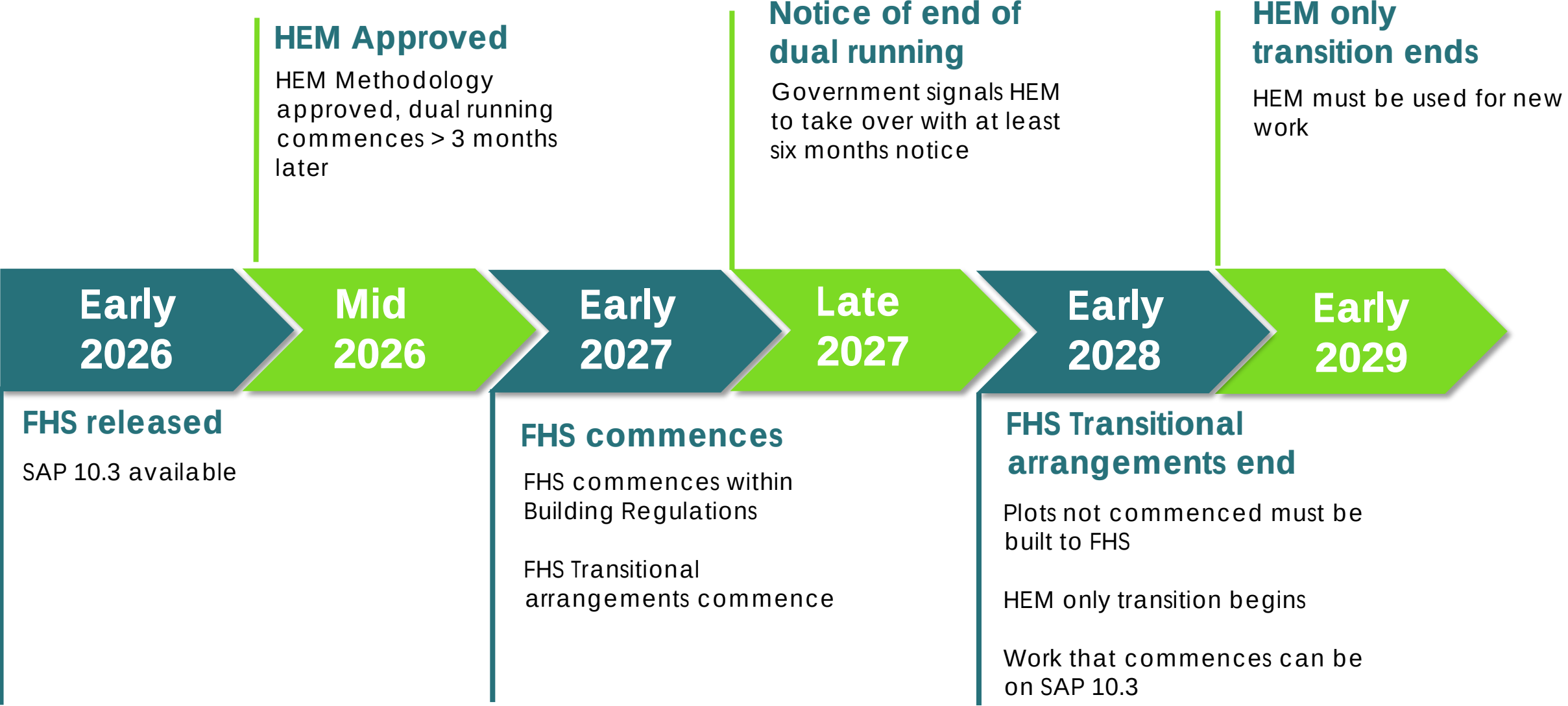


Transition from SAP to Home Energy Model

- Use of SAP 10.3 will eventually end and Home Energy Model will be the sole methodology for Future Homes Standard.
- Once Future Homes Standard released Home Energy Model will be released at least three months after.
- This will commence a period of dual running for at least two years.
- When Home Energy Model is deemed ready to take over expect at least six month advance notice.
- After this date any new work must only be completed on Home Energy Model.
- Possibly managed in a similar way to Building Regulations transitional arrangements.



Timeline?





What are Elmhurst doing?



- Developing Design HEM based on ECaaS, open source repositories and schemas.
- 'Home Energy Model Theory' and 'Understanding SAP 10.3' training courses available.
- Creating a new OCDEA course for new entrants to cover SAP and Home Energy Model.
- Working with various stakeholders including Government, House builders, NHBC, Future Homes Hub to advocate for our members.
- Creating materials for you that explain the changes to your clients and prepare them for new information needed for Home Energy Model.
- Upskilling internally to ensure we continue to provide best in class support for members.

Design HEM

- Elmhurst are authorized to use the ECaaS facility.
- We commenced development of our Design HEM application at the start of 2025.
- Interacting with ECaaS to understand user inputs.
- Has been difficult due to changing HEM versions/inputs.
- Lessons learned from SAP 10 delivery.
- No timeline available for release but intent to release as soon as possible.



Design HEM





Final Thoughts



- Expecting the Future Homes Standard to be published first quarter of 2026.
- SAP 10.3 is ready and will be deployed into Design SAP 10 once Future Homes Standard released.
- Home Energy Model continues to be developed and will eventually replace SAP.
- Dual running of SAP and Home Energy Model unprecedented in domestic new build sector.
- Elmhurst will fully support all members through this transition.



Q&A Session



Afternoon Break

Our next speaker will be at: **14:35pm**

The Elmhurst National Conference is proudly
sponsored by:



Acknowledgements

- Dr Matt Li, Prof. David Allinson, Prof. Kevin Lomas
- Build Test Solutions Ltd. – the largest airtightness dataset of existing homes in UK
- Department for Energy Security and Net Zero (DESNZ) for funding and Roger Littlewood for project management (Gathering evidence to improve airtightness in the UK housing stock – 2023-2025)

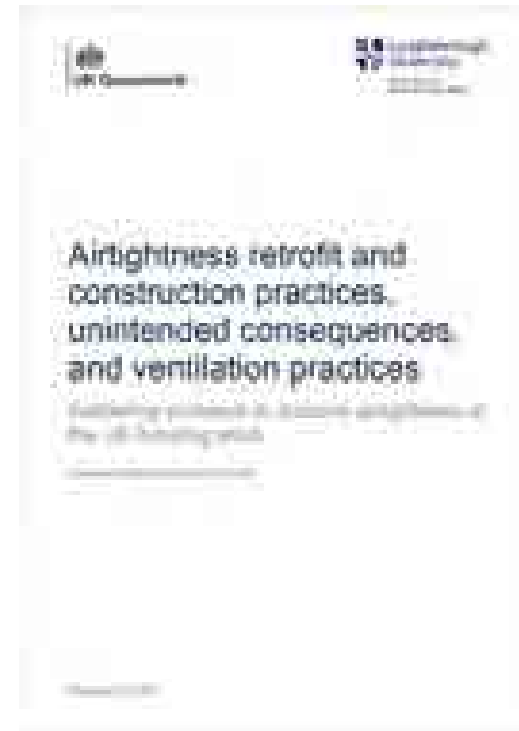
Four reports published



A literature review
and secondary
data analysis



A literature review,
an empirical
validation exercise,
and dynamic
thermal modelling



Three literature
reviews and
secondary data
analysis



Scoping for a
potential Phase 2

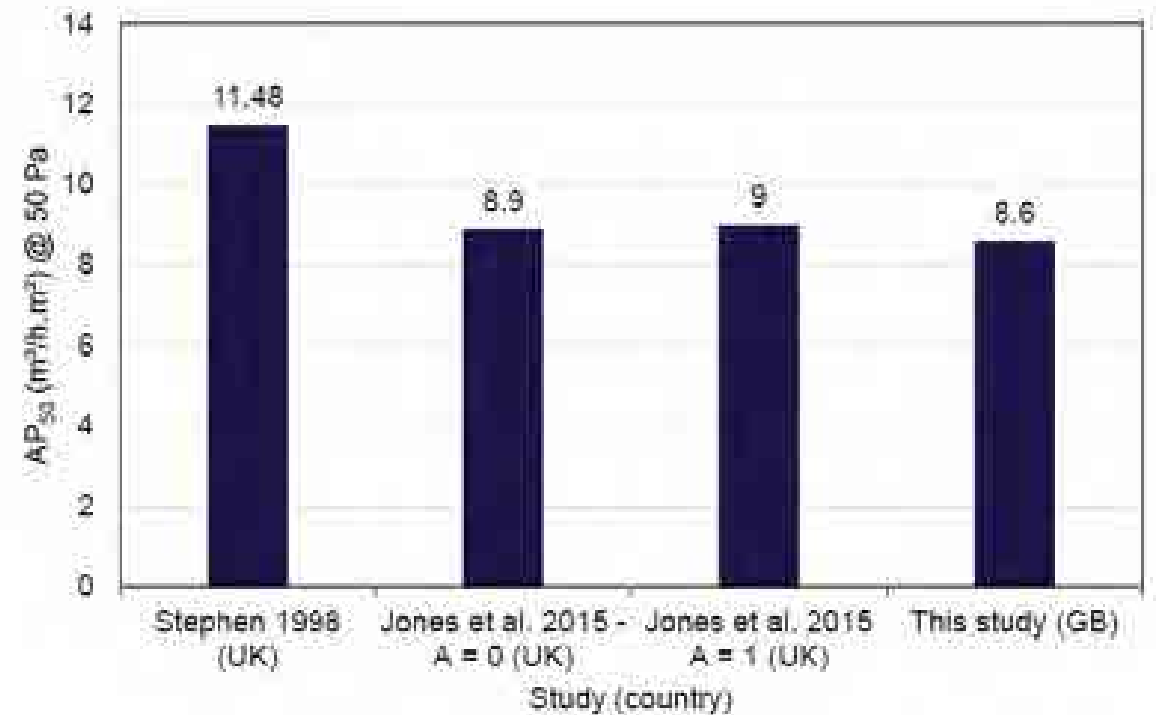
Context

- Airtight homes (with sufficient ventilation) contribute to them being energy efficient, affordable to heat/cool, and healthy for the occupants.
- UK Building Regulations and net zero targets are driving more airtight homes – but how airtight is the Great British housing stock?



What do we know already?

- Very outdated knowledge of airtightness
- Relying on a small number of tests:
 - 384 tests pre-2000
 - 287 tests 2006-2010



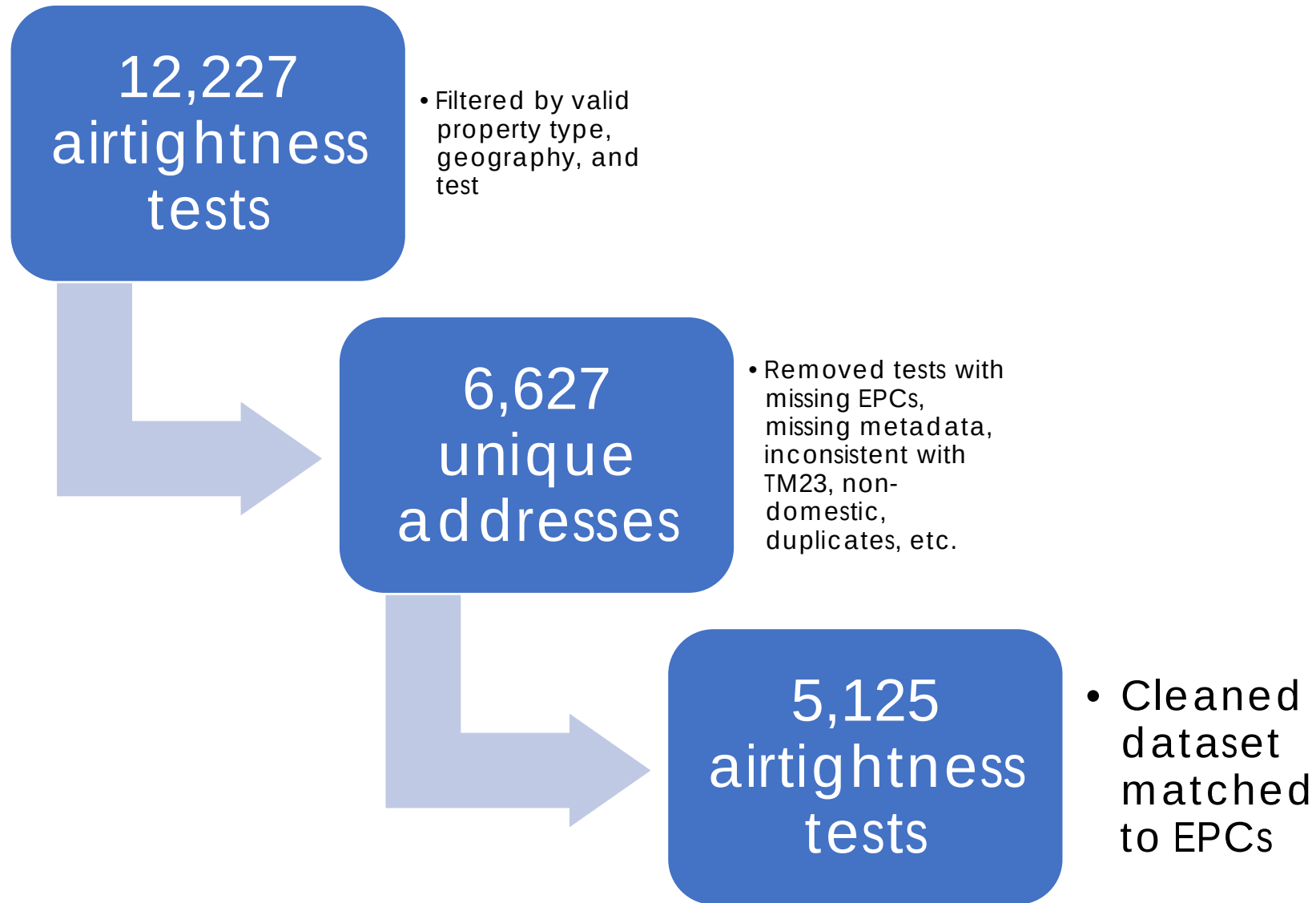
We need an up-to-date
calculation of the
airtightness of the GB stock

Background

- Research commissioned by DESNZ in 2023.
 - How much to do?
 - Where to target airtightness retrofits? (Age, built form, wall type).
 - Benchmarking to indicate scale of improvements. (Cost, carbon, energy).
- Four reports produced by Loughborough University:
 - Baseline airtightness of GB stock
 - Evaluating methods to estimate air infiltration from airtightness
 - Unintended consequences of airtight homes and retrofit practices
 - Scoping study for future projects

The dataset

- The 130,000 results lodged with ATTMA for new-build dwellings do not represent the existing stock
 - (and are biased by in-test air sealing – Love et al. 2017)
- The airtightness dataset was the largest and best quality available.
- Measured by the low-pressure pulse method between August 2021-October 2023.



Extrapolate to the GB stock

- Generated nationally-weighted dwelling counts using national housing condition datasets



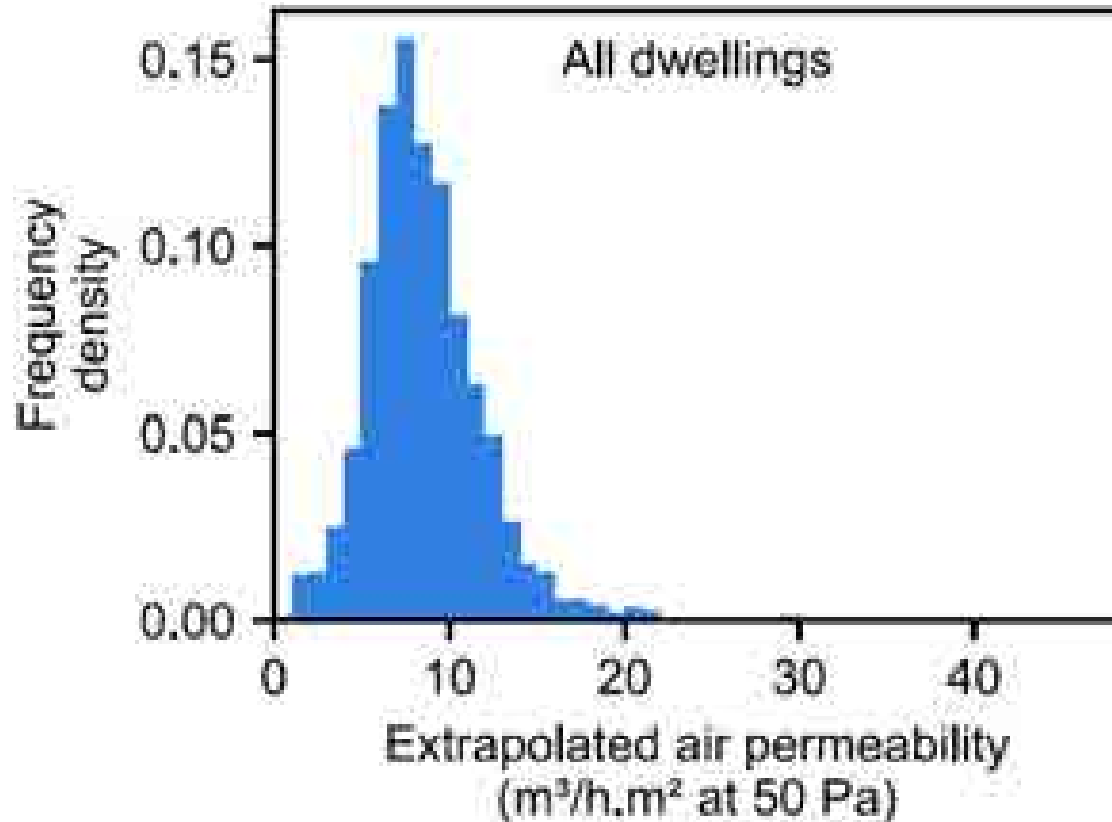
5,125 cleaned
dwellings



>27 million
dwellings

Results

Airtightness of the GB stock

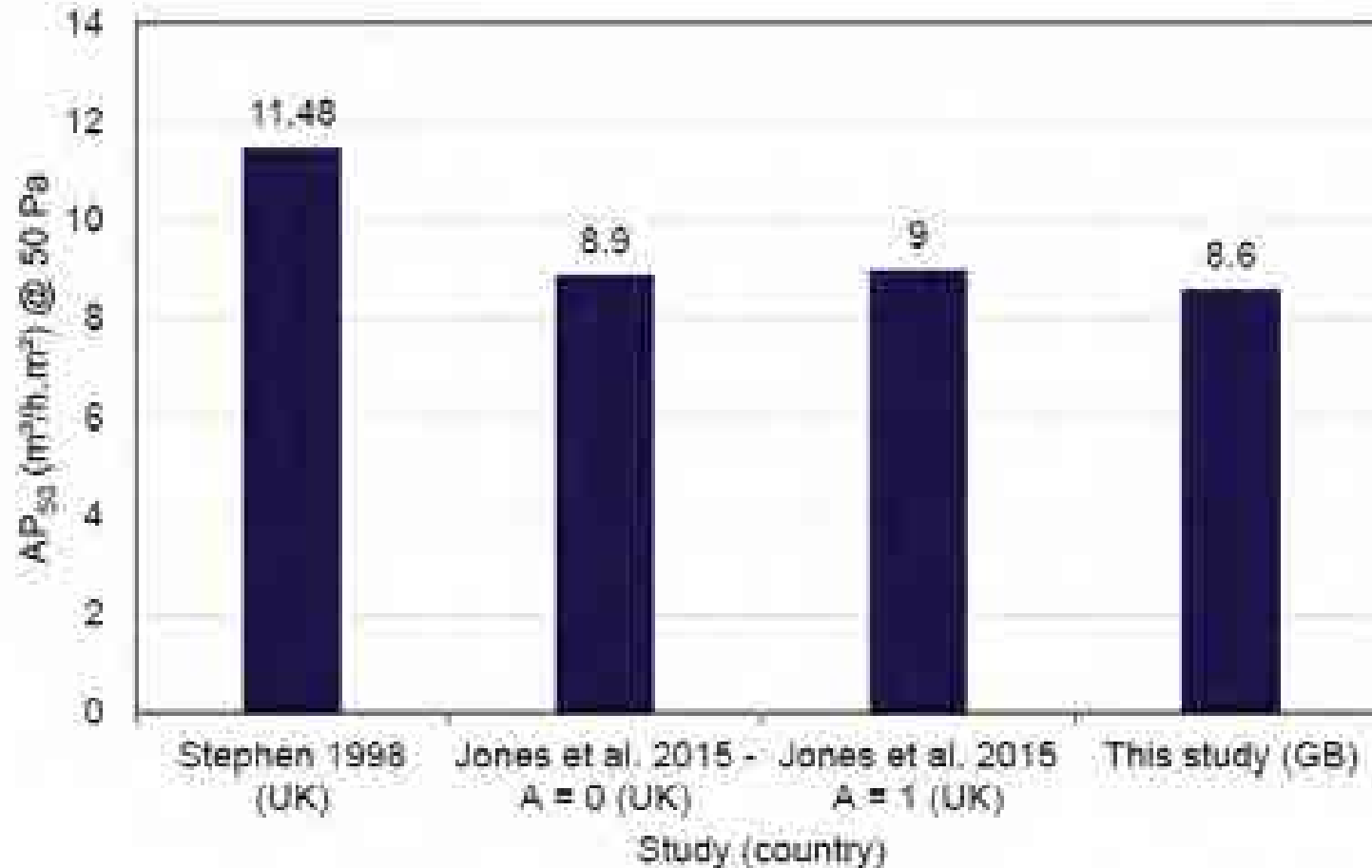


Mean AP_{50} of
 $8.6 \text{ m}^3/\text{h.m}^2 @$
50 Pa

(Current building regs = AP_{50} of 8 in newbuilds)

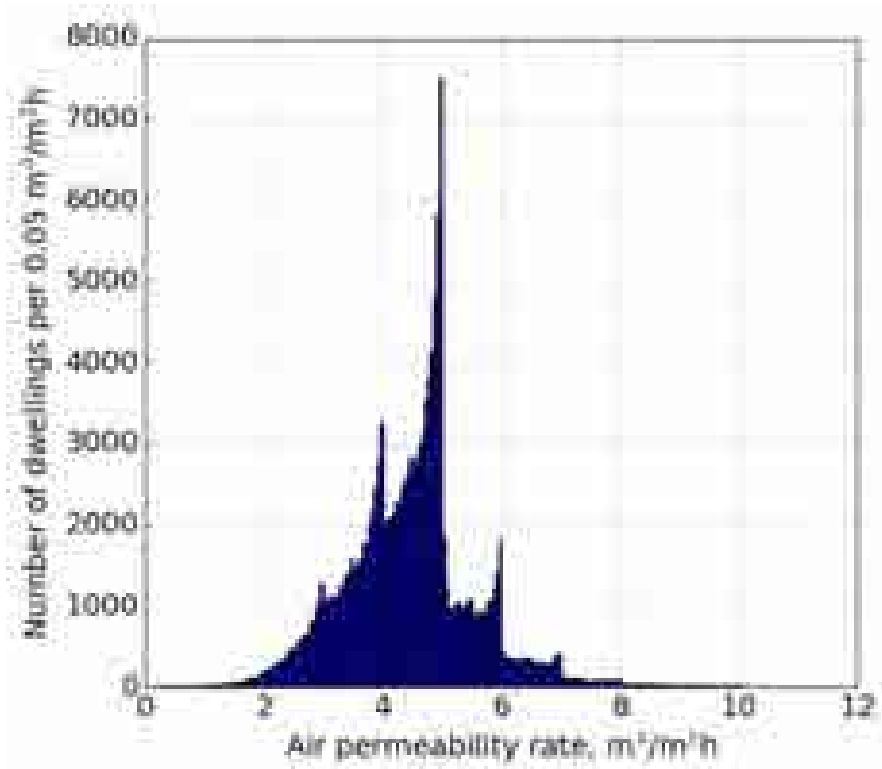
Roberts et al. (2025) <https://assets.publishing.service.gov.uk/media/68db99e0dadf7616351e4be6/airtightness-in-uk-housing-stock-baseline.pdf>

Compared to older studies

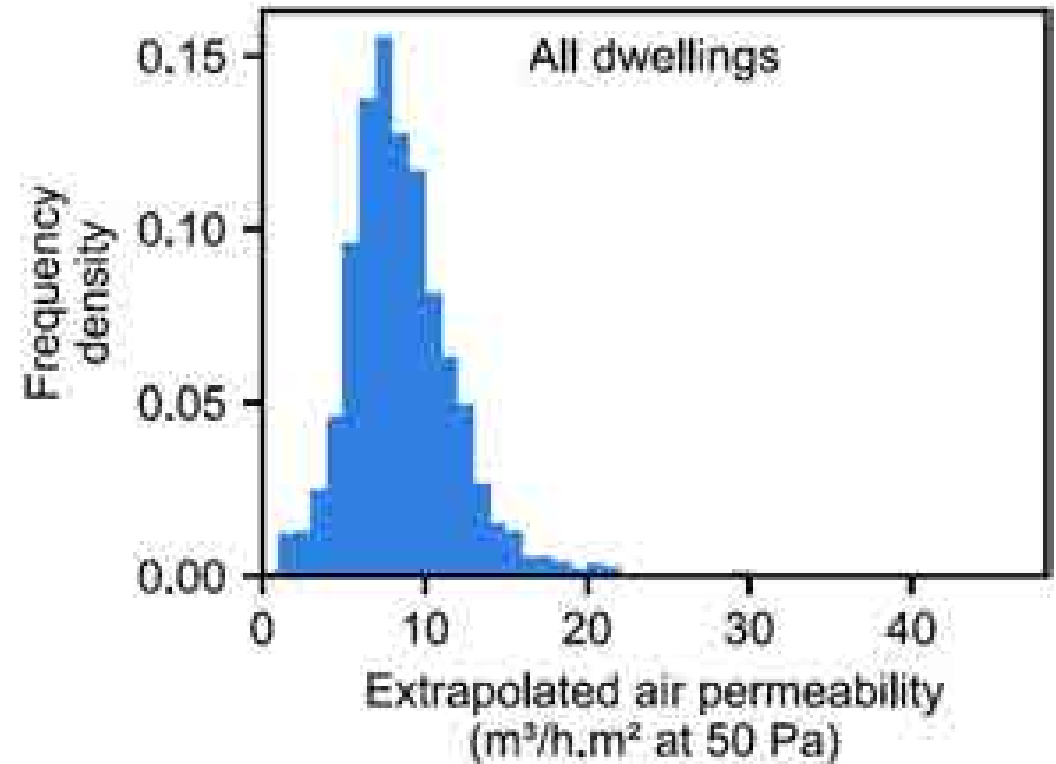


Roberts et al.
(2025)

Gaming the result – not seen in this dataset

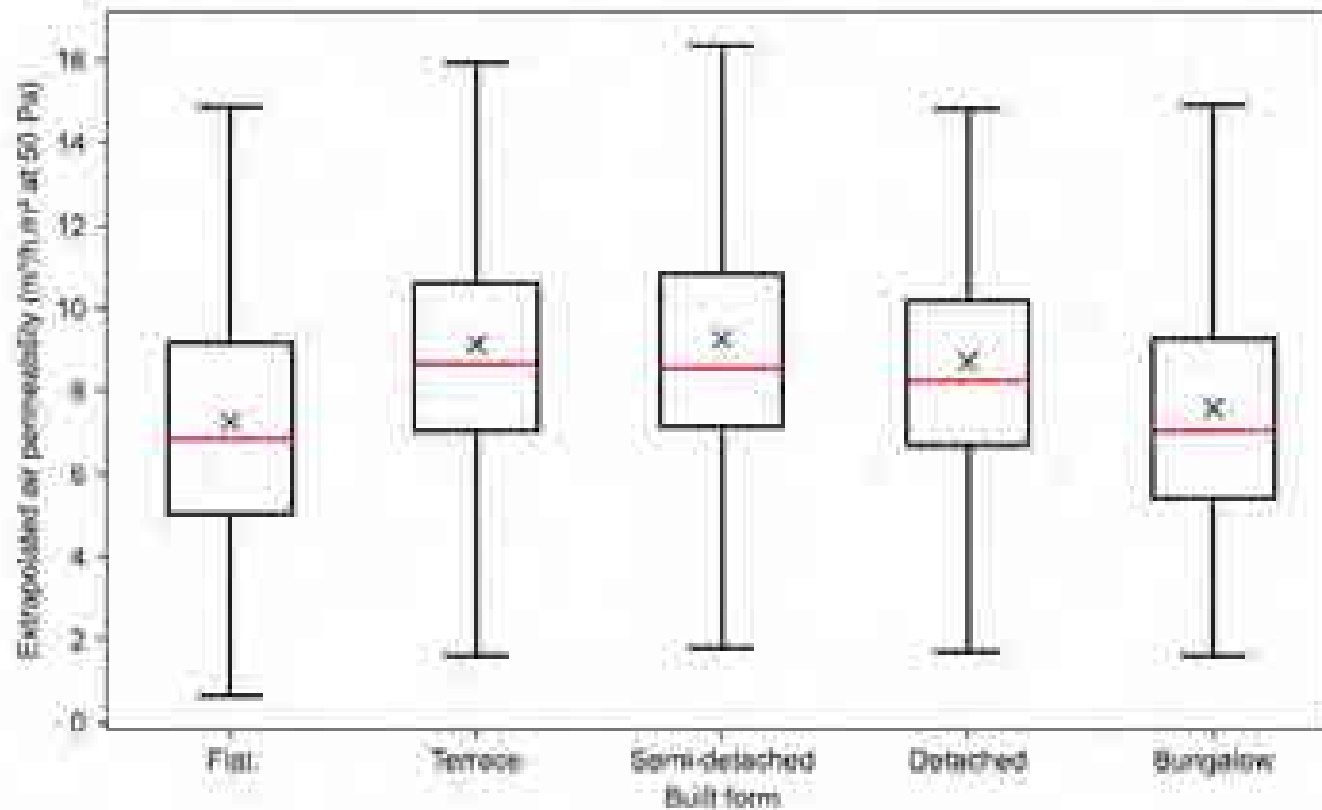


Crawley et al.
(2019)



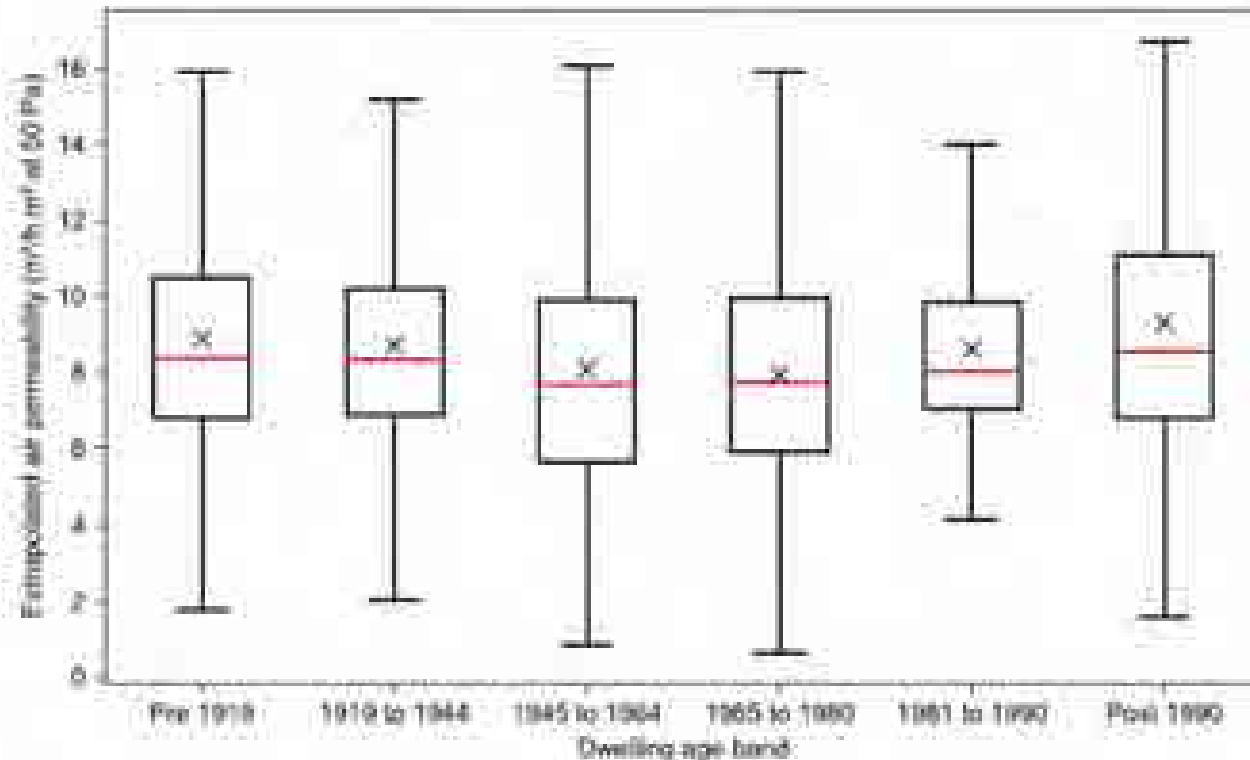
Roberts et al.
(2025)

Dwelling type: flats and bungalows were most airtight; semi-detached houses least airtight



Box bounds indicate lower and upper quartiles (Q1 & Q3), red line indicates median, x indicates mean, tails indicate minimum and maximum values not including outliers. (Outliers defined as values lying outside of the range $[Q1 - 1.5 \times IQR, Q3 + 1.5 \times IQR]$, where $IQR = Q3 - Q1$.)

Age band: 1965-1980 dwellings were most airtight; newer (post-1990) dwellings were least airtight



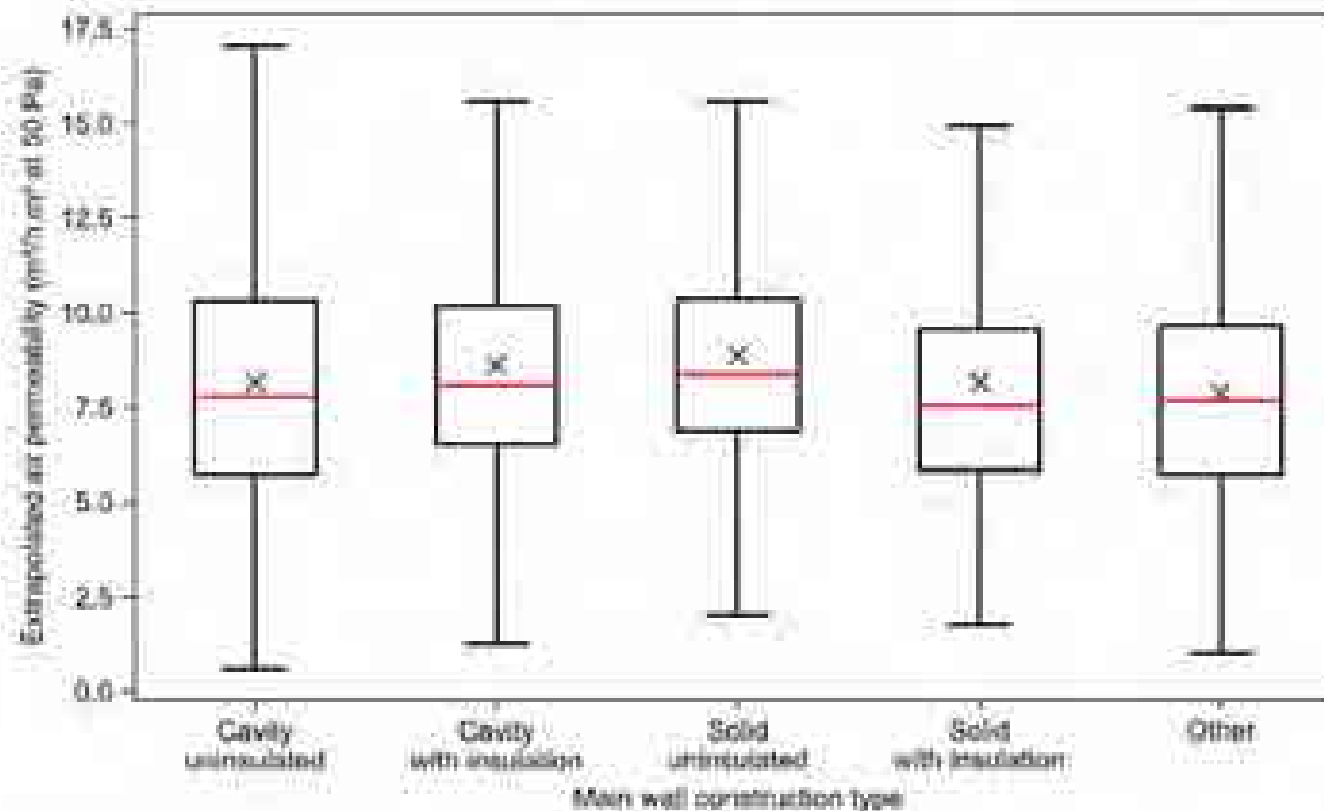
Box bounds indicate lower and upper quartiles (Q1 & Q3); red line indicates median, x indicates mean; tails indicate minimum and maximum values not including outliers. (Outliers defined as values lying outside of the range $[Q1 - 1.5 \times IQR, Q3 + 1.5 \times IQR]$, where $IQR = Q3 - Q1$.)



Vs.



Wall type: system-built walls were most airtight, uninsulated cavity walls least airtight



Box bounds indicate lower and upper quartiles (Q1 & Q3), red line indicates median, x indicates mean, tails indicate minimum and maximum values not including outliers. (Outliers defined as values lying outside of the range $[Q1 - 1.5 \times IQR, Q3 + 1.5 \times IQR]$, where $IQR = Q3 - Q1$)

Key points

- Big variation within categories of built form, age, and construction.
- Small differences in means and medians.
- Other factors are influencing airtightness.
- Construction practices have changed over time.
- Building regulations are requiring more airtight homes.
- More known of GB airtightness than other European countries.

Effect on energy, carbon, and cost of airtightness improvements

If ALL dwellings in the stock were improved to have an air permeability of at least $5 \text{ m}^3/\text{h.m}^2$ @ 50 Pa (notional dwelling in building regs):

25 million dwellings would need to be retrofitted (90% of the stock)



Energy

- 15.2 TWh reduction in heating energy demand per year
 - (0.61 MWh per dwelling per year) – 6.9% of winter heating demand



That's 1.5 times the capacity of
Sizewell B's annual output

Cost

- Save £840 million in annual heating energy costs
 - Mean £33 per treated dwelling

How much would airtightness retrofit cost? How much can airtightness be improved by retrofit? Report 3 showed inconclusive and conflicting evidence.



Carbon

- 2,880 ktCO₂e reduction
 - (mean 115 kgCO₂e per treated dwelling)

Reduce GB
greenhouse gas
emissions by
**0.7 percentage
points**



Conclusions

- First analysis since 2015.
- Previously using data includes small number of houses (671), none built after 2010.
- This new analysis used 5,125 dwellings scaled to the national stock of 27 million homes.
- Showed that GB dwellings are more airtight than previously thought (mean $8.6 \text{ m}^3/\text{h.m}^2$ @ 50 Pa).

Conclusions (continued)

- Attributes of most airtight homes:
 - Flats
 - Built between 1965-1980
 - System built walls
- Attributes of least airtight homes:
 - Semi-detached houses
 - Built post-1990
 - Uninsulated solid walls
- But large variations within categories points to other factors influencing airtightness.
- Effect on energy, cost, and carbon quantified.

Further reading

- Roberts et al. (2025). Baseline airtightness of the GB housing stock. UK Government.
<https://assets.publishing.service.gov.uk/media/68db99e0dadf7616351e4be6/airtightness-in-uk-housing-stock-baseline.pdf>
- Read all the reports here:
<https://www.gov.uk/government/publications/gathering-evidence-to-improve-airtightness-in-the-uk-housing-stock>



Energy and climate resilience in historic buildings

Joanne Williams (MRICS), Historic England





Energy

Figure 2: Greenhouse gas emissions by TES sector, UK, 2024 (%)





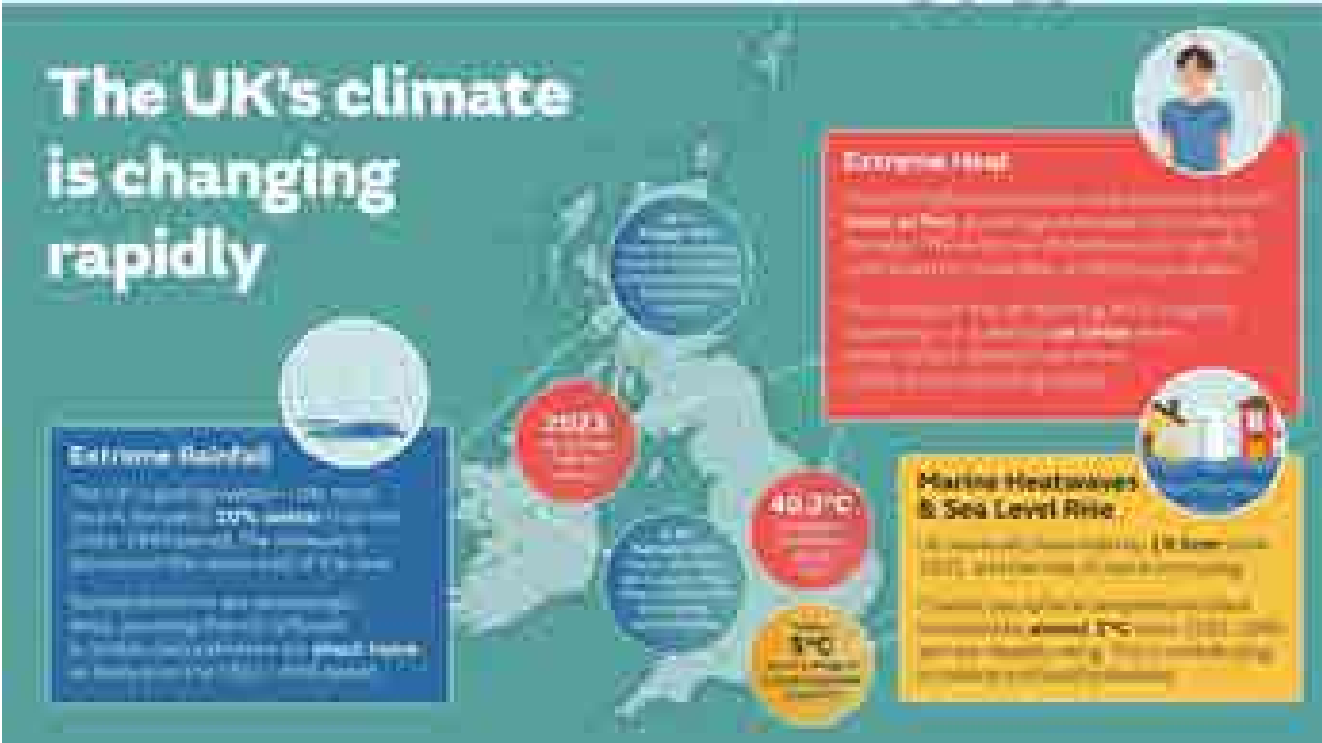
Overheating



Home / News / Insights

The hidden problem of overheating

Climate Change Committee, 2017



• CCRA4, 2025



Overheating and Insulation

The interactive map was provided by researchers at the University of Mayland



England's climate will begin to feel like the south of France

- Energy efficiency measures applied without sufficient cooling strategies, increases airtightness and cause overheating. Particularly with internal solid wall insulation which prevents heat escaping. UKGov 2023
- High thermal mass buildings take time to change temperature so can mitigate peaks in external temperature by allowing the thermal mass to absorb the heat and dissipate it later. However thermal mass can be counterproductive in cases where the building is not permitted to cool down (for example when a building is well insulated and not ventilated during cooler periods). UKGov, 2021





Overheating and the UK



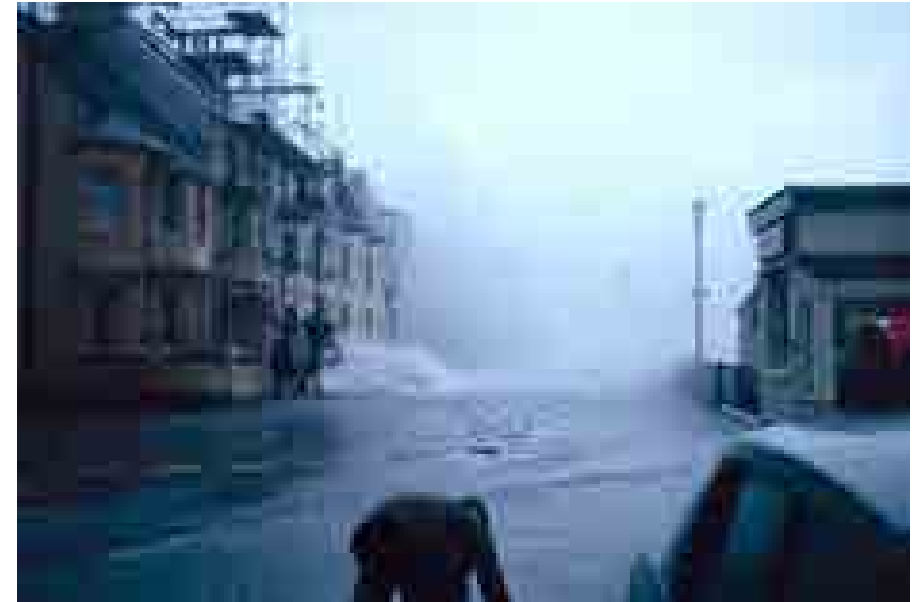
Good Homes Alliance, 2022



BBC. 2026



Other climate change issues



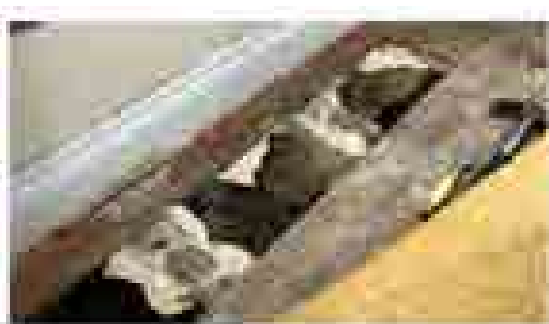


Lessons from retrofit in the UK



'Government insulation scheme ruined my home'

Glasgow & West Scotland / 11 May 2020



'Serious and systemic' problems found in insulated homes

Scotland / 21 Jan 2020



'Failings at every level' resulted in botched insulation scheme, MPs told

London / 14 Jan 2020



Man's mouldy house may force him into a van for winter

London / 14 Jan 2020



'Living with damp and mould like living in space'

London / 14 Jan 2020



'Poor' insulation that left homes mouldy needs wider investigation, government told

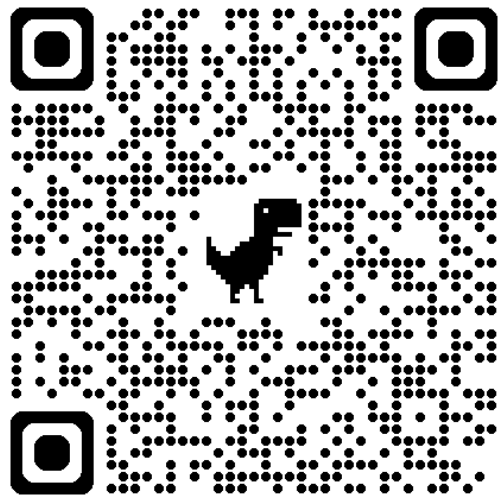
London / 14 Jan 2020



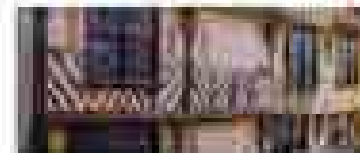


Technical guidance and advice

Historic England's technical tuesdays:

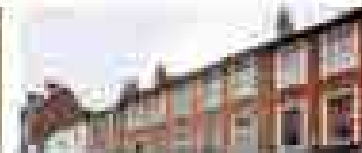


Energy Efficiency and Retrofit in Historic Buildings



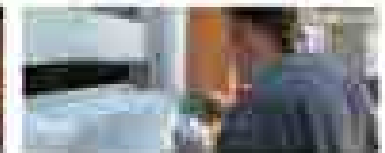
Traditional Buildings

Learn how to improve the energy efficiency of traditional buildings by addressing the key areas of energy loss.



Whole Building Assessment

A whole building assessment is a key step in identifying the key areas of energy loss and developing a plan to improve energy efficiency.



Improving Energy Efficiency

Advice on how to improve energy efficiency in historic buildings.



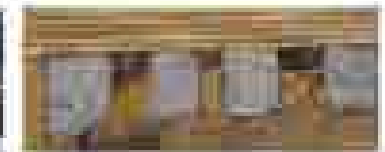
Improving Climate Resilience

How you can make historic buildings more resilient to climate change.



Modifying Windows and Doors

How to improve the energy efficiency of windows and doors in historic buildings.



Reducing Heat Loss

Advice on how to reduce heat loss in historic buildings.

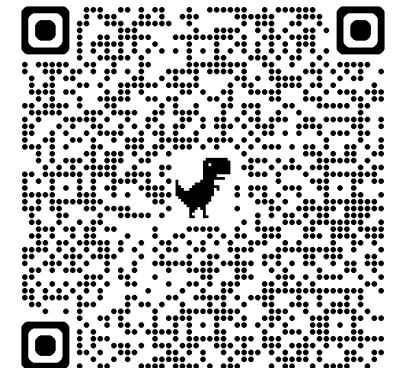




Whole Building Approach

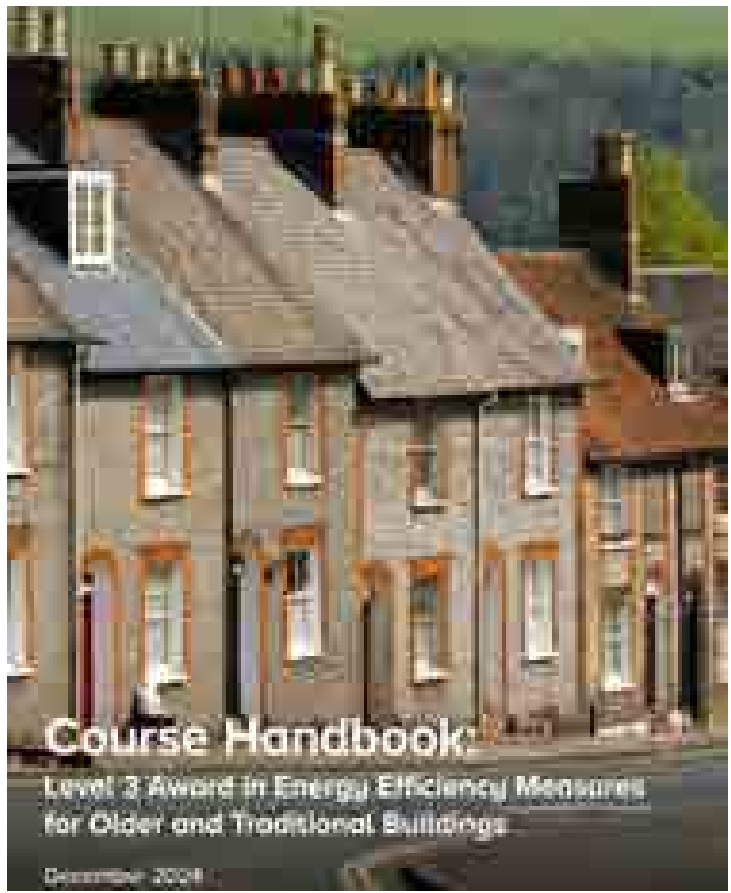
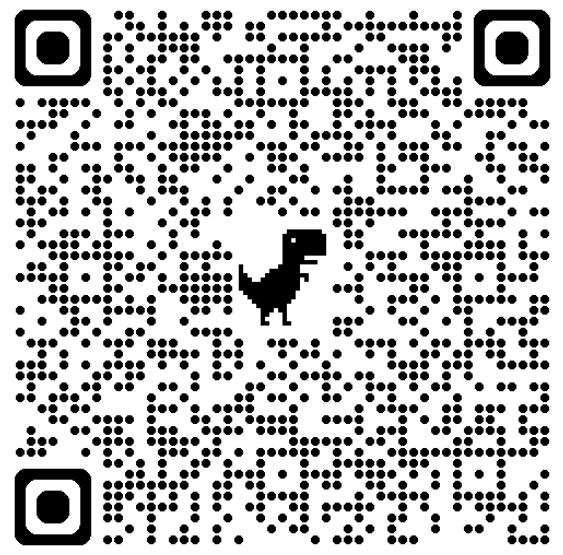
A systematic process that ensures solutions:

- Understand the building in its context and how it performs
- avoids harm to its significance
- minimises the risks of negative or unintended consequences
- ensures a healthy and comfortable internal environment
- increase climate resilience and minimise environmental impact
- are proportionate, effective, and cost efficient





Level 3 Award for Energy Efficiency Measures for Older and Traditional Buildings





Historic Building Energy Performance Potential: Demonstrator Project

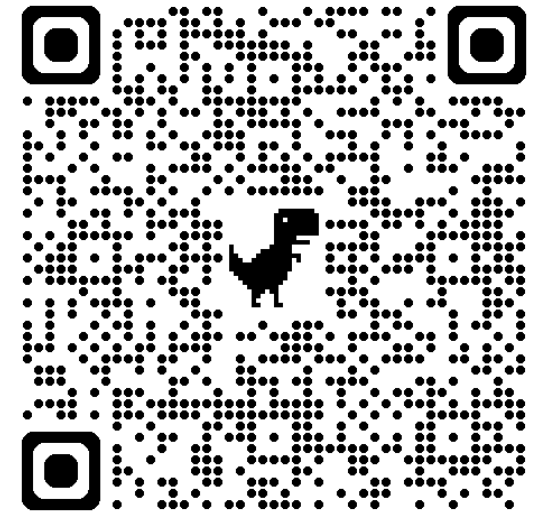
- Evidence on the accuracy, limitations, and improvement potential of Energy Performance Assessments for historic buildings of traditional construction.
- Detailed comparative analysis of default EPC assumptions versus in-situ measured data across 6 properties, in RdSAP10.
- In-situ measurements revealed that most properties performed better than assumed, particularly in terms of air-tightness and fabric heat loss.





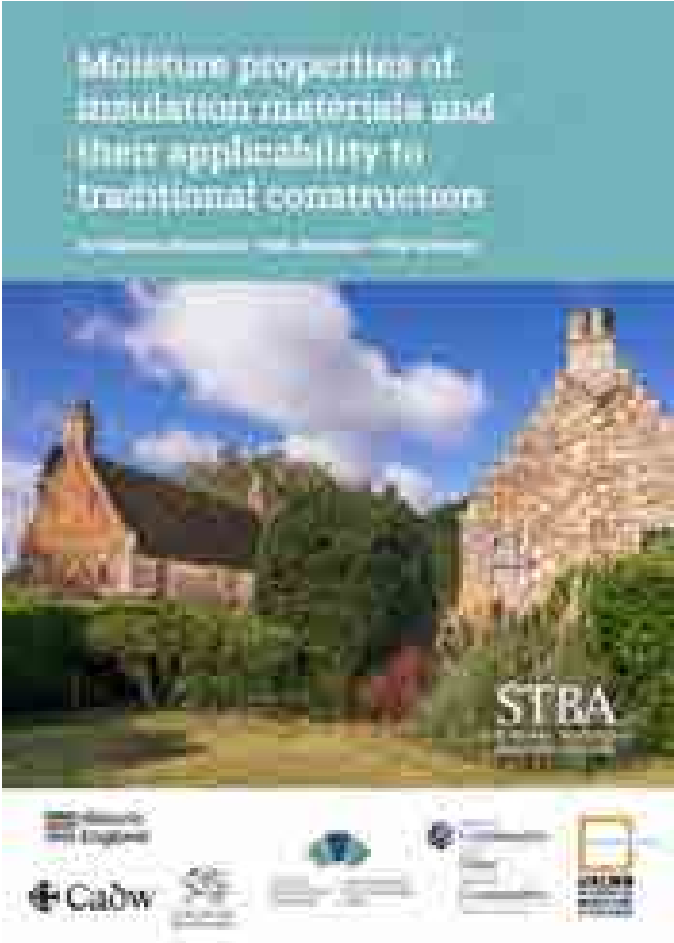
Historic Building Energy Performance Potential: Demonstrator Project

- while EPCs provide a useful baseline, they frequently underestimate the energy performance of traditionally constructed buildings.
- enhanced technical assessments, incorporating measured data and contextual analysis, are essential for accurate retrofit planning.
- recommends the development of a qualified 'heritage task force' of energy assessors to deliver bespoke, risk-aware advice for historic buildings.

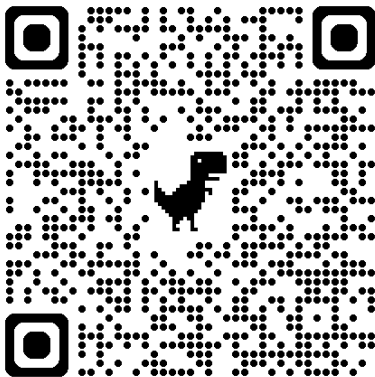




Moisture problems and their properties



Material	Thermal conductivity λ (W/mK)	Water vapour permeability μ (m)	Capillary
Insulation materials			
Polystyrene (extruded)	0.035 - 0.040	0.05	Yes
Polystyrene (expanded)	0.035 - 0.040	0.05	Yes
Mineral wool	0.040 - 0.045	0.05	Yes
Wool	0.040 - 0.045	0.05	Yes
Straw	0.040 - 0.045	0.05	Yes
Grass	0.040 - 0.045	0.05	Yes
Traditional building materials			
Brickwork	0.100 - 0.105	0.05	Yes
Concrete	0.100 - 0.105	0.05	Yes
Other materials			
Gravel	0.040 - 0.045	0.05	Yes
Expanded polystyrene (EPS)	0.035 - 0.040	0.05	Yes
Expanded polystyrene (EPS)	0.035 - 0.040	0.05	Yes
Expanded polystyrene (EPS)	0.035 - 0.040	0.05	Yes
Expanded polystyrene (EPS)	0.035 - 0.040	0.05	Yes
Expanded polystyrene (EPS)	0.035 - 0.040	0.05	Yes
Expanded polystyrene (EPS)	0.035 - 0.040	0.05	Yes
Other materials			
Gravel	0.040 - 0.045	0.05	Yes
Gravel	0.040 - 0.045	0.05	Yes

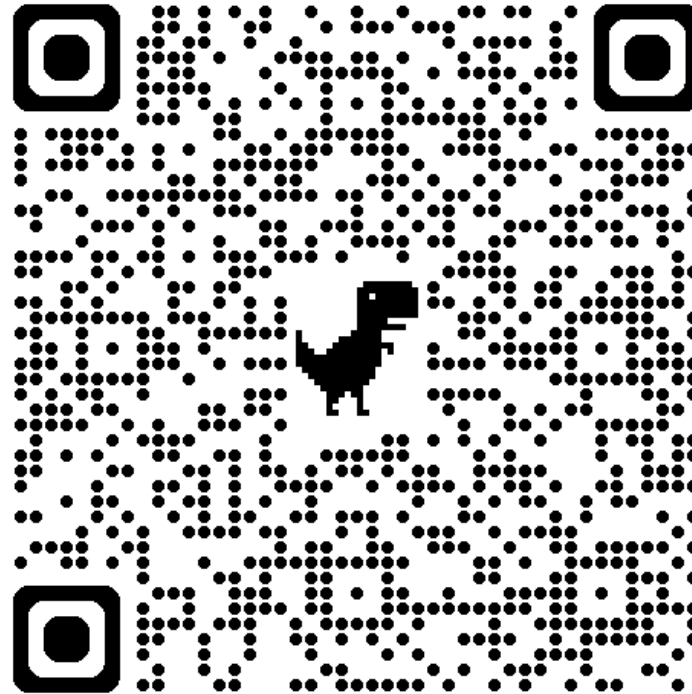




Is Retrofit the next Grenfell?



Historic England Technical Advice webpages

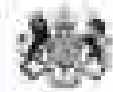


Net Zero and Decarbonisation within the UK

Emma Fletcher, Octopus Energy

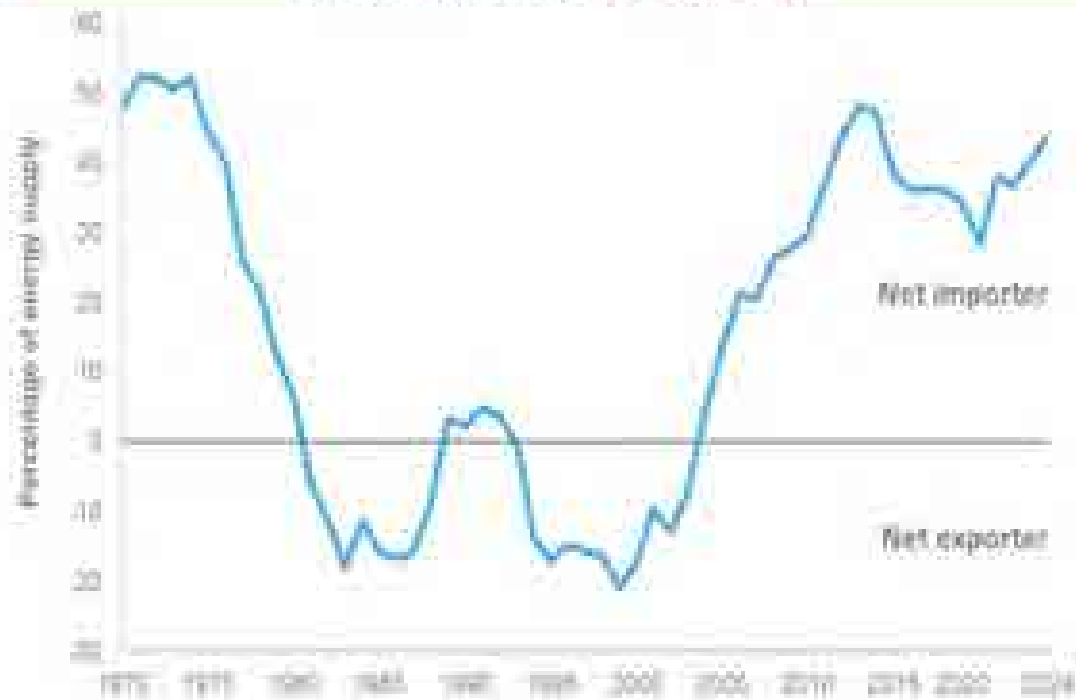


UK Energy in Brief - an Importing Story

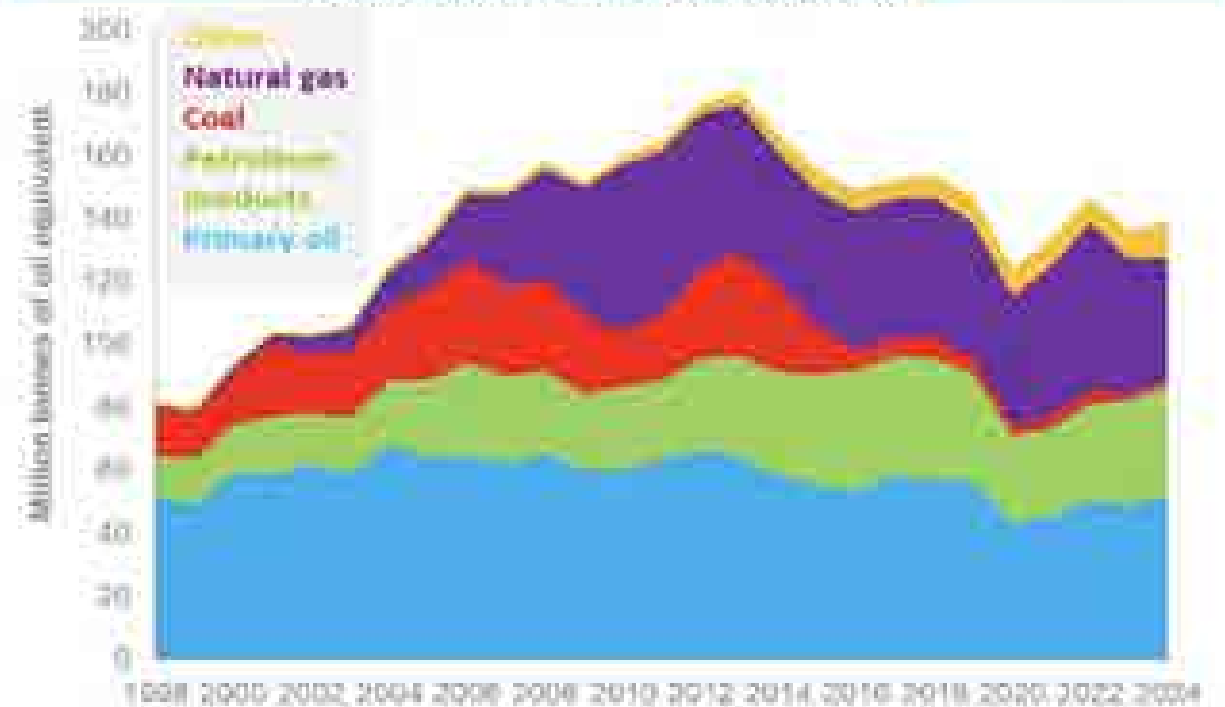


Department for
Energy Security
& Net Zero

OVERALL ENERGY
Import dependency, 1970 to 2024



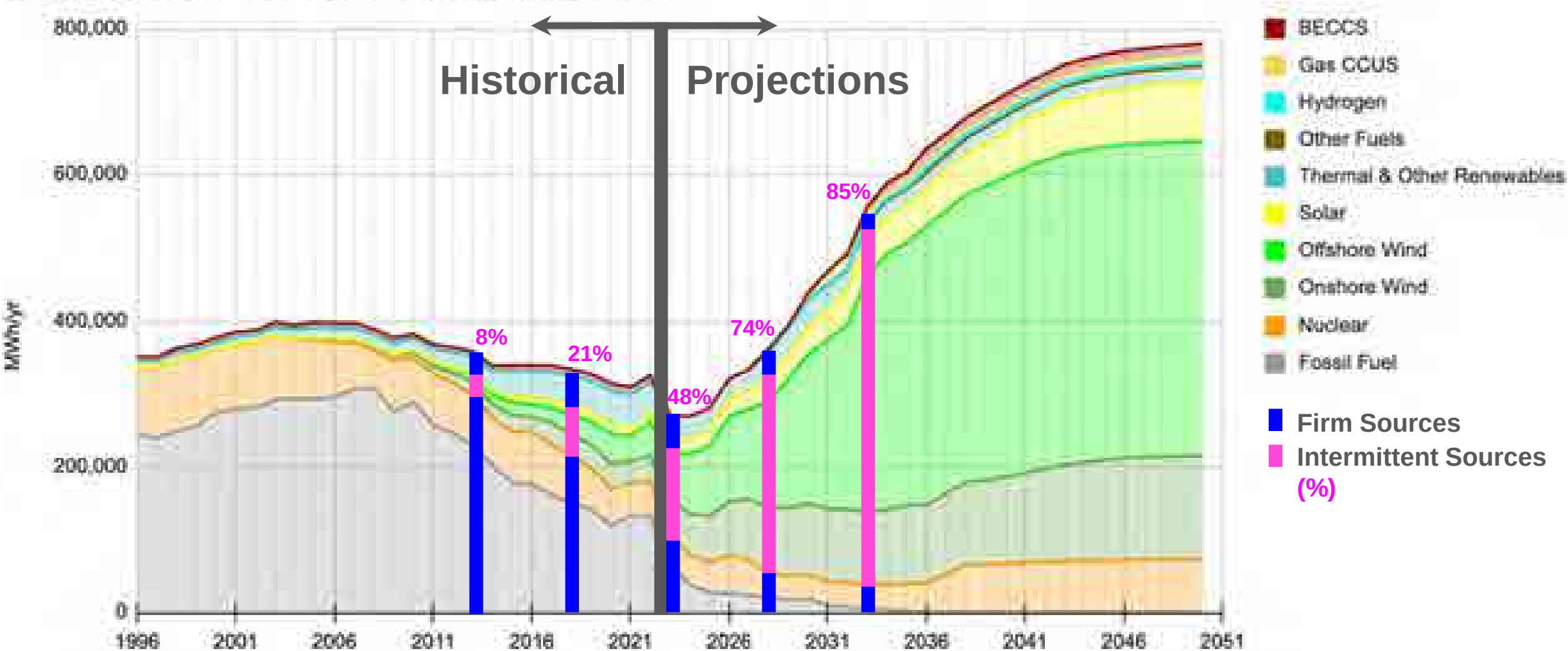
OVERALL ENERGY
Key sources of imports, 1998 to 2024





We are at a key transition point in the electricity grid...

Annual Electricity Generation by source (Historical to 2022 from DUKES, 2023 onward from National Grid FES2023 - Leading the Way)



Understanding what customers want

Help installing technology

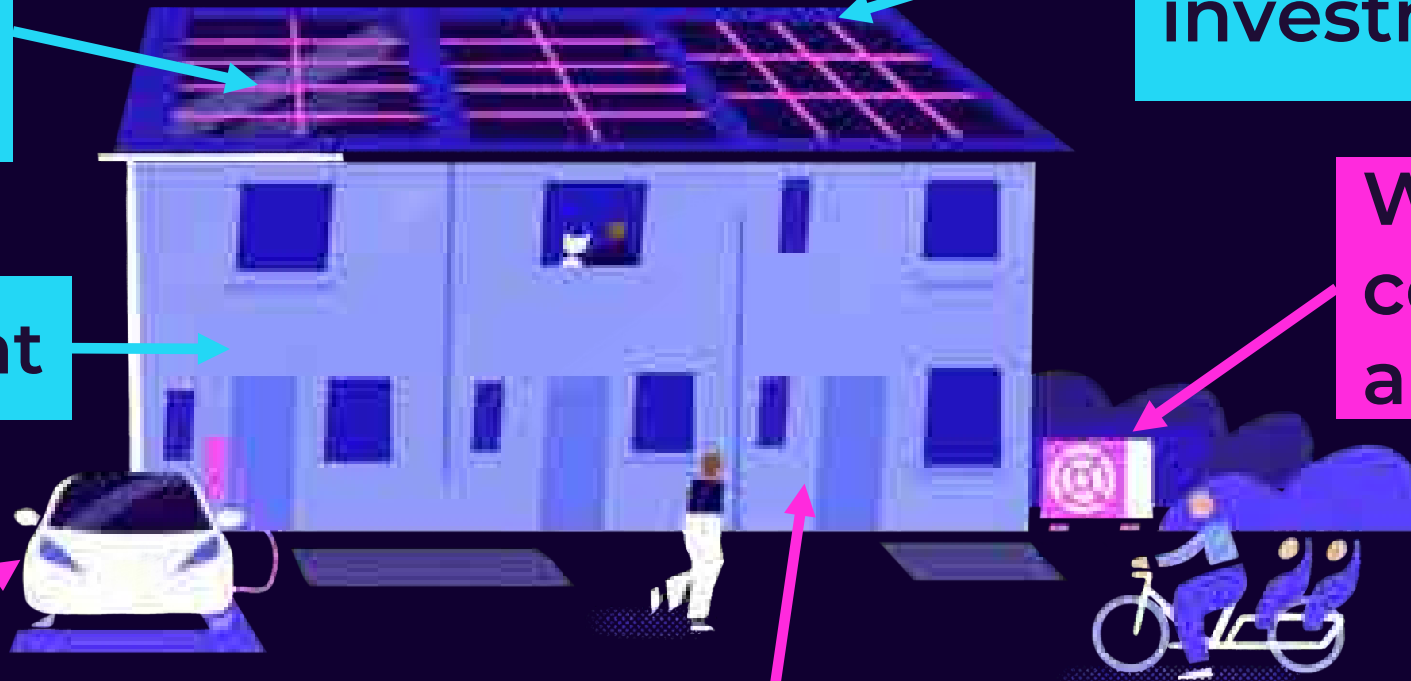
A return for my investment

EPC improvement

Warm or cool when I am there

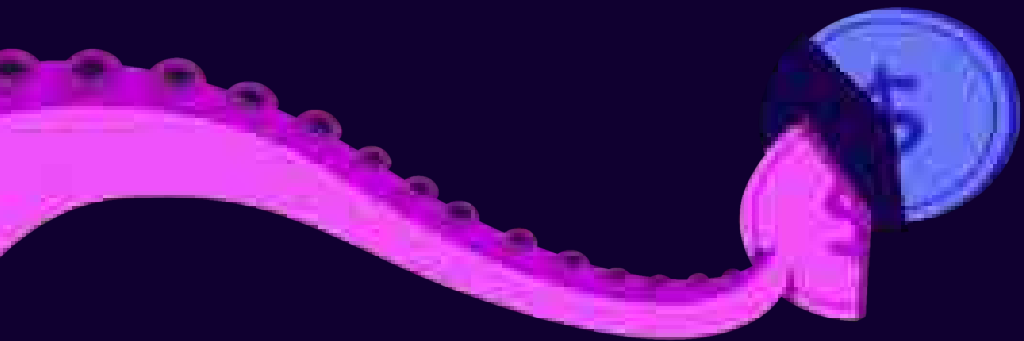
Cheap range when I need it

I want help managing the technology to reduce my bills





Opportunity:
Creating business value AND
customer value by optimizing
and monetizing millions of
domestic assets





Challenge:

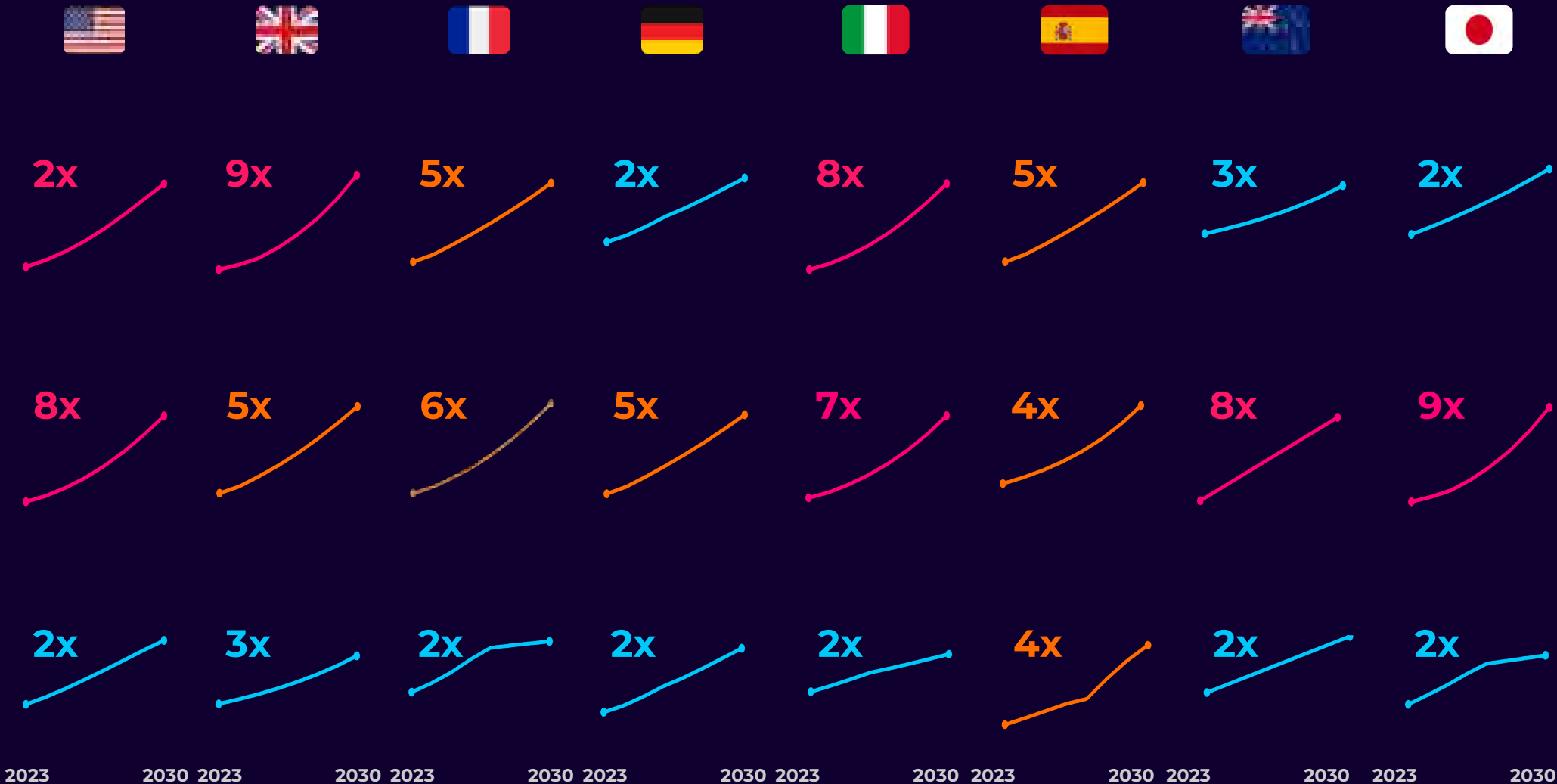
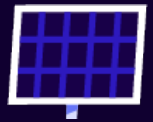
Booming number and variety of energy assets in and on homes



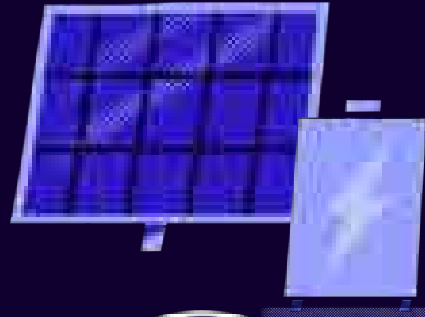


200 million new devices by 2030

2023-30
device
growth



Households will have a growing variety of asset types, brands, models & technical capabilities...



How to manage this complexity in a scalable way...?

Octopus: Helping You to Deliver the Green Revolution

Cheaper and faster for citizens and the planet



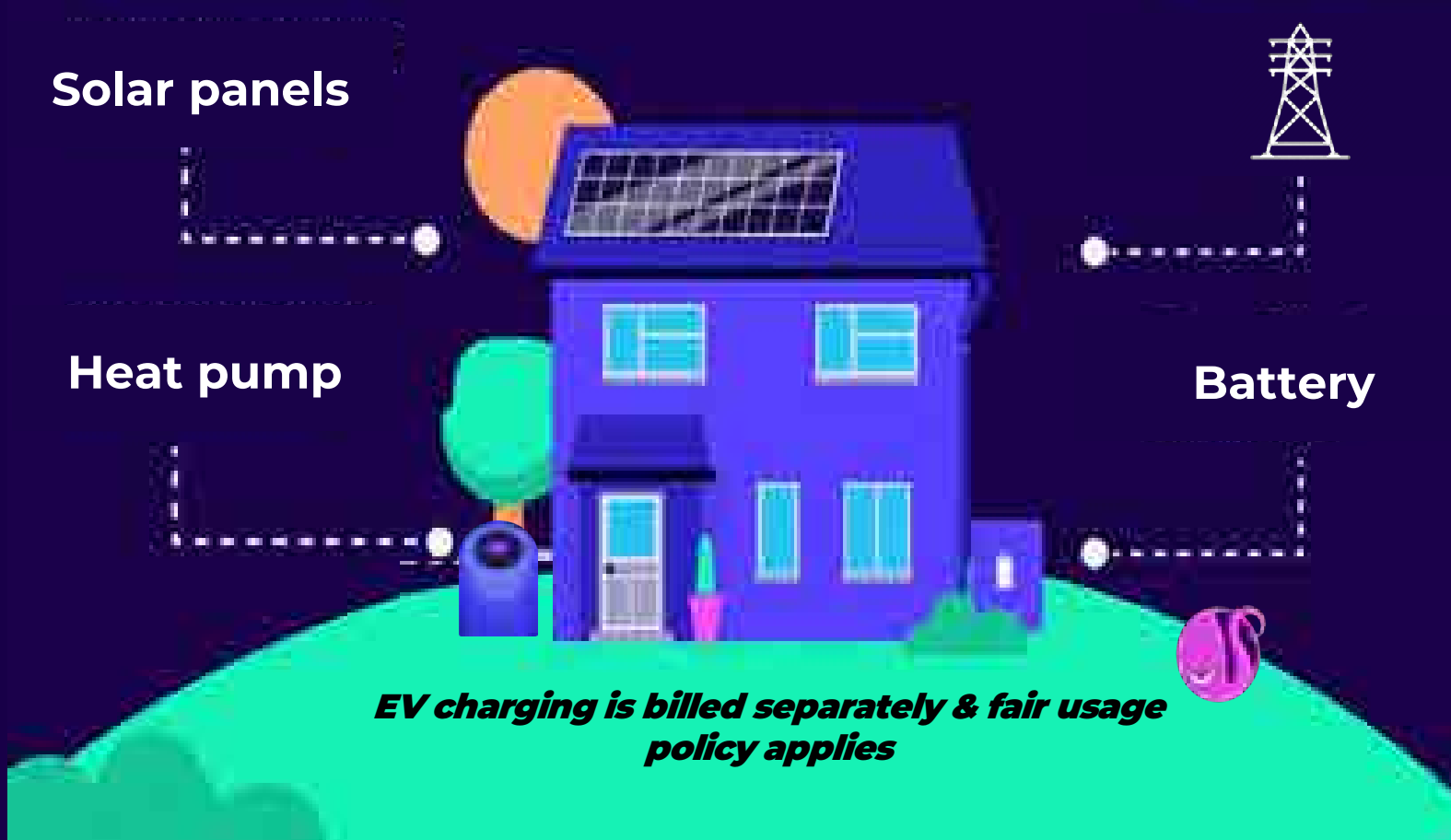
Octopus Propositions



How Zero Bills works...



We combine heat pump, battery, and solar to eliminate energy bills – offered in perpetuity, *guaranteed for at least 10 years!*



We optimise the home energy system for Zero Bills by:

- Optimising the **heat pump** and **solar battery** systems
- Taking feed from **weather forecasts**
- Dynamically accounting for **market conditions**
- Providing **flexibility services** to the grid
- **EV charging billed separately**
- **Fair usage applies**



Example Installation: Zero Bills homes



Solar PV

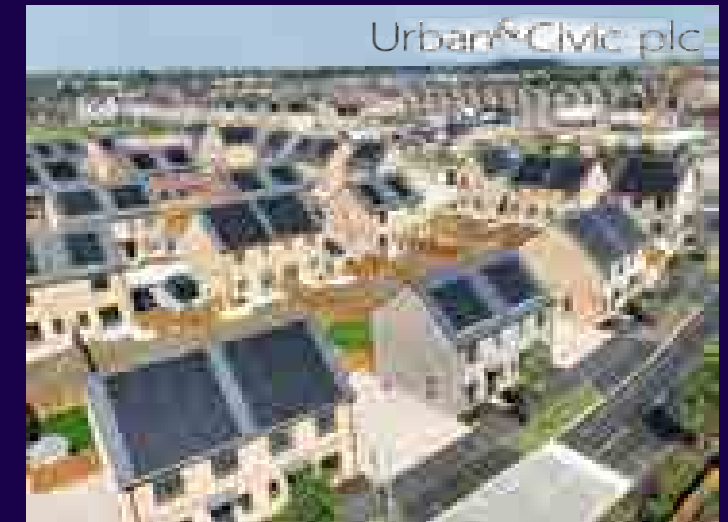


Home Battery
(Tesla Powerwall 3)

EV charger
(Ohme ePod)

+ Heat Pump!

Zero Bills homes come in all shapes and sizes



Octopus & gs8 unveil UK's largest 'Zero Bills' community with revolutionary microgrid



CARPENTERS YARD

Beautiful, planet-positive homes
that set a new benchmark for
sustainable development.

A **gs8** NEIGHBOURHOOD



Family houses fit for the future

Zero energy bills guaranteed

Dipping pond

Community coffee shop

Natural trail garden

Pedestrianised play street

Residents fitness centre

Communal lift and re-use centre

Commaerge

Zero carbon living

113 homes centralised battery storage, allowing solar power to be seamlessly shared between properties.

ZERO BILLS

UPGRADE TRIALS

5 Years Zero Bills

130 years old!



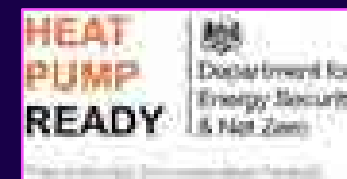
2 weeks old!



70 years old!



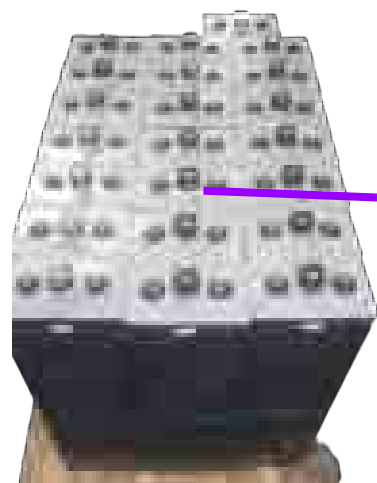
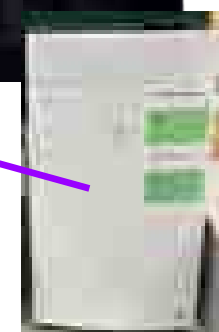
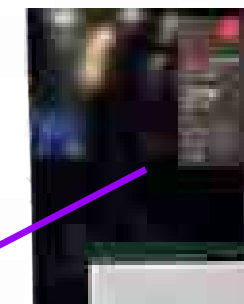
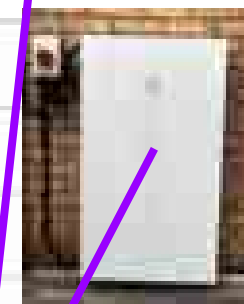
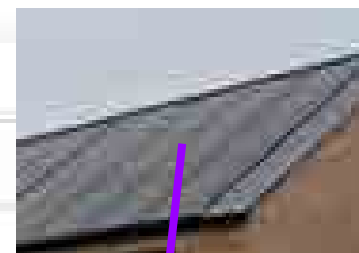
- ❖ Kent: Snodlands, North of Maidstone
- ❖ 10 x Post War / 1950's
- ❖ (£) Clarion + part Govt Heat Pump Readiness
- ❖ Zero Bills for 5 years
- ❖ Daikin Heat Pumps
- ❖ On Roof Solar (120%)



Zero means £0



Reductions in net cost of solar & battery materials to achieve a typical Zero Bills home





Octopus Energy: Tenant Power

Splitting the benefit of solar and battery installations between landlords & tenants



1. Landlord installs battery and solar



2. Tenant becomes an Octopus customer on **Tenant Power** tariff



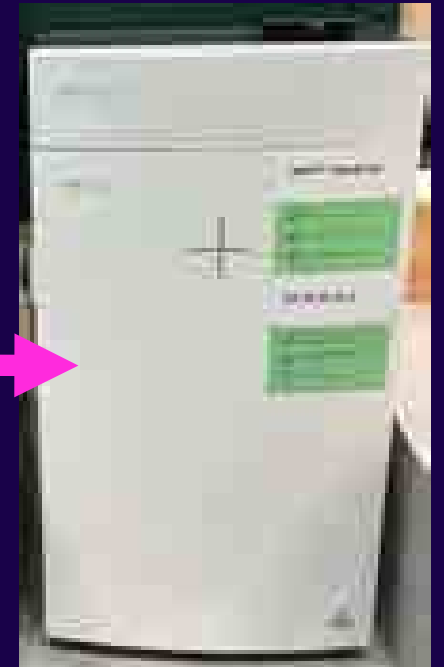
3. Tenant lives happily in the home with % discount on all monthly electricity bills



4. Landlord receives an export payment from the solar AND flexibility payment from the battery to be paid as agreed - monthly, annually etc

octopusenergy

Example Installation: by Together Housing



octopusenergy



Cosy Series | Design & Installation



Specifications

		cosy6	cosy9	cosy12
Nominal capacity	kW	6.00	10.00	12.00
Heat capacity (A-5/W50)	kW	5.60	8.70	11.20
Minimum heat capacity (A10/W35)	kW	1.90	3.00	3.00





Cosy Series | Design & Installation



Design:

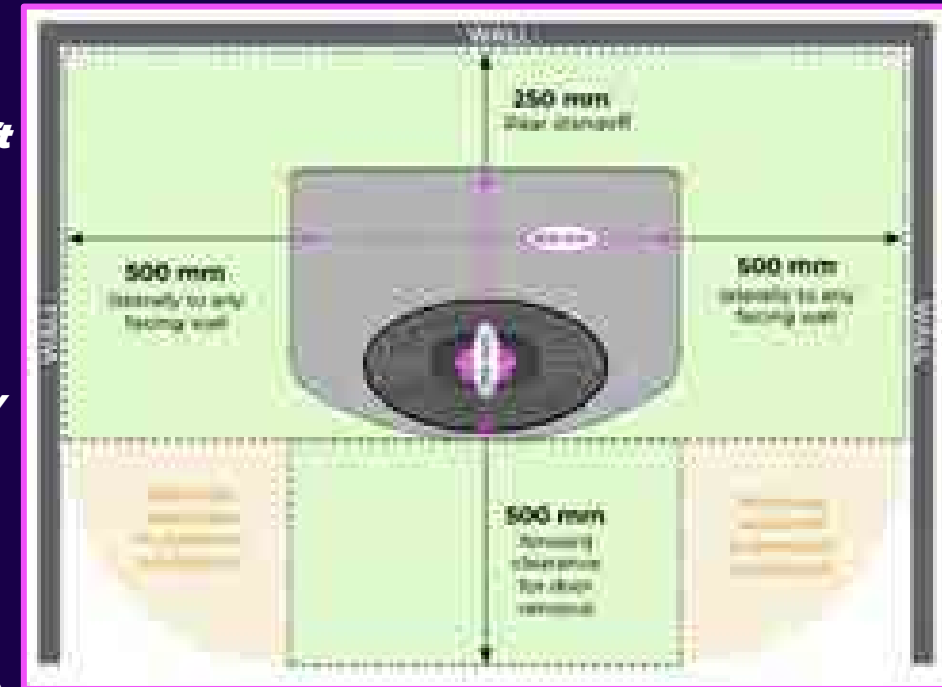
- High Temp design (B2C) - MCS approved to 65°C. **Plug & Play Gas Boiler replacement in retrofit / no rad changes / disruption to the home.**
- Industry leading space requirements - **470mm standoff from the wall if spark zone Fits into tight properties eg Terraces & 58 db noise / no need for planning**
- Modular design that is corrosion resistant **No need for Blygold if near the coast**
- R290 Natural (Propane) refrigerant vs R32. **Future proofed Heat Pump**

Installation:

- Ease of installation - **power cable, comms cable, flow & return, that's it! Swift & simple installs, reduced cost & disruption**
- App based Install commissioning. **Easy to use & same app for schedules that customer uses to manage Octopus Energy Account**

Run & Operation

- Simple & easy to use controls: **Boost buttons, pre loaded schedules & partially sighted friendly**
- Remote monitoring of the Heat Pump - **Proactive maintenance visits e.g. if flow rate drops. Forward facing cover for easy access**
- Temperature & moisture sensor in hubs **detects & prevent mould**
- Intelligent Cosy Tariffs - **A one stop shop & savings vs gas**
- Quiet at 58 db vs most Heat Pumps **Lived experience & avoid planning due to noise**
- 8 Years Warranty.



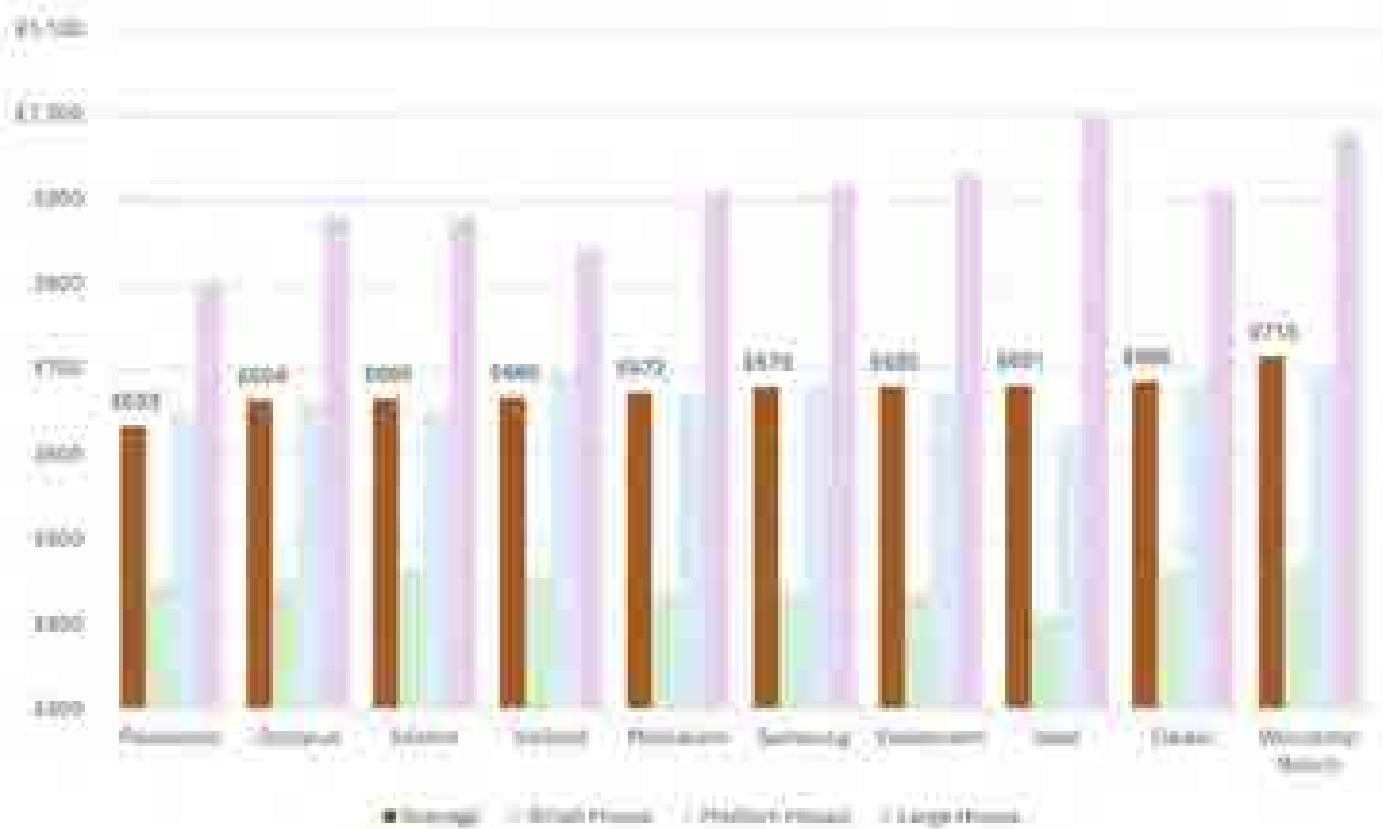
octopusenergy



Heat Pump Comparison Report Dec 2025

Summary – Running Costs

The typical running costs of three new-build properties have been assessed, using air source heat pumps from ten different manufacturers.



	Running Cost 12 Month Average	Running Cost 12 Month Small	Running Cost 12 Month Medium	Running Cost 12 Month Large
Daikin	£664	£438	£664	£677
Aspire	£665	£463	£663	£679
Daikin	£666	£443	£663	£679
Daikin	£667	£441	£662	£680
Daikin	£672	£438	£670	£686
Daikin	£673	£448	£644	£684
Daikin	£679	£440	£680	£678
Daikin	£686	£458	£698	£684
Daikin	£690	£428	£672	£690
Daikin	£778	£468	£701	£677

Refer to Technical Paper for specific model numbers, PCDB data entries and hot water cylinder sizes.

Running costs based on SAP10.2 using EPC fuel prices from September 2025. Unregulated energy use excluded.



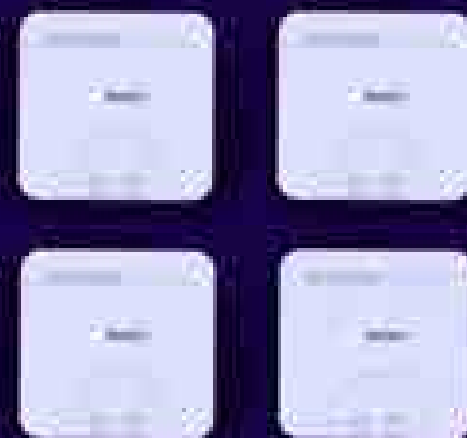
Cosy Series | The Cosy heating system



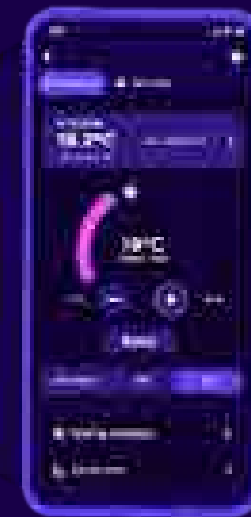
Cosy heat pump



Cosy Hub



Cosy Pods



Octopus App

High Temp - Plug & Play
Robust & Domestic Design
Small Footprint
Up to 8 Years Warranty
Quiet 58 db
Ease of Install - 30%

Simple & easy to use controls
Wifi Dongle

Moisture → Black Mould detection

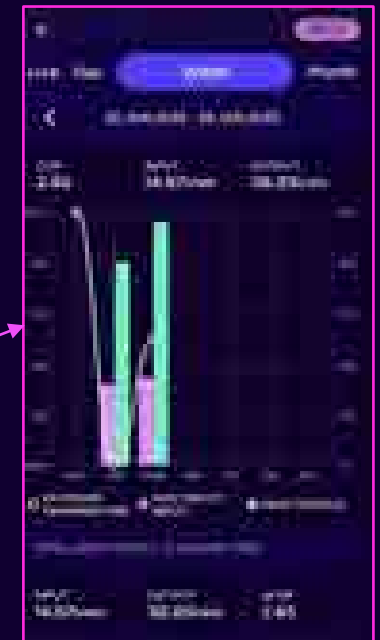
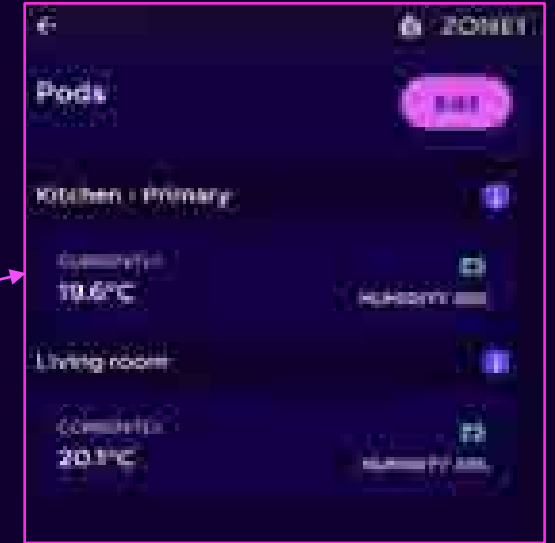
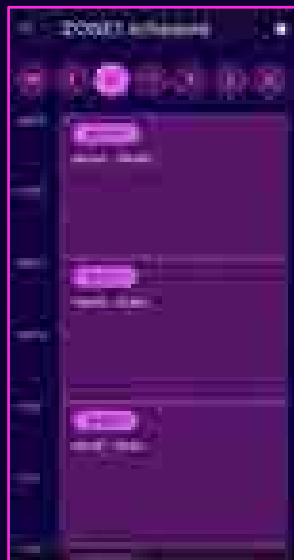
7.4m have the app
App based commissioning
Remote Monitoring
Intelligent Tariffs



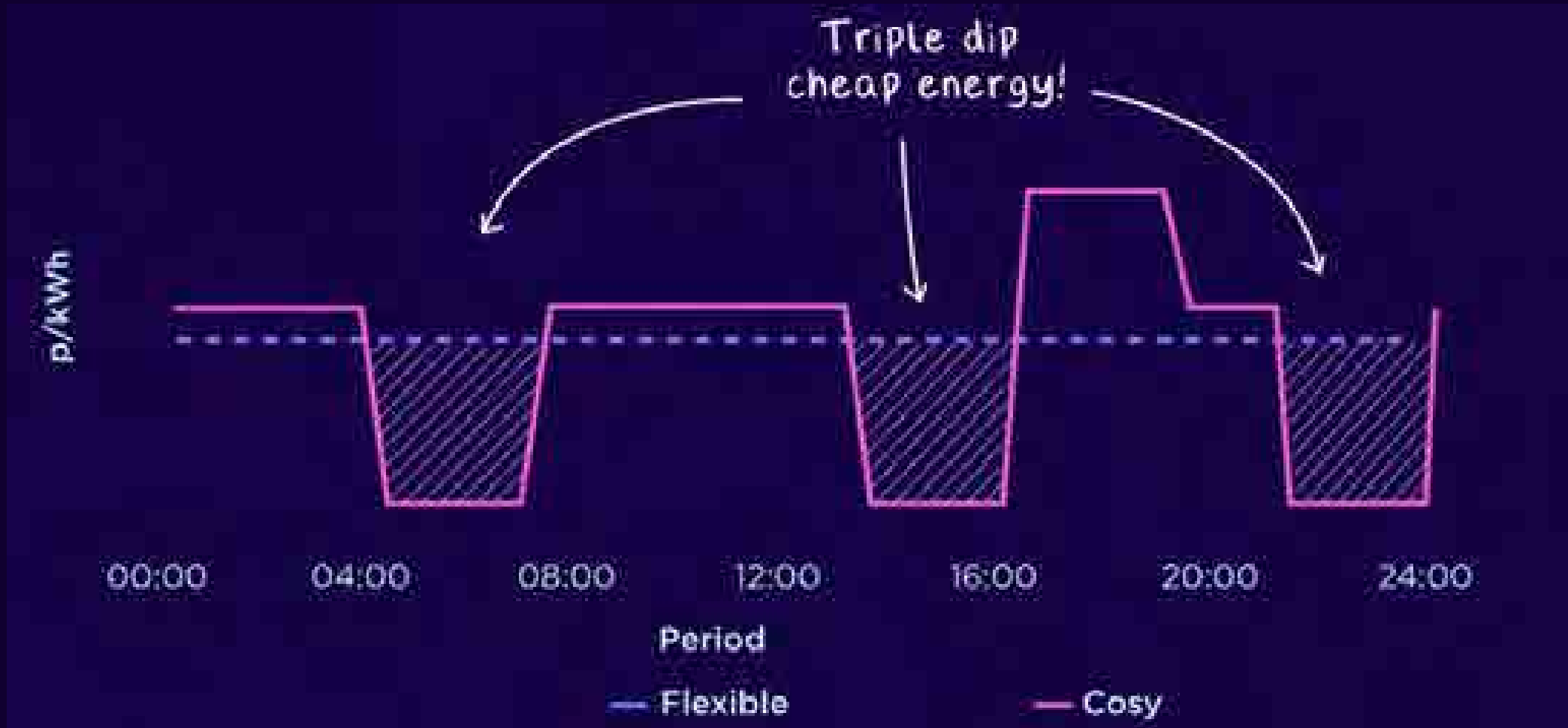
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Cosy Series | Octopus Energy App



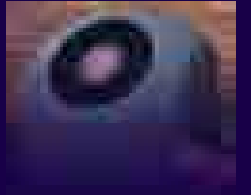
Cosy Octopus | The smart tariff to keep homes toasty



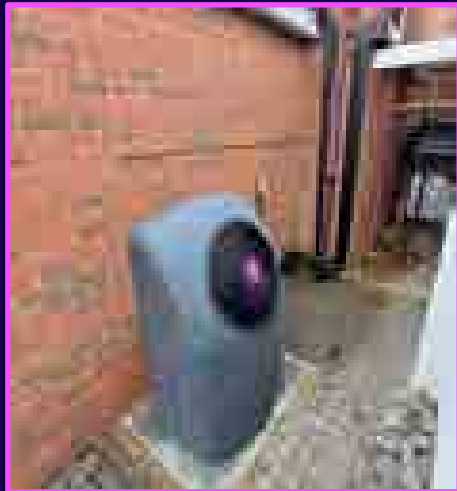
1. Three cosy periods of **super cheap rates** between 04:00 - 07:00, 13:00 - 16:00 and 22:00 - 00:00 every day, 51% cheaper than the Day rate in your region.
2. A **peak rate** between 16:00 - 19:00, 50% above the Day rate in your region.



Cosy Heat Pumps | Customer Love



5,000+ now out in the wild!



octopusenergy



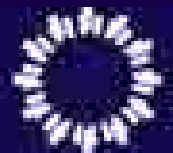
Futureproof your home with the Melbourne Energy Superloop

 Lanpro

octopus energy
generation

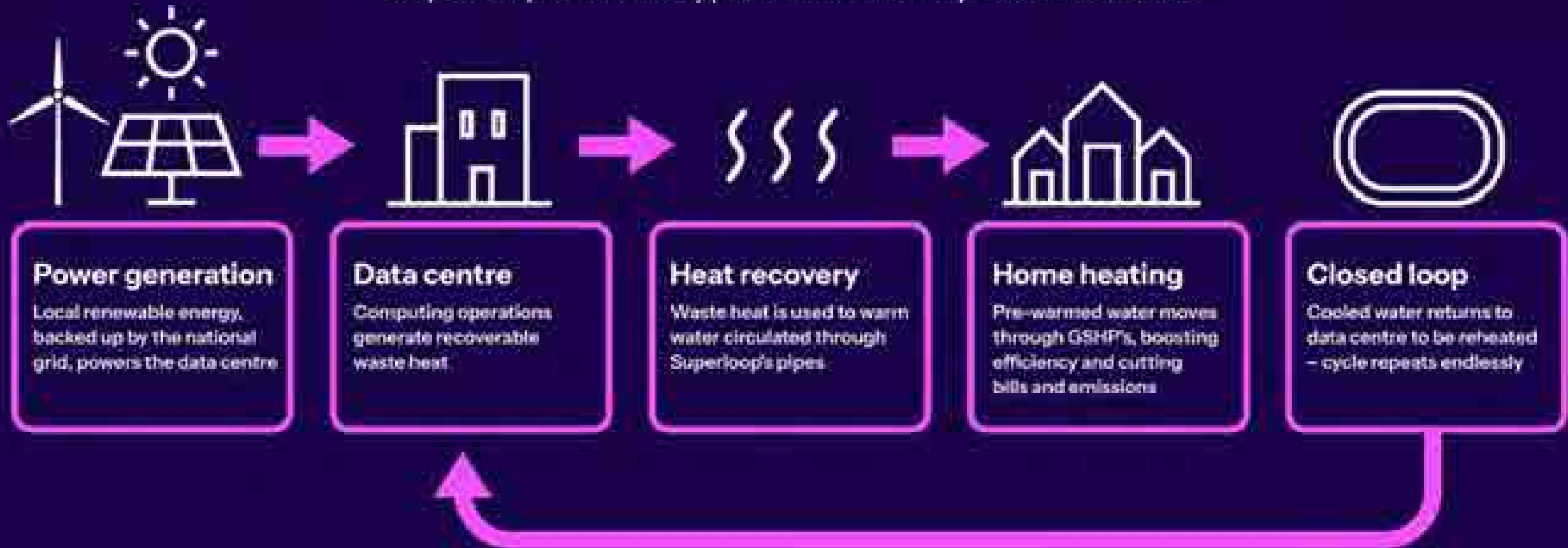
 Kensa Group

 aql

 DEEP
GREEN

What is Melbourn Energy Superloop?

Superloop is a new type of community heat network.





Melbourn Energy Superloop

The result?

Up to 5x
more efficient heating

25-40%
lower energy bills

Up to 90%
lower heating emissions



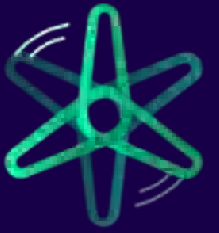
Touring wind turbine....



River Cottage installs temporary wind turbine to promote renewable energy, in partnership with Octopus Energy

Octopus Fan Club

Currently for postcodes: BD22, CF81, DN31, DN32, DN33, DN34, DN35, DN36, HX2, LN11, LN12, LN13, NP24, PE24, PE25 and YO43



octopus
FAN CLUB

20%

**off your unit rate
whenever your turbine is
spinning and you're using
electricity**

50%

**off your unit rate when the
wind picks up and the green
electrons are really flowing**

100%

**renewable energy from
your local fan**



Invest in British green energy with the Collective

A third of Brits say they'd like to invest in green energy.

Now you can! Invest from £25, with no fees.



As with any investment, there are risks that come with investing through the Octopus Energy Collective. It's important you fully understand these so you can decide if investments on the Collective are right for you.

Rated 5 stars for customer service from 739,775 reviews.



Last updated: 08/1/2025



Uswitch
Supplier
of the Year
Winner



 2025 · 2024 · 2023 · 2022 · 2021 · 2020 · 2019 · 2018

 2024 · 2023 · 2021 · 2020 · 2018

 RESPECTING THE ENVIRONMENT,
ANIMALS & PEOPLE

Great value for the long term

Our standard prices have always been below the Ofgem energy price cap.

The UK's most awarded energy supplier

We've won more awards for customer service than anyone else.

Energy for a cheaper, greener future

One of Europe's leading investors in green energy.



GBN BRITAIN'S NEWS CHANNEL

Watch Live Money Travel Celebrity Sport Lifestyle Tech Privacy Opinion

go Pensions Tax Cost of Living **Energy Bills** Bank Closures Bank

EXCLUSIVE Octopus Energy launches new 'groundbreaking' tariff cutting social housing energy bills by up to £200

GUY MARTIN'S HOUSE WITHOUT BILLS

MONDAY 9TH FEB 9PM

CHANNEL 4

nesta

the one show

the one show



Sun Sun Cash News Sport Fashion TV Shopping Money Travel Health Motors More

EXCLUSIVE

Money & Invest Money

HOT TOPIC I have my heating on all the time but I don't pay energy bills – it saves me £250 a month

Ellie Wood lives in a zero bills home – and you could find one in your area too

Ellie Wood: Consumer Reporter

Published: 08:30 27 Oct 2025 | Updated: 09:25 28 Oct 2025

Octopus Energy collaborates with Rightmove to help Brits buy greener homes

EXCLUSIVE: There has been a 46% increase in mentions of heat pumps and a 37% rise in references to solar panels in property listings year-on-year.

[Share Article](#) [Bookmark](#)

[Comments](#)

By **Katie Elliott**, Consumer and Money Editor
08:03, Tue, Dec 9, 2025

EXPRESS

INSIDE HOUSING

REGULATION
DEVELOPMENT
FINANCE
ASSET MANAGEMENT
SUSTAINABILITY
MORE TOPICS

NEWS
INSIGHT
COMMENT
IH LIVE

Nearly 100 landlords in talks with energy provider about zero-bills tariff

NEWS 26.01.26 11.15 AM BY ELLIE BROWN



Thank you!

Love & Power

emma.fletcher@octoenergy.com
07785 324729



Retrofit Roundup

Simon Flint Elmhurst Energy



Introduction

Twelve months is a long time in retrofit

Let's look back to look forward

The lessons we can learn from last year will, prepare us to take charge and shape the future of retrofit in 2026 and beyond.



2025 in 'One Slide'

Top Ten retrofit events of 2025

- WH SHF Wave 3 is published with over £1 billion awarded to 137 projects
- Publication of BS40104 Retrofit Assessor standard.
- Government confirms Warm Homes Plan will deliver £13.2 billion investment over next five years.
- RdSAP 10 launched.
- TrustMark identify high volume of EWI projects with potential issues

2025 in 'One Slide'

- Increased press awareness of EWI issues resulting in some negative messaging.
- National Audit office publish finding of investigation into EWI.
- TrustMark introduce 'Find & Fix' in response to N.A. reporting.
- Budget confirms ECO4 & GBIS schemes to close March 2026.
- TrustMark and all schemes begin work to standardise auditing framework.

Opportunities for 2026

- Warm Homes Plan
- PAS 2038
- Retrofit Assessor Standard BS40104
- Scheme/Software Developments
- Awaab's Law
- Damp & Mould Competence Scheme



Warm Homes Plan

- £15 billion of public funding over the next five years.
- Investment to support improvements in up to 5 million homes.
- Lift up to 1million families out of fuel poverty by 2030.
- Focus has shifted to installing renewables Solar, Heat pumps & Battery.
- Target of solar panels on the roofs of 3 million homes by 2030.
- Heat pump installations increasing to 450,00 per year by 2030.
- With that in mind, increased funding for Boiler Upgrade Scheme.
- Linked to introduction of improved EPC metrics & MEES guidance.



PAS 2038

- The aim of the PAS 2038 is to improve the energy efficiency of the existing commercial building stock, reduce energy demand, and decarbonise building services in supporting the county's commitment to reducing carbon emissions.
- Not appropriate for all commercial buildings.
- Competency scheme being developed for our members to support implementation.
- Understanding PAS 2038 One-hour CPD course.
- Introduction to Non-Domestic Retrofit Five-hour CPD course.



Retrofit Assessor Standard BS40104

- Published September 2025.
- Identifies a seven-stage process which, if followed will provide a comprehensive Retrofit Assessment.
- Not adopted by PAS 2035 yet.
- Additional training/upskilling will be required.
- Modular training likely to be developed so members can gain the addition knowledge required.



Scheme/Software Developments

- Lodgement portal for Retrofit Projects
- Enhancements to Improvement Option Evaluation Tool
- Revised audit process
- Updated Elmhurst/TrustMark Scheme Operating Requirements



Awaab's Law

‘The most significant regulatory shift in UK Housing in decades’

Awaab's Law is one of the most significant regulatory responses to the health risks caused by damp and mould in UK housing. Named after Awaab Ishak, the law imposes strict duties on landlords to identify and respond to housing hazards quickly and transparently.

Awaab's Law is a new legislation that came into force on 27 October 2025, aimed at addressing issues of damp and mould in social housing. It requires social landlords to fix reported damp and mould issues, as well as emergency repairs, within strict timeframes.

Damp & Mould Competence Scheme

- Launched today 12th February 2026.
- New Competence scheme.
- New training course.
- New software.
- Ability once trained and a member of the scheme to be able to create a Damp & Mould Survey Report.
- Following Awaab's law this report will be a vital reporting mechanism for social landlords.



Social Housing Providers

- Elmhurst have strong existing links with over 90 local authorities.
 - Many of these will have been awarded funding under WH SHF.
 - They will be acutely aware of Awaab's Law and its implications for them.
 - Strategic partnership with ECOSURV who provide an integration platform preferred by many social housing providers to deliver their retrofit solutions.
 - Elmhurst RdSAP engine is integrated with a number of social housing providers so they can access their data and integrate into their asset management systems.
-
- All of these provide strong reasons why as an Elmhurst member you are in a fabulous position to win work.

Summary

- In summary, you will see there are a great deal of potential opportunities for us all in the coming year.
- By taking charge, together we can continue to innovate, lead with confidence, and shape a retrofit future we can all be proud of.





Q&A Session



2026 a big year (and beyond!)

- EPC reform (all regions)
- ECO4 and Warm Homes Plan - Retrofit Transitions
- Future Homes Standard
- New Methodology: Home Energy Model (HEM)
- Much more use of onsite measurements
 - e.g. Air Testing, HTC, Background Ventilation, Heat Loss Calculations...
- Ongoing transitions to clean energy e.g. Heat Pumps, PV, Batteries
- Lenders Perspective
- Public Awareness of this sector
- **Leadership, Quality & Independence**
 - **“Do the right thing”**

Thank You



- Sponsors
- Speakers
- The venue and AV team
- My marketing team for organising
- And most important **you** for coming – have a safe journey home!



elmhurst *National* conference

