

## Buildings

### Introduction

Domestic properties in the East Riding account for approximately 20% of the county's carbon emissions. A priority for significantly reducing carbon emissions in East Riding is to retrofit the existing building stock with technology to produce low-carbon or renewable energy and ensure buildings can then retain this energy as efficiently as possible.

Typically, most of the energy used in homes is to heat space. Therefore, we will require a shift away from gas and oil central heating systems to heat pumps, biomass or hydrogen boilers (when commercially available) in our existing building stock. This will have to be coupled with measures to ensure buildings retain heat. Factors that determine whether a building retains heat include how it was built, how much insulation has been installed, the efficiency of the windows, how draughty it is and the behaviour of those who live there.

In the average UK home:

- 64% of energy is used for space heating.
- 17% for heating water
- 16% for lighting appliances and appliances
- 3% for cooking

BEIS (2021), Energy Facts from: Energy Consumption in the UK.

With provision to be made for 1,400 new houses each year, as set out in the East Riding Local Plan, we will have to transition towards these buildings being designed and built to zero carbon standards as soon as possible, if we are to not contribute further carbon emissions as an area.

### What we have done

- Utilised funding opportunities to offer low-carbon and energy efficiency support in to homeowners, targeting those on lower incomes as a priority. These opportunities have included the schemes and grants below.
  - **Future Energy Scheme Grants** – Funding to install energy efficiency measures and low-carbon heating (including air source heat pumps) in properties off the gas network, that have an EPC rating of E, F or G.
  - Grants for loft or cavity insulation.
  - **Green Homes Grant** – Received funding to install 60 air source heat pumps in separate dwellings that have no gas central heating systems.
  - The council is working with Communitas Energy CIC who, in partnership with Northern Gas Networks, manage an assisted connection voucher scheme, which will either partly or completely cover the cost of connecting a property to the Gas Network if eligible.
- Invested in energy improvements in the Council's own housing stock, as set out below.

- Annual capital investment programme of circa £5m on more efficient heating systems, new roofs, windows, and doors helping to improve the energy efficiency rating of the properties
  - **Warm Homes Fund** – received funding to deliver the replacement of 115 more energy-efficient central heating systems in homes that are in the 25% most deprived areas or where the household meets the qualifying criteria.
  - **Green Homes Grant** – received funding to install 30 air source heat pumps in properties that had the lowest energy performance rating (D or below) and where the tenant’s household income fell below £30k per annum. These properties would have previously had inefficient electric storage heaters or solid fuel heating.
  - **Future Homes Standard** – prepared to build new Council homes to this standard from 2022, ahead of the regulations being introduced in 2025.
- We have put policies in place within our East Riding Local Plan which support development proposals that contribute to a reduction in carbon emissions and incorporate climate change adaptation.
  - Provided advice and support on energy efficiency measures to residents, including signposting to Government funding as available. *This includes the Governments recent Energy Company Obligation (ECO4) and Boiler Upgrade schemes.*

## Key Challenges & Opportunities

### Challenges to Delivery

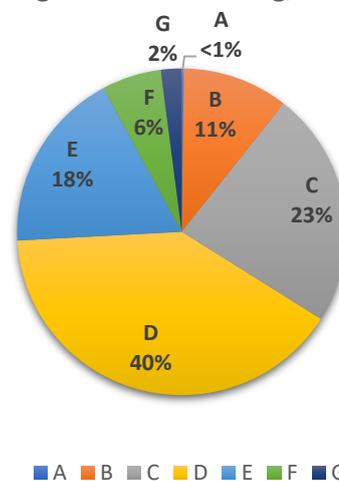
**Rurality** – Approximately 32% of properties in the East Riding are not connected to the mains gas. This means they rely on different heating fuels like oil or liquefied petroleum gas (LPG) which are more carbon intensive and expensive compared to mains gas.

**Energy Performance Ratings** – Approximately 66% of the properties in East Riding have an energy performance rating of D or below. The Government’s Heat and Buildings Strategy recognised that most homes below EPC band C will need to be upgraded between now and 2050.

**Fuel Poverty** – According to the most recent data, the percentage of households deemed fuel poor in East Riding was 14.7%, compared to an average in England of 13.2%. In response, we have been targeting those on lower incomes for energy efficiency improvements and low-carbon heating grants.

**Costs** – The costs of household energy efficiency and low carbon retrofits remains high. Whilst very limited grant funding is available, changes to the market and further Government support will be required to reach current targets.

Energy Performance Standards of Buildings across East Riding, March 2022



## Opportunities

**Future Homes & Building Standard** – The new standard, setting changes to Building Regulations, should ensure that all new homes built from 2025 will produce 75-80% less carbon emissions compared to current regulations, and produce 31% less from 2022.

**Gas Boilers** – The Government's Net Zero Strategy included the ambition for no new gas boilers to be sold by 2035. Although not yet set into law, there has also been indications by Government that as part of changes to building regulations there may be a gas boiler ban for new homes as early as 2025. Furthermore, in Spring 2022, the Government's Boiler Upgrade Scheme has opened for applications. This provides upfront capital grants to support the installation of heat pumps (or biomass boilers in some circumstances) in domestic and non-domestic buildings

**Health** – Improving the quality of our indoor environment through deep energy retrofits, such as improved insulation, can provide benefits to physical health by creating healthy indoor living environments with healthy air temperatures, humidity levels, noise levels and improved air quality.

**Social Housing Decarbonisation Fund** – An application will be made in 2022 to the fund which is for social housing landlords to deliver improvements to the fabric of their properties (wall, loft, and other insulation measures) to achieve an energy efficiency rating of C or above. This will make the property ready for the transfer to low carbon heating such as air source heat pumps in the future.

## Areas of Action

*Please note that until the final Climate Change Strategy has been approved, we have chosen to use the wording 'East Riding of Yorkshire Council can.' Once the Strategy has been fully consulted on internally and with the public we will commit to 'East Riding of Yorkshire Council will.'*

East Riding of Yorkshire Council can...

- Deliver an ambitious programme of energy efficiency improvements to the East Riding of Yorkshire Council's housing stock.
- Capitalise on new funding opportunities to support the rollout of energy efficiency and low-carbon improvements across the East Riding, with targeted support for low-income households and those off the gas grid.
- Ensure that climate change is embedded throughout the East Riding Housing Strategy.
- Develop future Local Plan policies to ensure low-carbon opportunities and climate risks are identified in new developments, reviewing local energy efficiency standards following the release of the Future Homes and Building Standards.
- Work in partnership with local contractors, community interest groups, energy providers and local energy hubs to raise energy standards across the private and public sectors
- Provide advice to residential and non-residential sectors on low-carbon and energy efficiency opportunities, including the promotion of Government funding opportunities (e.g. the national Boiler Upgrade Scheme).

### **How might you reduce your carbon footprint?**

- Have you considered the energy performance of your home or business? You may be able to find the energy certificate for your property, along with tips for improving its efficiency, here <https://www.gov.uk/find-energy-certificate>.
- See the Council website for advice and support on improving energy efficiency at home. <https://www.eastriding.gov.uk/housing/energy-efficiency/energy-efficiency-at-home/>

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