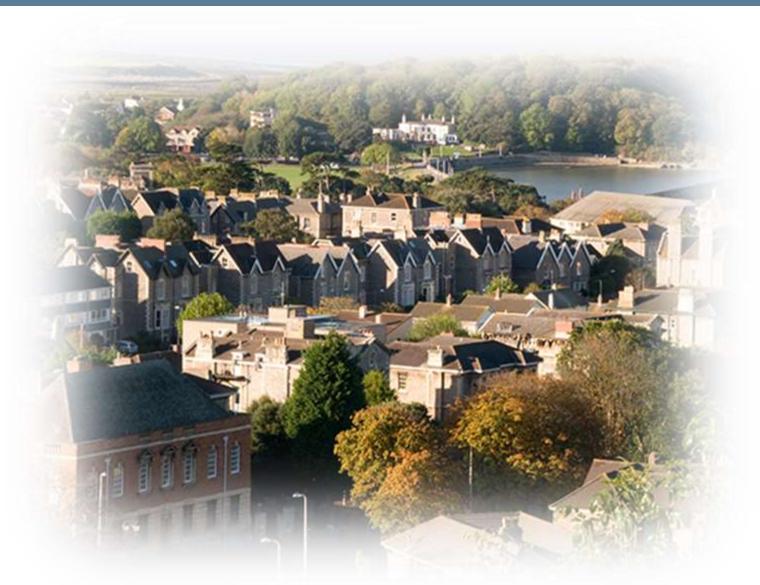


# Adapting Existing Buildings In your community

**Email:** communities@cse.org.uk



## About CSE



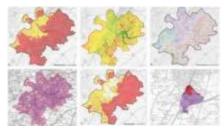
- We support people and organisations across the UK to tackle the climate emergency and end the suffering caused by cold homes
- 120+ staff and 100+ projects running



- Support for people in fuel poverty and vulnerable circumstances
- Housing energy retrofit
- Local authority support and action for net zero
- Empowering communities
- Future generations
- Fairness in the energy system



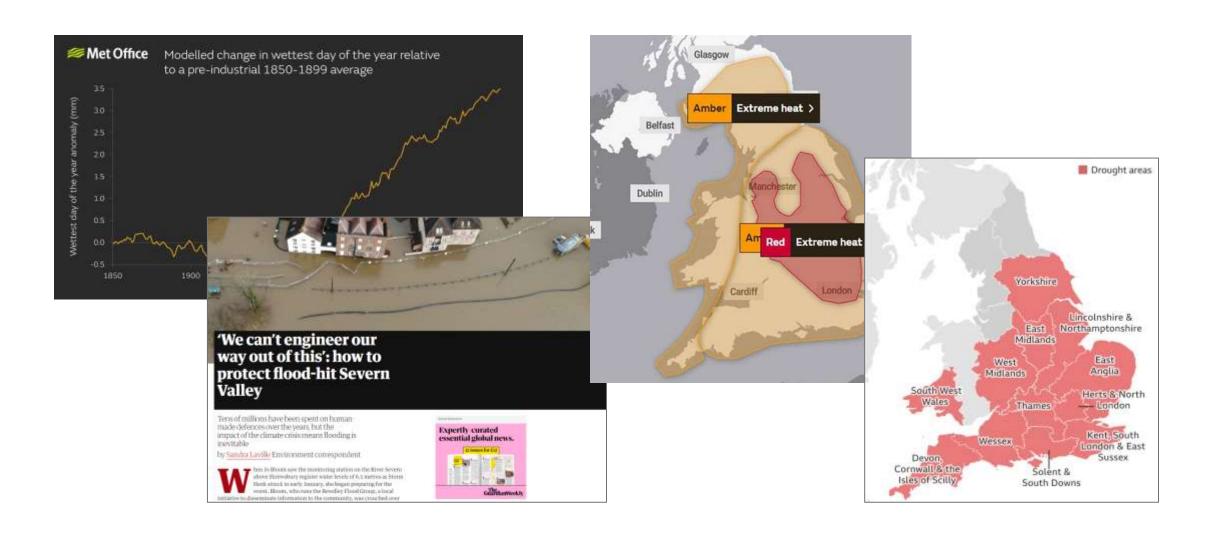






# Climate change in the UK





## Emissions & the built environment





## Adapting existing buildings



#### The most sustainable building is often one that is already built

- Our existing building stock, including historic buildings, provides opportunities to achieve Net Zero more sustainably while enabling the continued use and care of the nation's heritage.
- Successful interventions lead to the continued use and care of buildings to prevent waste, and it avoids the increase in carbon emissions from new builds.
- 80% of our buildings in 2050 are thought to be already built

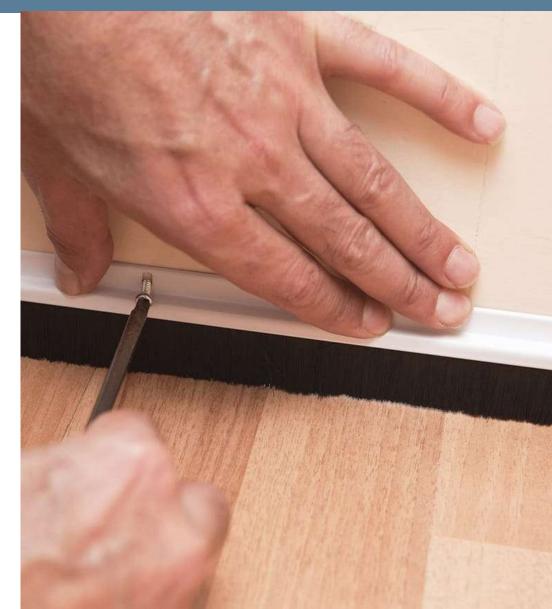
## What is Retrofit?



**Retrofit**: "the addition of a technology or feature to an existing thing."

## **Building energy retrofit:**

"any improvement work on an existing building to improve its energy efficiency".

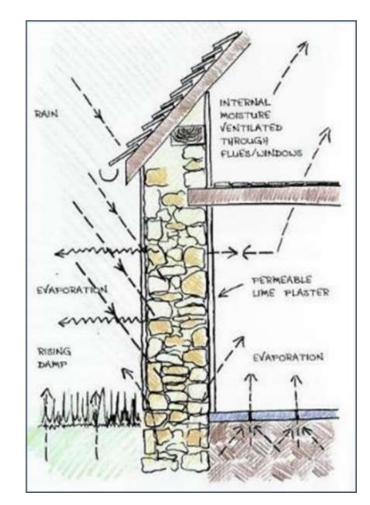


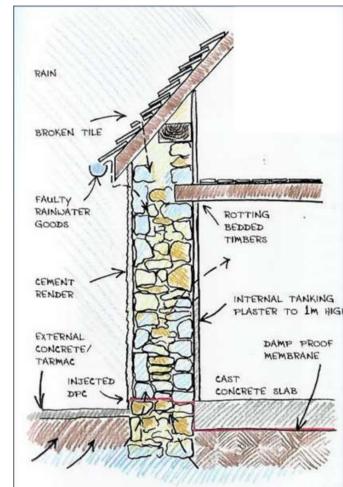


## Key Principles



- Do no harm
- Repair and maintenance
- Start from a position of knowledge
- The whole building approach –
   specific to each building
- Assessments and monitoring
- Myth-busting 'fabric first'



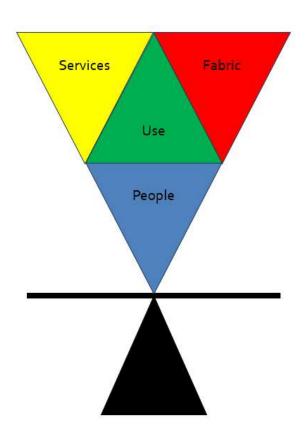




## Whole building approach



- Focus on the whole system not individual elements
- Deals with the specific situations as opposed to generalities.
- Opportunities and constraints can vary widely even if the buildings appear similar.
- A building and site-specific approach is needed, to find a bespoke, balanced solution.
- Helps to highlight and resolve uncertainties, reconcile conflicting aims, and manage the risk of unintended consequences.



Individual elements in a building do not work in isolation but as part of a wider whole system. The actual performance of a building is often a balancing act.

## Monitoring, assessments, surveys



### You may have heard of:

- Energy use monitoring
- Air temperature monitoring
- Relative humidity monitoring
- CO and CO<sub>2</sub> monitoring
- Indoor air-quality (IAQ) monitoring
- Air-tightness testing
- Thermal imaging assessments
- Building condition surveys
- Mechanical and electrical services assessment
- Energy performance certificates
- Retrofit surveys

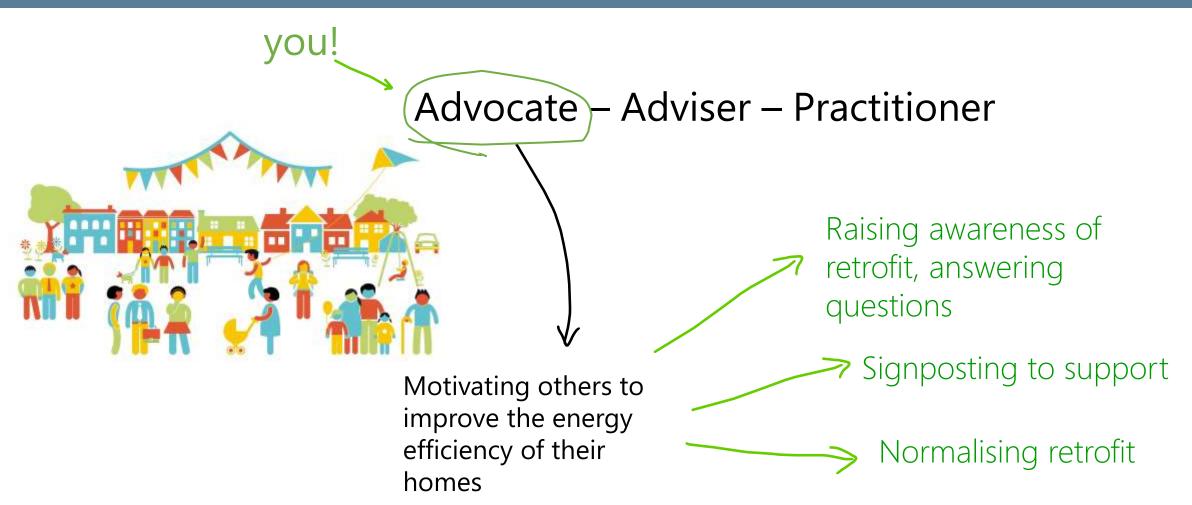




What do they all mean?

## You and your community





## Who lives in your community?





I rent my home. I have health issues, so I need to keep my home warm in the winter, but it's tricky because my home is quite draughty. My landlord doesn't want to spend money on making it better.

Our home, which we own, was built in the 1800s

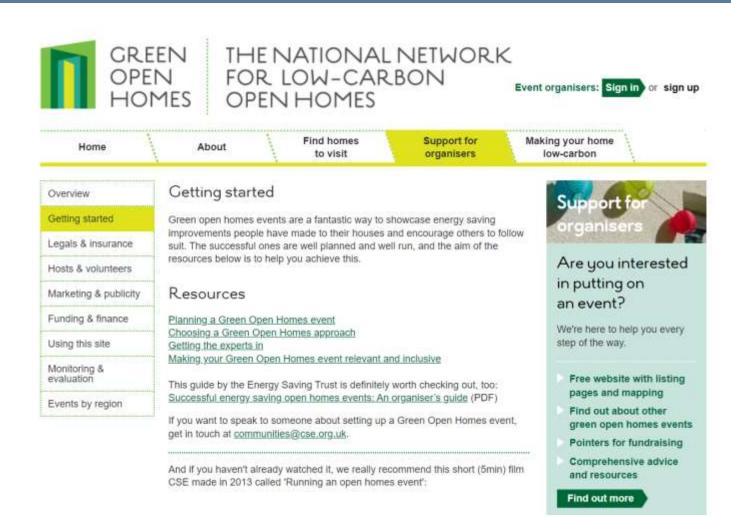
— it has lots of history! But it's cold and increasingly expensive to heat. We'd like to understand what our options are for tackling this but we don't know to who ask for advice. We've spoken with a few builders to get quotes but we don't feel they have the experience of working with old homes.

We're all different! Understanding where people are coming from will help you talk to them about retrofit.



## Green open homes





## Retrofit in the South West





Make Your Home More Energy Efficient » Retrofit West

#### **Futureproof your home in 2024**

Comprehensive survey • Expert advice • Backed by your council

Start cutting carbon and saving money today

You have been chosen to receive our offer of a hugely discounted home survey.

A home survey can help

- · Cut your energy bills.
- Reduce your carbon footprint.
- Have a warmer, cosier home.

Futureproof home surveys offer bespoke energy advice and big savings, and include:

- A survey based on a site visit to understand your home, and your aims and budget.
- A detailed post-survey report outlining the key energy-saving improvements you can make.
- Help on next steps such as finding reliable contractors.

#### Save BIG ...

Get £500 off your in-depth Futureproof home retrofit survey. For a 3-4 bedroom home it's now £300+vat (normal price £800+vat).

PLUS ... For extra reassurance. we'll give you free follow-up expert support six months after your survey.

#### Limited offer! Don't miss out!

Brought to you by the Futureproof energy efficiency partnership between Wiltshire Council and the Centre for Sustainable Energy







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## Further Resources



- CSE (Centre for sustainable energy) <u>Home Centre for Sustainable Energy (cse.org.uk)</u>
- RICS (Royal institute of chartered surveyors) Residential retrofit standard (rics.org)
- CIOB (chartered institute of builders) Retrofit of Buildings CIOB Academy
- Historic England <u>Advice | Historic England</u>
- Tywi Centre Home | Tywi Centre
- UKCMB (UK centre for moisture in buildings) <u>UKCMB home UK Centre for Moisture in Buildings</u>
- STBA Sustainable and traditional building alliance) <u>STBA UK Centre of Excellence for traditional buildings (stbauk.org)</u>
- LETI (London Energy Transformation Initiative) <u>Home | LETI</u>



## **Thank You!**

- Any questions?
- Keep in Touch:
- communities@cse.org.uk

