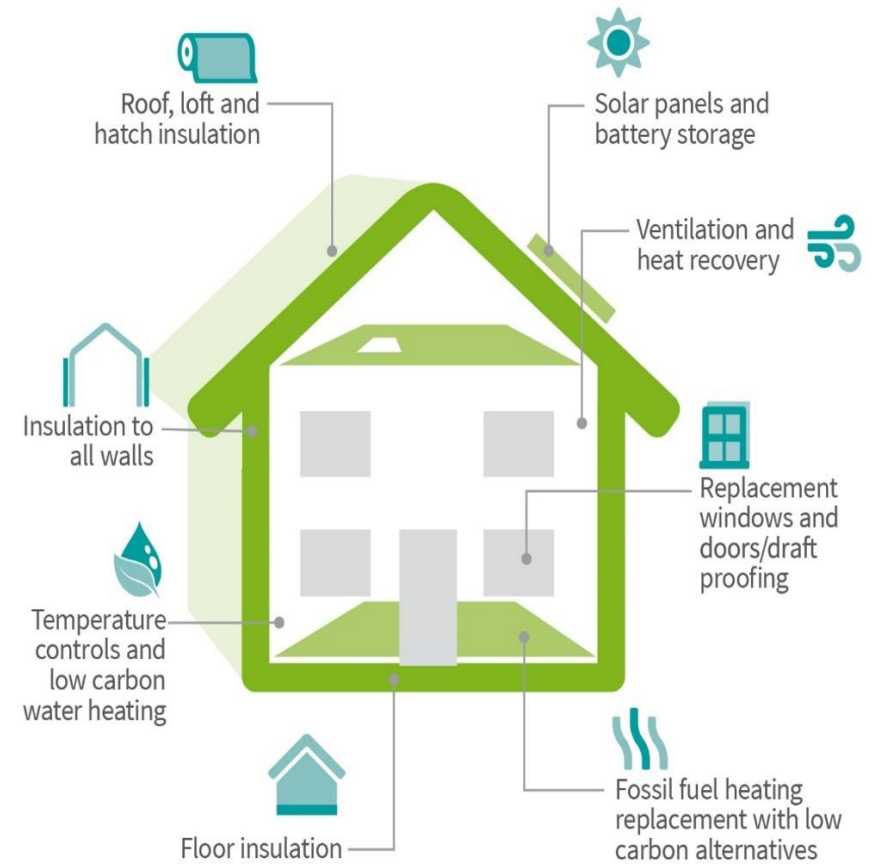
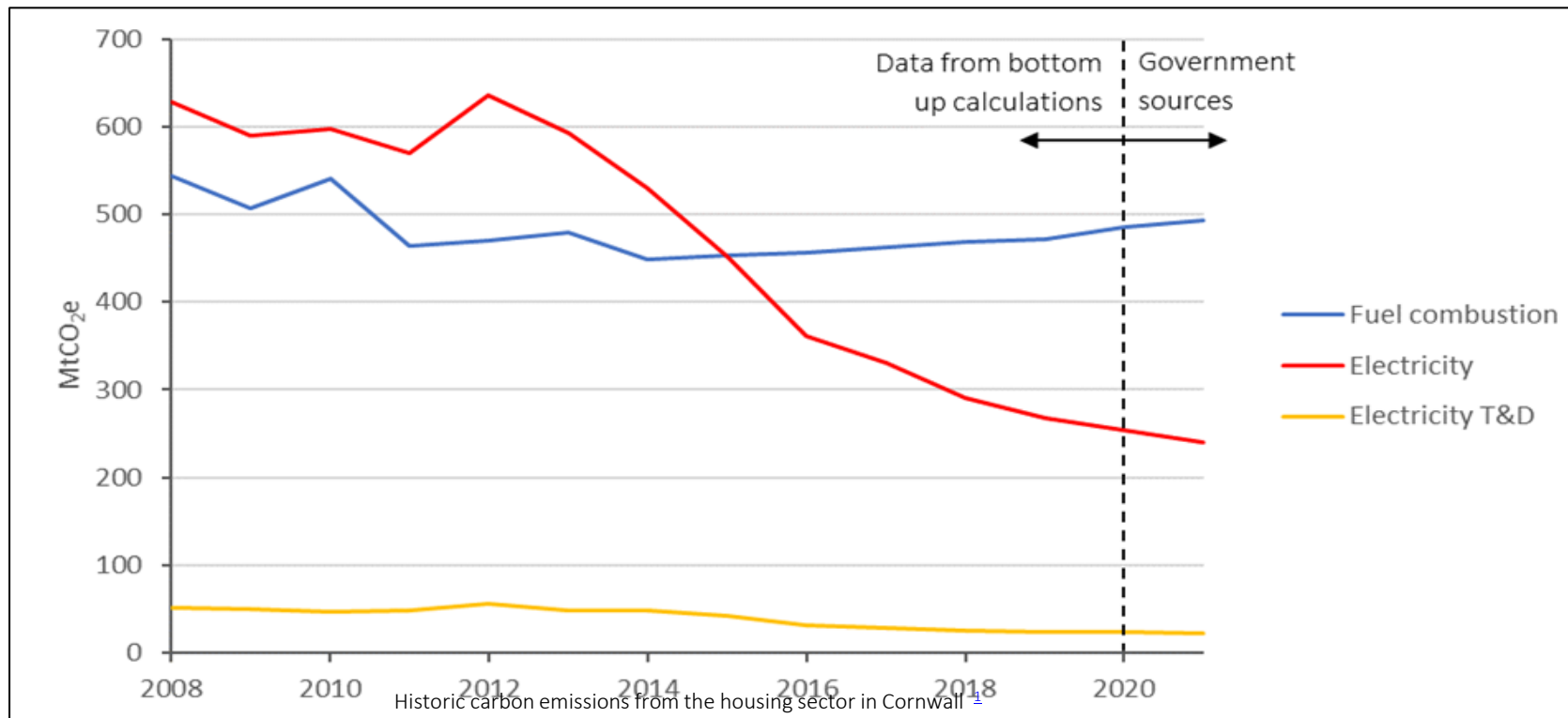


# Cornwall Housing Decarbonisation



# Emissions from housing in Cornwall

Emissions from housing in Cornwall have reduced over time (25% since 2008) this is largely due to the decarbonisation of the electricity grid (red line) emissions from fossil fuels are increasing (blue line) Existing housing in Cornwall contributes a fifth of the county's total emissions or 0.76 million tons (MtCO<sub>2</sub>e).



# Housing Decarbonisation Strategy

The purpose of the strategy is to consider the practical measures required to reduce emissions from housing in Cornwall and outline key strategic actions the public and private sector can take in partnership, to accelerate decarbonisation, while reducing energy costs and making homes more healthy places to live.

## Strategy aims:



**Our homes don't negatively impact our environment**



**Well insulated and low carbon**



**Affordable to heat**

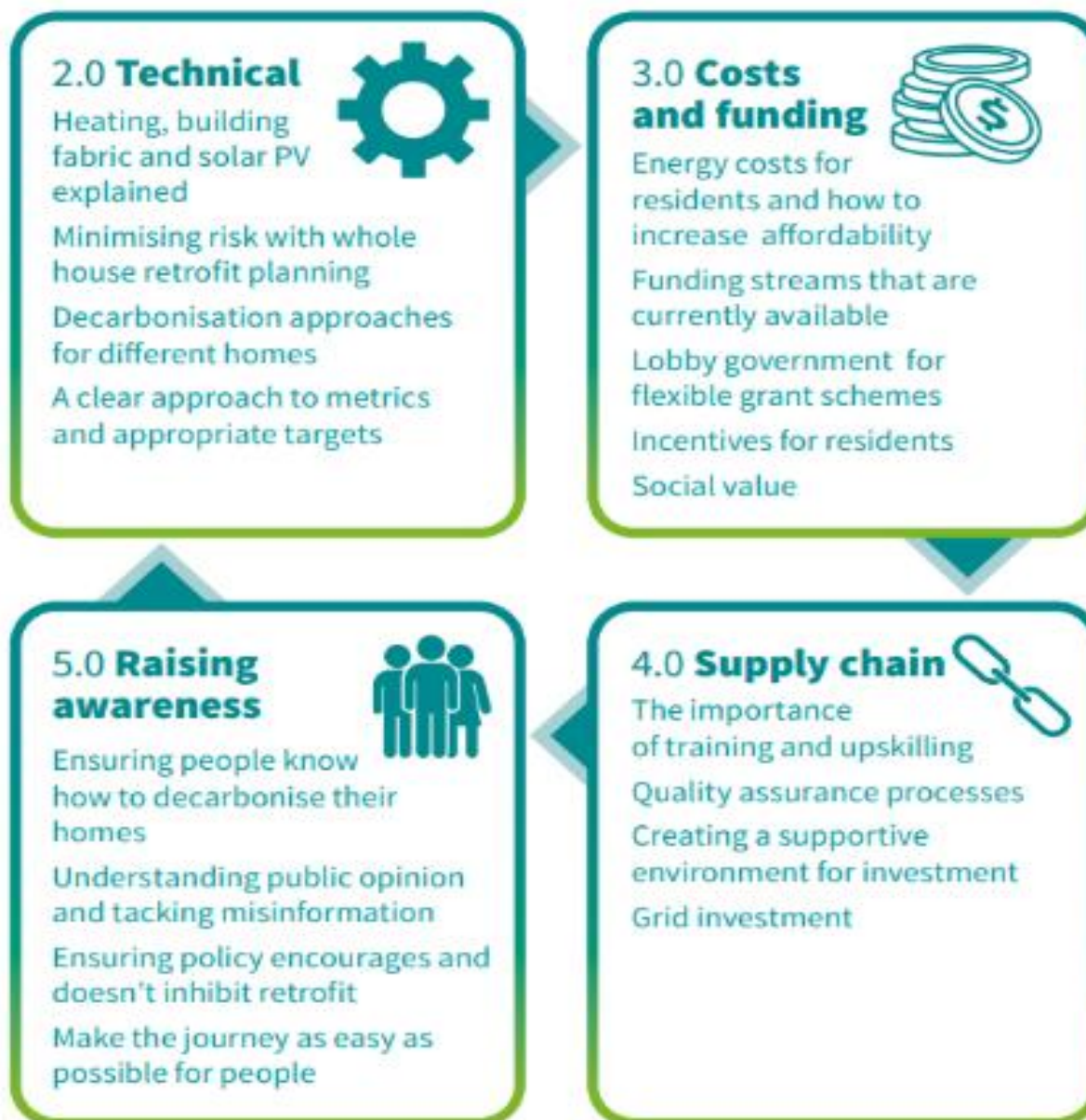


**Healthy**



**No one is left behind**

# Challenges



# Key facts

**Cornwall has a much older housing stock than most parts of the country, with 31% of properties built before 1930<sup>5</sup>.**

**96% of future emissions** from housing in Cornwall will come from the existing housing stock that has already been built<sup>1</sup>.

**48% of Cornwall's homes are heated by mains gas,** far less than the 74% across England and Wales.



Fossil fuels such as oil and LPG are used in 20% of homes with the balance (32%) provided mostly through forms of direct electrical heating<sup>1</sup>.

**51% of roofs in Cornish homes need more insulation** compared to 38% nationally<sup>1</sup>.



**43,500 homes (16%) are at least partially single glazed, with 15,500 (6%) fully single glazed.** 90,000 (33%) homes have older double or single glazing with a further 72,000 (26%) having double glazing of an unknown age<sup>5</sup>.

**The cost to move to low carbon heating is estimated to be £2.4-3.1 bn** as a minimum first step (£3-10k per property). £8.4 - 9.1bn should be invested for all homes to be well insulated (£26-29k per property)<sup>1</sup>.

**Around 15% of households in Cornwall live in fuel poverty,** according to the Government's most recent reports. Fuel poverty is a significant driver of health inequalities<sup>6</sup>.

**25% of all dwellings are estimated to be in severe disrepair<sup>7</sup>.**

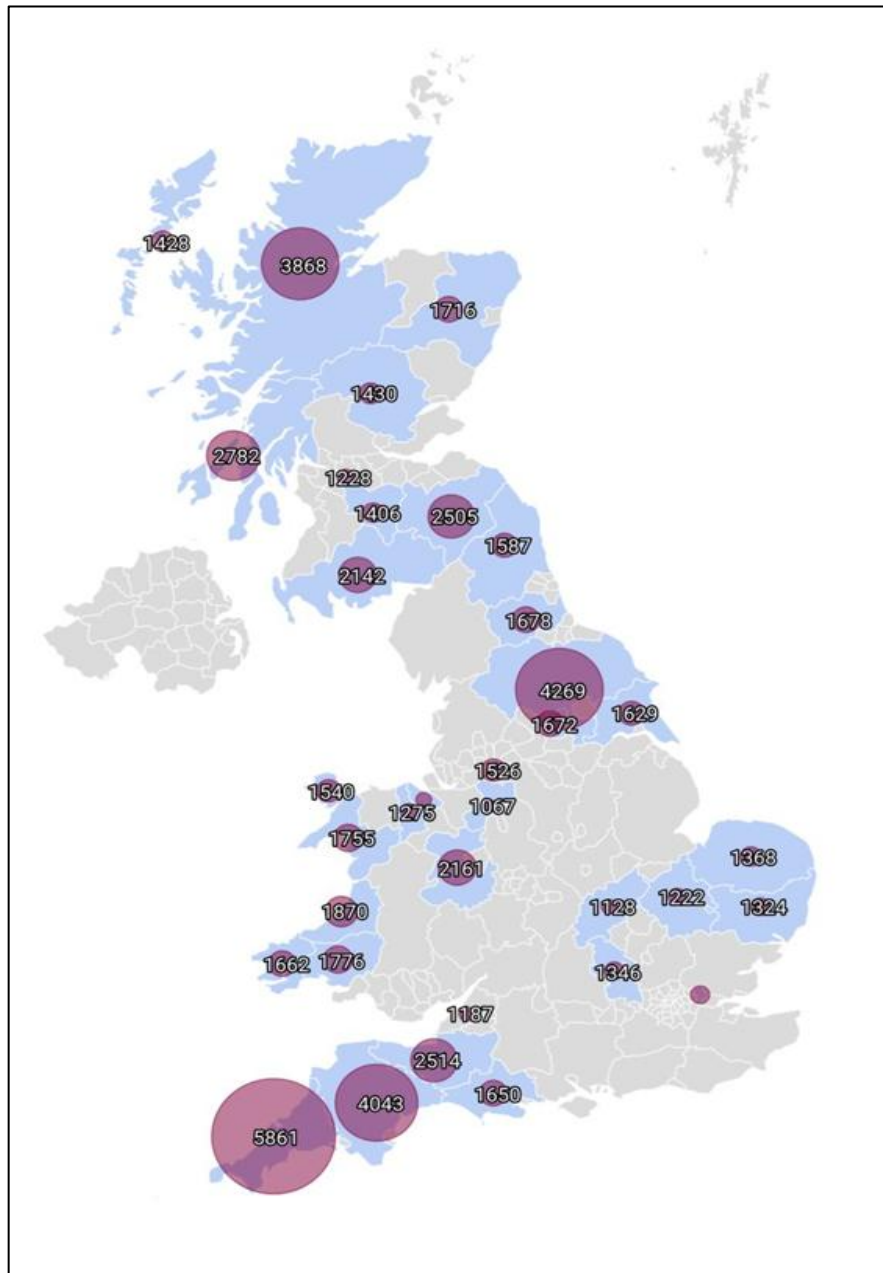
**12,000 homes are estimated to suffer with damp and mould<sup>1</sup>.**

**Housing is a determining factor for health, education and employment.**

**Housing tenure is split with 13% social rent,** 20% private rent or rent free and 67% owned outright or with a mortgage or loan<sup>4</sup>.



# Cornwall is leading the way!



[www.cornwall.gov.uk](http://www.cornwall.gov.uk)

## MCS data 2019 – 2024

- 15% > have installed one form of renewable energy solution.
- 5% > of households in Cornwall have a heat pump

## EPC data

- 6 of the top 10 heat-pump hotspots are in rural Cornwall.
- All these districts have more than 10 times the national average, with 15-20% of properties having a heat-pump.
- Lands End, Camelford, St Agnes, Newquay, Lizard & Meva.

# Key principles:

- Decarbonising Heat:** The strategy highlights the importance of moving away from fossil fuel heating systems, such as gas and oil boilers, to low-carbon alternatives. This is the single most important measure for emission reduction.
- Energy Efficiency Improvements & Fabric Retrofitting:** Enhancing energy efficiency in existing homes, including measures such as loft and wall insulation, energy-efficient windows and doors.
- Renewable Energy Generation** – Solar panels or other technologies can help homes generate their own renewable energy, reducing cost and carbon
- Smart Technology:** a smart meter or other smart home technologies that optimise energy use, and energy tariffs. For example: smart meters and thermostats.



Triple glazed casement  
([wear21degrees.co.uk](http://wear21degrees.co.uk))









# Whole house retrofit





Each home will have a bespoke process for decarbonisation. WHR plan is a comprehensive plan to ensure improvements are carried which are compatible and do not compromise the health and safety of the building. It does not mean everything needs to be at the same it can be a phased approach.

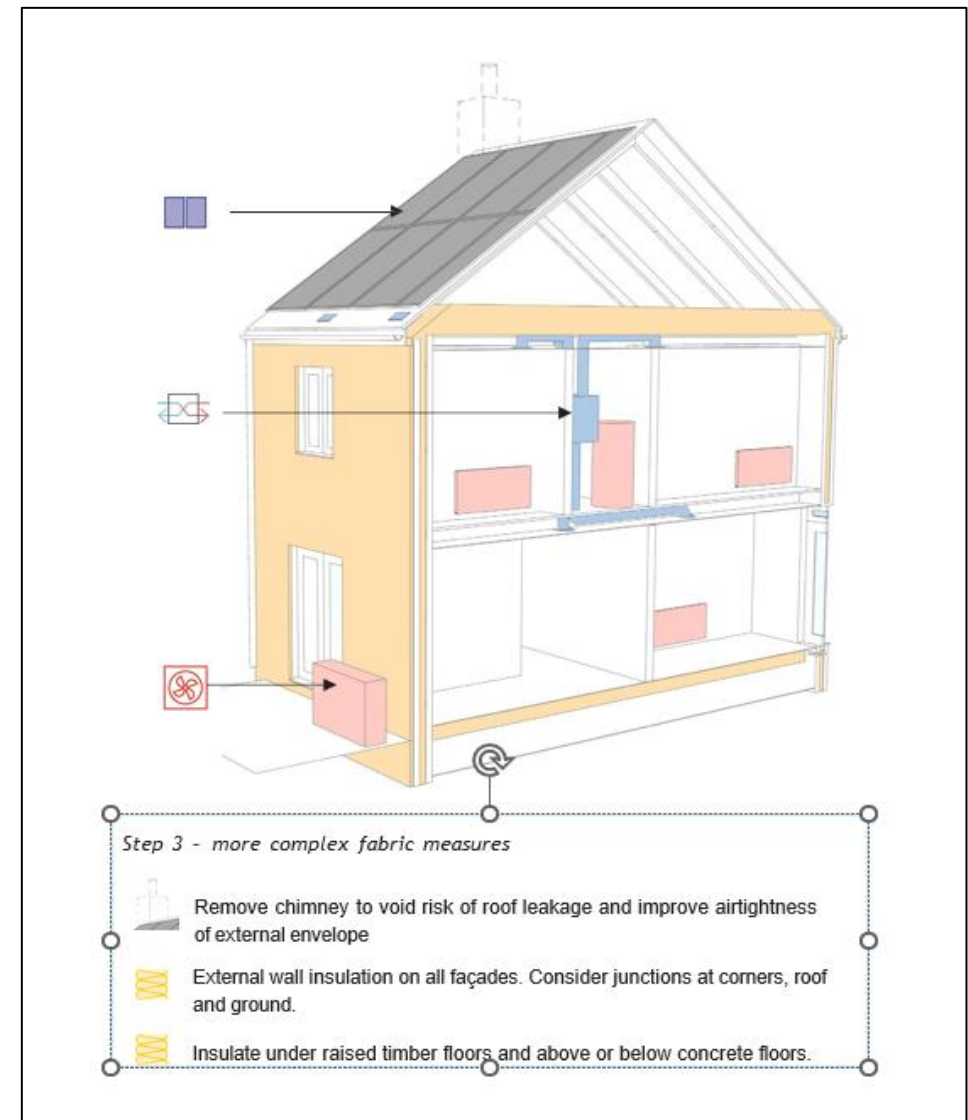
## Example - three steps to decarbonise a simple home

### Step 1 - low carbon heat and 'easy wins'

-  Low carbon heating installed at the earliest possible stage.
  -  Hot water tank (heat pump or electric)  Maintain existing radiators and pipework or increase radiator size if needed.
  -  Electricity supply capacity Use the process described earlier to determine whether it is necessary to upgrade the heating supply
- 
-  Solar photovoltaic panels (early if possible)
  -  Top up loft insulation or insulate rafters if required. Ensure adequate ventilation below rafters and continuity with cavity wall insulation.

### Step 2 - high impact fabric measures

-  New / replacement cavity wall insulation where appropriate
-  Windows and doors, good quality double or triple glazed, installed in centre of insulation line. Upgrade ventilation together.
-  Draught proof around junction with floor, windows and doors. Consider junctions at corners, roof and ground.
-  Ventilation – MVHR will need to be located close to external façade, and ducted through wall or roof.





# Focus Areas

Key focus areas were identified to inform our strategic priorities for this strategy. These are:

**Cornish Housing Stock by Age, the Challenges and the Opportunities.**

**Heat Pump Deployment**

**Fuel Poor and Vulnerable Households**

**Rural and Off Gas Homes**

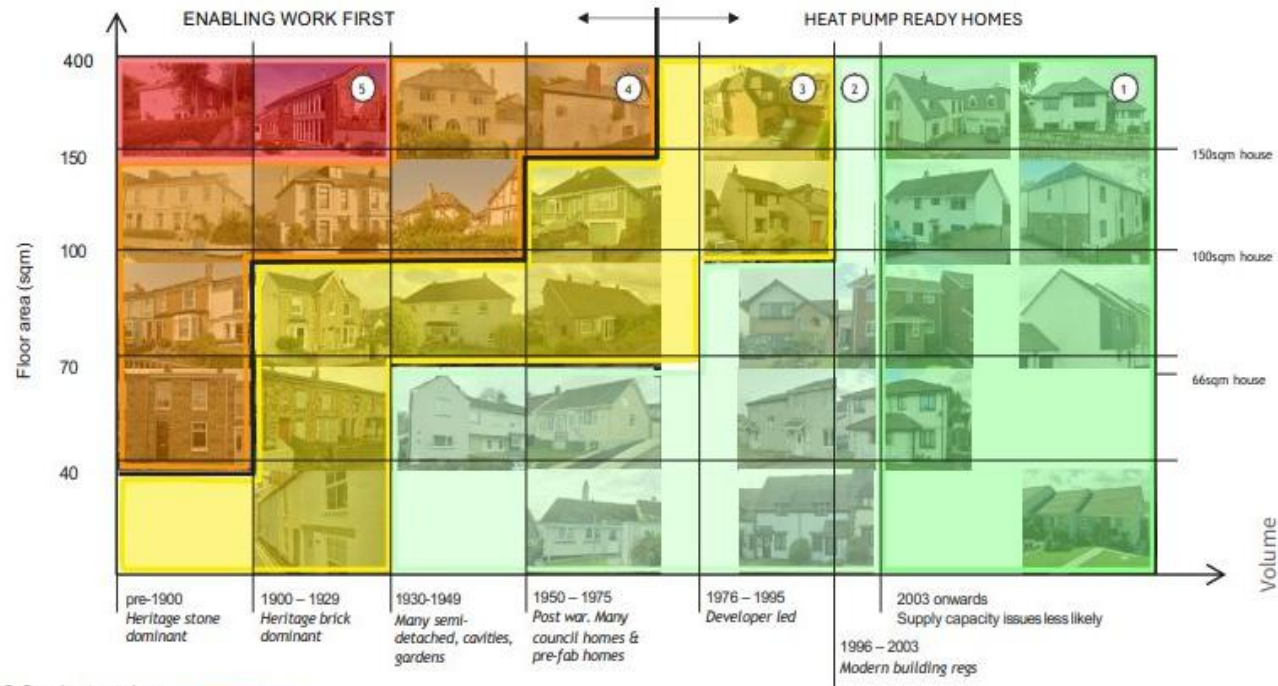
**The Private Rented Sector**

**Non-Traditional Construction**

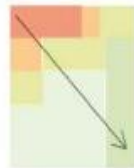
**Park Homes**

**Flats and Maisonettes**

# Heat pump ready homes



s © Google street view



Increasing likelihood that homes will be heat pump ready.

# Targets

- All homes supported to be decarbonised by 2045: a home with low carbon heating and sufficient insulation to be affordable to heat to a healthy standard.



With interim targets set at 5 yearly intervals:

- 15% by 2030
- 46% by 2035
- 77% by 2040
- 100% by 2045

- 30-50% of homes to have solar energy generation by 2045 maximising our solar potential across the county to reduce energy demand and running costs.
- Heat demand savings because of energy efficiency measures and behaviour change of at least 12% by 2045.



This is based on us not exceeding grid capacity growth, giving ourselves time to build capacity but showing ambition and striving to succeed with a housing stock that is diverse with a higher proportion of off gas properties running on high cost and high carbon fuels.

# Next Steps: low-cost high impact actions



**Facilitate retrofit training and upskilling**



**Public awareness campaign**



**Provide a central advice Centre/Retrofit Hub**



**Improve quality assurance:**



**Support retrofit programs**



**Support heat pump deployment**



**Promote renewable energy**



**Support innovation**



**A plan for council homes.**



**Regulation compliance**



**Create a supportive investment environment**



**Identify frameworks and work within National and Local Energy System Planning**



**Lobby government**



**Identify areas for heat networks**



**Monitor and report progress.**

# Building Capacity

To build capacity in the supply chain and skills arena we will:



- Continue to support our local colleges to provide training and drive uptake.



- Attract investment to Cornwall to build capacity to deliver change locally and create decent jobs.
- Improve quality and standards and develop an improved installer scheme.
- Engage with manufacturers to ensure Cornwall has the required support.

## Quality Assurance




Cornwall Council will encourage operators and members of consumer protection schemes to strengthen, maintain and achieve the highest standards to build confidence in the comfort, reliability and usability of new technologies


The collage displays logos for various certification and quality assurance schemes, organized into three tiers:


- Third tier: Voluntary schemes, often represent best practice**
  - Which? Trusted trader
  - bpec
  - RETROFIT ACADEMY CIC
  - good energy
  - octopus energy
  - Internal training programmes
  - THE Green REGISTER OF CONSTRUCTION PROFESSIONALS
  - SOUTH WEST ENGLAND ENERGY EFFICIENCY REGIONAL AWARDS HIGHLY COMMENDED SOLAR PV INSTALLER 2022
  - Heat Geek
  - AECB building knowledge
  - EnerPHit Certified Retrofit Passive House Institute
  - CERTIFIED PASSIVE HOUSE TRADESPERSON
- Second tier: Required for access to SHDF, ECO4 funding etc.**
  - TRUSTMARK Government Endorsed Quality
  - PAS 2035
- First tier: Required for to access BUS grants for heat pumps or solar export payments**
  - MCS CERTIFIED
  - RECC RENEWABLE ENERGY CONSUMER CODE
  - HIES Consumer Code

# Costs and Funding: Creating a supportive investment environment

 **Installation costs:** standard costs & hidden costs including those for repairs to enable retrofit.

 **Funding :** grants, loans, incentives and private finance for Cornwall.

 **Energy costs** - linked to efficiencies & fuel poverty and affordable decarbonisation.

 **Energy prices and levies:** generally, outside of local authority control but raising awareness and education plays a key part of this strategy.

- Drive down upfront installation costs
- Maximise funding and investment opportunities for Cornwall
- Reduce running costs to ensure affordability
- Increase access to affordable finance
- Raise awareness and understanding of energy prices

## Partnership approach

Cornwall has a strong history of partnership working to achieve better outcomes for our residents.

- **Community Energy Plus** - Cornwall's energy advice charity, helps householders, landlords and communities in Cornwall use their energy better to enjoy warmer, energy efficient homes as part of a more sustainable, low future.
- **Cornwall Climate Action Network** – are a network of grassroots organisations working towards transformational change in Cornwall, the Isles of Scilly and beyond through climate action, nature recovery and building community resilience.
- **Winter Wellbeing** – a partnership of over 30 organisations who work together to reduce fuel poverty, improve health and progress people to work. The partnership has delivered energy efficiency improvements and low heating solutions for over 10 years using funds such as the Central Heating Fund, Warm Homes Fund, ECO LA Flex, Green Homes Grant Local Authority Delivery Scheme (GHG LAD) and Sustainable Warmth. To date this partnership has seen interventions in over 20,000 homes.
- **SW Net Zero Hub** – provides strategic and technical support to the public sector and communities to support projects provides.
- **Sustainable Construction Advisory panel** – is a regional steering group to advise, influence and steer sustainable construction, training, development, and education in the region.





The screenshot shows the Cornwall Council website page for the Housing Decarbonisation Programme. The header includes the Cornwall Council logo with the tagline 'one and all • onen hag oll' and navigation links for 'My account', 'Listen & translate', and 'Search'. The breadcrumb trail reads 'Home Page / Housing / Private Housing / Housing Decarbonisation Programme'. The main heading is 'Housing Decarbonisation Programme'. Below the heading are links for 'Print page', 'Share page', and 'Email'. The main content area features a sub-heading 'Helping Cornish homes become kinder to the planet, warmer, healthier and more energy efficient' followed by a paragraph explaining the council's commitment to carbon neutrality and the Housing Decarbonisation Programme. A 'Last Updated' section shows the date '15/01/2025'. A 'Related Content' sidebar lists links for 'Housing Decarbonisation Programme', 'Public Health', 'Planning policy', 'Housing', 'Environment', and 'Green Home Improvement Loans'.

**CORNWALL COUNCIL**  
one and all • onen hag oll

My account Listen & translate Search

Home Page / Housing / Private Housing / Housing Decarbonisation Programme

## Housing Decarbonisation Programme

Print page Share page Email

### Helping Cornish homes become kinder to the planet, warmer, healthier and more energy efficient

Cornwall Council declared a [Climate Emergency in 2019](#) and made an Action Plan. As part of this plan a series of initiatives aimed at carbon neutrality are already in place. The action plan introduced a Carbon Neutral Homes Programme. The Housing Decarbonisation programme and strategy will add to and expand this work. Doing this will help us to meet our legal duty to decarbonise. The duty is set out in the [Climate Change Act 2008](#) ([legislation.gov.uk](#)).

Homes in Cornwall contribute 20.5% of our total emissions. Over 90% of Cornish housing needs improvement if we are to meet our carbon neutral ambition. Our housing is not as energy efficient when compared to those in the Southwest and across the UK.

The Council, working with communities want to create a carbon neutral Cornwall. Our aim is that everyone can start well, live well and age well in Cornwall.

**Last Updated:**  
15/01/2025

**Related Content**

- Housing Decarbonisation Programme
- [Public Health](#)
- [Planning policy](#)
- [Housing](#)
- [Environment](#)
- [Green Home Improvement Loans](#)

To download a copy of the strategy, go to our Housing Decarbonisation page at:

[Cornwall.gov.uk/housing/private-housing/housing-decarbonisation-programme/](http://Cornwall.gov.uk/housing/private-housing/housing-decarbonisation-programme/)



# Grant delivery

## Social Housing

### Decarbonisation Fund ( SHDF)

77 homes retrofitted

Measures included heating, solar, insulation, windows and ventilation

### Home Upgrade Grant (HUG2)

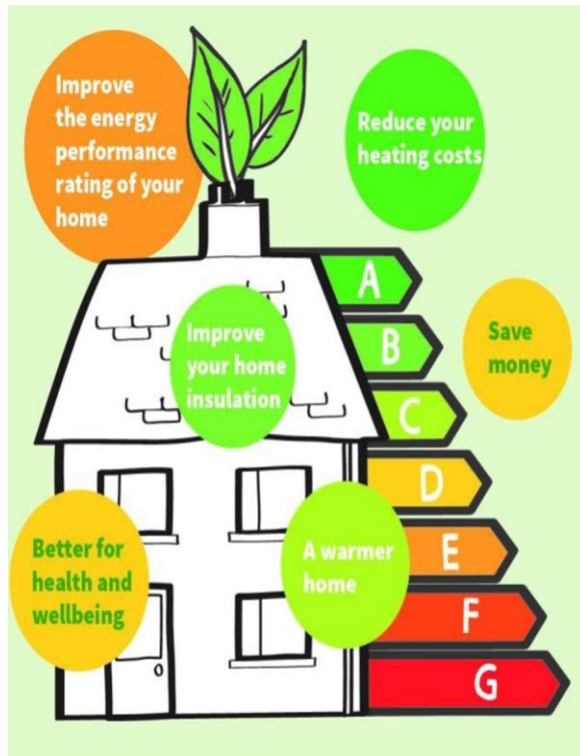
Successfully delivered HUG2 with a capital budget of £5.2m to 243 homes over 15 months. Off Gas only.

Measures included heat pumps, wall insulation, lofts and solar PV panels.

### Warm Homes Local Grant Due to commence spring 2025

3-5year programme.

Off gas and on gas properties. Procuring new delivery model and partner.



**The Warm Homes: Local Grant** will begin delivery in 2025 and will provide energy performance upgrades and low carbon heating via local authorities, to households that:

- are in England
- are low income
- have an Energy Performance Certificate (EPC) between D and G
- are privately owned (owner occupied or privately rented)

Warm Homes: Social Housing Fund replace SHDF

# Green Home Improvement Loans



lendology.cic

talk to  
Lendology  
01823 461099

**4% fixed**  
**interest rate**  
(representative  
4.2% APR)

## Landlords

- To benefit tenants
- (Not available for holiday lets or second homes)

## Homeowners

- Who can't access mainstream lending
- In fuel poverty
- With long term health issues or disabilities
- With Children under 16 living at home
- Park-home owner occupiers

Lump sum  
reductions  
at any time

No early  
repayment  
charges

Individually  
tailored  
assessment  
and loan  
product

**Borrow**  
**from £1000**  
**- £25,000**

Repayment  
up to 10  
years

# For more information or to apply for the Green Home Improvement Loan Scheme:

Visit <https://www.lendology.org.uk/> or email [loans@lendology.org.uk](mailto:loans@lendology.org.uk). Or Call Lendology on 01823 461099.

You can also connect via social media platforms:

**Facebook** <https://www.facebook.com/lendologyCIC/>

**Twitter** <https://twitter.com/lendologycic>

**Instagram** <https://www.instagram.com/lendologycic/>

**LinkedIn** <https://www.linkedin.com/company/lendologycic/>

**YouTube** <https://www.youtube.com/@lendologycic>



# Homewise Tool

Homewise

To help you decide which energy efficiency measures and renewable technologies would suit you, your home and your lifestyle we have launched the [Homewise tool](#)

energy  
saving  
trust

The Homewise tool is new, developed by the Energy Saving Trust



The tool offers free impartial energy saving advice to help boost the energy rating of your home and help you to save money on energy bills.



In three simple steps you can now create a report and download it for your home helping you to plan and budget for energy saving improvements.

  
Funded by  
UK Government

  
CORNWALL  
COUNCIL  
*one and all - one by all*

 Council of the  
ISLES OF SCILLY

 GOOD  
GROWTH  
CORNWALL & ISLES OF SCILLY  
SHARED PROSPERITY FUND

 [www.cornwall.gov.uk](http://www.cornwall.gov.uk)

# Minimum Energy Efficiency Standards (MEES)

## Improving energy efficiency across the private rented sector



**Data and identification work**



**Programme of intervention focused on PRS households likely to be in fuel poverty including exemptions validation work**



**Robust support package and comms plan for landlords and letting agents**



F&G PRS reduced by  
**65% since 2020**



# Local Area Energy Plan (LAEP)

The Cornwall and Isles of Scilly Local Area Energy Plan (LAEP) aims to transform the local energy system to achieve net zero carbon emissions.

**Alignment:** the Housing Decarbonisation Strategy and LAEP must work together.

**Purpose:** A vision for the future of energy in Cornwall and Isles of Scilly, the current system, potential changes, preferred options, and a five-year action plan (covers Transport, Agriculture and Commercial Buildings as well as Domestic Homes)

**Benefits:** A decarbonised energy system, warmer homes, lower energy costs, increased energy security, new business opportunities, and community benefits.

**Process:** The LAEP was developed over 18 months with a wide range of stakeholders, who discussed various scenarios for achieving a decarbonised energy system.

**Community Involvement:** Over 4,000 people, including residents and representatives from various sectors, contributed to the plan through surveys, roadshows, and workshops.

**Cabinet Approval:** March 2025



# Community Groups

Community groups play a crucial role in net zero delivery for several reasons:

- 1. Local Knowledge and Engagement:** Community groups often have a good understanding of local issues and needs. Their involvement ensures that strategies are tailored to the specific context of the community, making them more effective.
- 2. Awareness and Education:** These groups can help raise awareness, educating community members on the importance of reducing carbon emissions and adopting greener lifestyles.
- 3. Collaboration and Mobilisation:** Community groups facilitate collaboration among residents, local businesses, and government entities, mobilising collective action towards achieving net zero goals.
- 4. Support for Policy Changes:** They can advocate for local policies that support sustainability initiatives, pushing for changes that align with net zero targets.
- 5. Implementation of Projects:** Community groups often lead or participate in local area-based projects for renewable energy installations.



# Thank you / Meur ras

If you have any questions or comments

[HousingDecarbonisation@cornwall.gov.uk](mailto:HousingDecarbonisation@cornwall.gov.uk)