



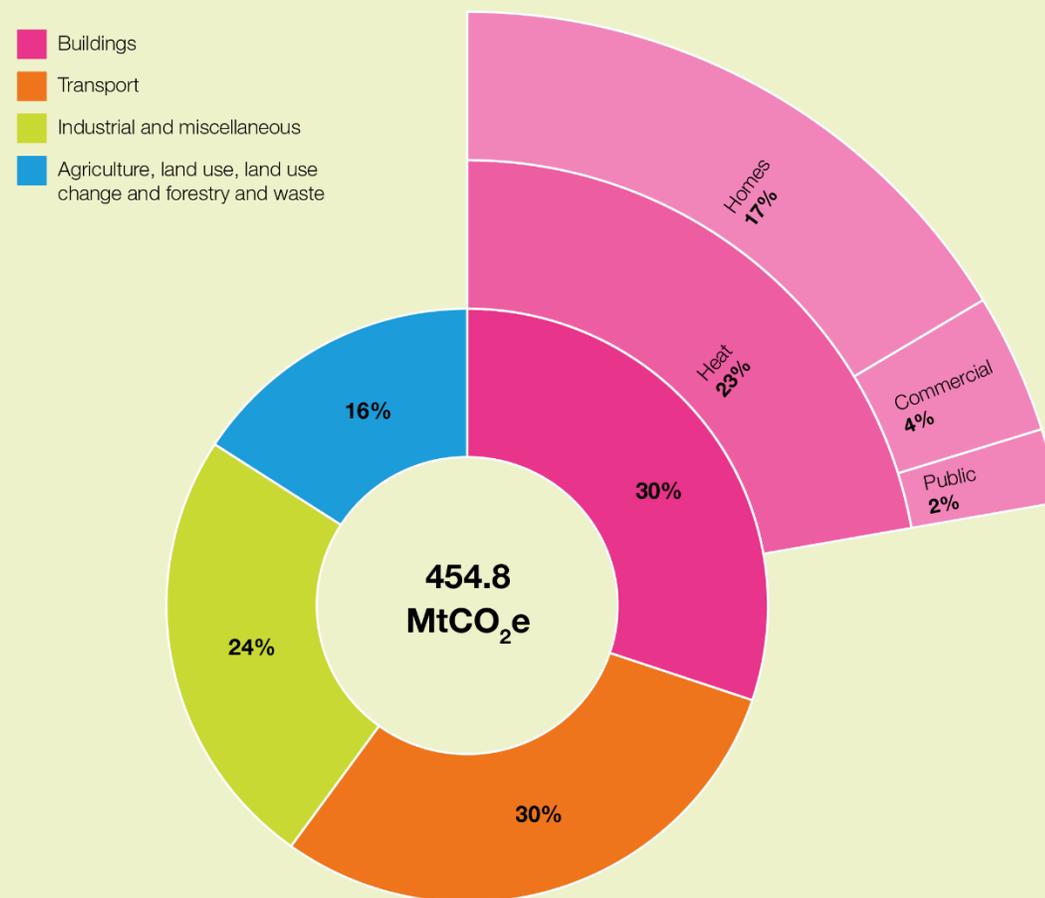
Heat and Buildings Strategy

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Decarbonising buildings: The challenge

- There are around **30 million buildings in the UK** – these are responsible for **~30% of our national emissions**.
- The UK building stock is currently quite **inefficient** and contains a **large number of ‘hard-to-treat’ older buildings**.
- **Around 85% of UK properties are connected to the gas grid** with many others using oil, coal or liquefied propane gas.
- **Supply chains** for key technologies are growing but remain at an early stage of development. **Significant new infrastructure is required** to support the transition.
- Must **build-in flexibility** despite urgency of action
- But also great **opportunity!**



Our strategic approach

Our Heat & Buildings Strategy, published last October, set out a **comprehensive, strategic plan for accelerating the decarbonisation of buildings**. Key components, include:

- **Improving the energy performance of buildings** making them warmer, more comfortable and cheaper to heat
- **Phasing out fossil fuel heating**, aiming for no new installations of gas boilers from 2035 and high carbon fuels used off grid in the mid 2020s
- **Reducing costs** and implementing key enabling policies to make the transition affordable and attractive for all
- **Supporting the most vulnerable** through targeted subsidy and stronger protections
- **Investing in innovation**, including trialling hydrogen for heat with industry
- **Growing supply chains and markets** boosting UK manufacturing and working with industry to expand the skills base
- **Creating the conditions for major investment** by providing long-term signals

Key principles

1. **Take a whole-buildings and whole-system approach**
2. **Innovation is essential to drive down costs**
3. **Accelerate no or low-regret actions**
4. **Balance certainty and flexibility**
5. **Target support for the most vulnerable**

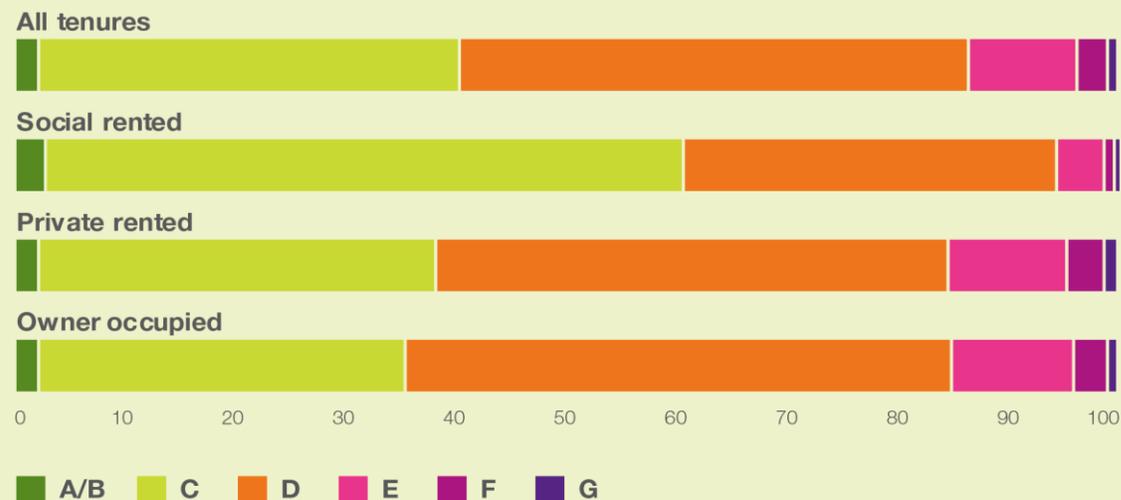
Improving energy performance: Homes



Improving the energy performance of homes is an **important first step on the road to Net Zero buildings:**

- **We want all homes to meet EPC C by 2035**, where cost-effective, practical and affordable
- Supporting this by consulting on phasing in **minimum performance standards across all tenure types**
- Ensuring new-buildings are energy efficient and ready for low carbon heating through the **Future Homes Standard**
- We will look to upgrade **fuel poor homes to fuel poverty energy efficiency rating C by 2030**
- Investing a **further £1.75bn in Social Housing Decarbonisation and the Home Upgrade Grant scheme**

EPC rating in homes in England 2019 (%)



Improving energy performance: Commercial & Industrial Buildings

We are committed to **decarbonising the 1.7 million commercial and industrial buildings** in England and Wales, through:

- Futureproofing new-builds through the **Future Buildings Standard**
- **Setting a minimum energy performance standards of EPC B by 2030** for rented commercial buildings
- Planning to **introduce a new performance-based energy rating framework** for larger buildings
- **Strengthening assessments** through the Energy Savings Opportunity Scheme
- Policies need to account for **more diverse energy demands of commercial buildings, remove barriers for SMEs** and **ensure funding is available**



Improving energy performance: Public Sector buildings



Decarbonising public sector buildings will demonstrate leadership, encouraging action in other sectors as well as making a direct contribution to Net Zero. We aim to **reduce direct emissions from public sector buildings by 75%** by 2037 against 2017 levels.

Measures to support public sector decarbonisation include:

- The **Public Sector Decarbonisation Scheme**, providing grants for public sector organisations to fund heat decarbonisation and energy efficiency measures:
 - We have **already made over £1 billion available** through the Public Sector Decarbonisation Scheme over 2020/21 and 2021/22
 - We will invest **a further £1.425 billion** in the Public Sector Decarbonisation Scheme over 2022/23 to 2024/25
- Improving capability through the **Public Sector Low Carbon Skills Fund**, providing funding for public sector organisations to access the skills and expertise needed to identify, develop and delivery decarbonisation projects..

Energy Company Obligation (ECO)

Summary

- The Energy Company Obligation (ECO) is an obligation set on larger energy suppliers requiring them to reduce heating costs, by making homes energy efficient, targeting low income and vulnerable consumers.
- ECO has operated since 2013 in various iterations. **ECO4 will run through to 2026 and worth £1 billion per annum.**
- The scheme is administered by Ofgem
- ECO is an obligation placed on energy suppliers, and costs are recovered in the cost of customers' energy bills.

ECO4 Specific Elements

- **Buy-Out:** To address market distortions, we have developed a "buy-out" mechanism which would enable small suppliers to meet obligations by paying an approved third party for an approved purpose.
- **Scoring:** Suppliers are scored according to how well they meet their obligations. Scores will be based on the difference in average annual bill expenditure between the starting and finishing SAP rating of a property.
- **Measures:** ECO4 focuses on improving the fabric of buildings and ensuring that homes are suitable for low carbon heating. Most properties will receive multiple measures due to mandated levels of improvements (e.g. EPC band F & G homes must improve to at least a D). There will be limited support for the repair and replacement of existing boilers.
- **Impact:** Since 2013 ECO has delivered **~3.4 million measures in 2.4 million homes (up to Jan 2022)**. We estimate that over its four years ECO4 will upgrade around 450,000 homes, **reducing household bills by £300 on average** – for the least efficient homes, this could be up to £1,600.

Reducing barriers for consumers



The Climate Change Committee **estimate around £360bn of investment is required to decarbonise UK buildings by 2050**. A range of actions are required to incentivise investment, keep the transition affordable and protect households and businesses:

- **Setting clear targets and standards** to leverage private investment
- **Growing the market for private green finance** through **doubling innovation funding** for the development and piloting of new green finance products for consumers to £20m and working with the UK Infrastructure Bank to consider future opportunities.
- Ensuring businesses **invest in upskilling and growing their workforce**.
- **Expanding information and advice provision**. By summer we will launch a comprehensive **Energy Advice Service on GOV.UK** which will help consumers to improve the energy performance of their homes



Delivering our commitments and future decisions



Over the next few years we need to start **delivering** on our **key commitments including improving the energy performance of our buildings**. We will monitor and track progress and seek continuous improvement in our approach.



We will **rapidly expand and grow markets and supply chains** ahead of the introduction of regulations as well as implementing enabling policies to incentivise early action and reduce costs.



Determining the future mix of low carbon heat in the UK requires **setting direction on the relative roles of hydrogen and electrification** and taking **strategic decisions by 2026**.

2035 no new or replacement natural gas boiler installations

