

# Low carbon retrofitting

Taking a whole house approach

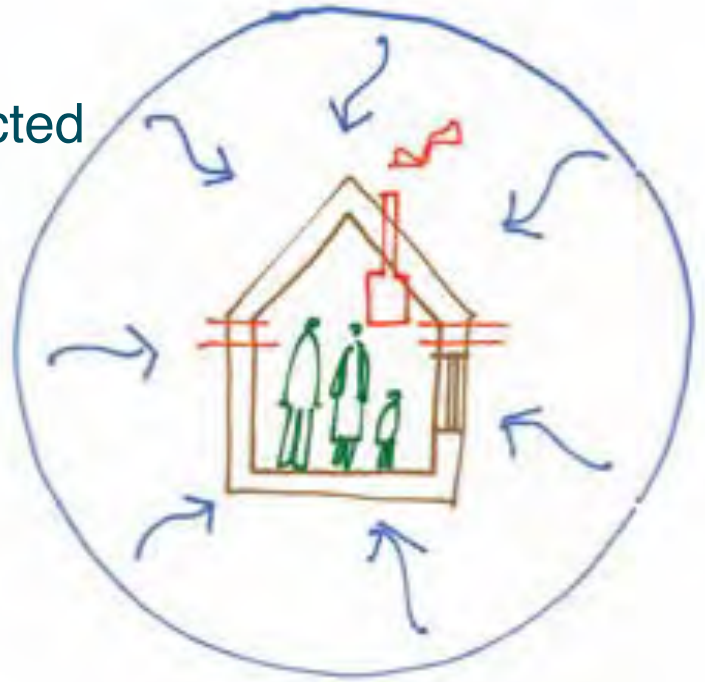


- **The whole house, fabric first approach**
- **Understanding your home**
- **Funding**
- **Finding contractors and advice online**
- **In depth retrofit advice**



# The whole house approach

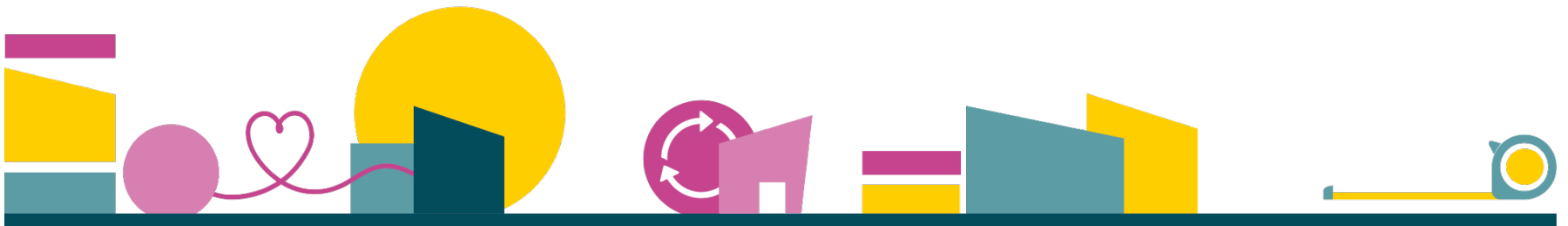
- Considers the building fabric, services, who lives in it, and the surrounding environment
- Look at maintenance and repairs first
- Not just about energy saving. Connected issues such as damp and ventilation
- Sees the home as a system with interacting elements
- Helps to decide the order in which to carry out improvements
- Helps to identify potential problems which could result from retrofit



# Aims of a 'fabric first' approach

Prioritising improvements to the energy efficiency of the building's external shell before building services and renewables are considered, to ensure energy demand is as low as possible.

1. Even, all round insulation  
To maintain a consistent internal surface temperature
2. An airtight building envelope  
With a continuous, unbroken air barrier
3. Vapour permeable construction  
To promote the safe passage of moisture



# Understand your home

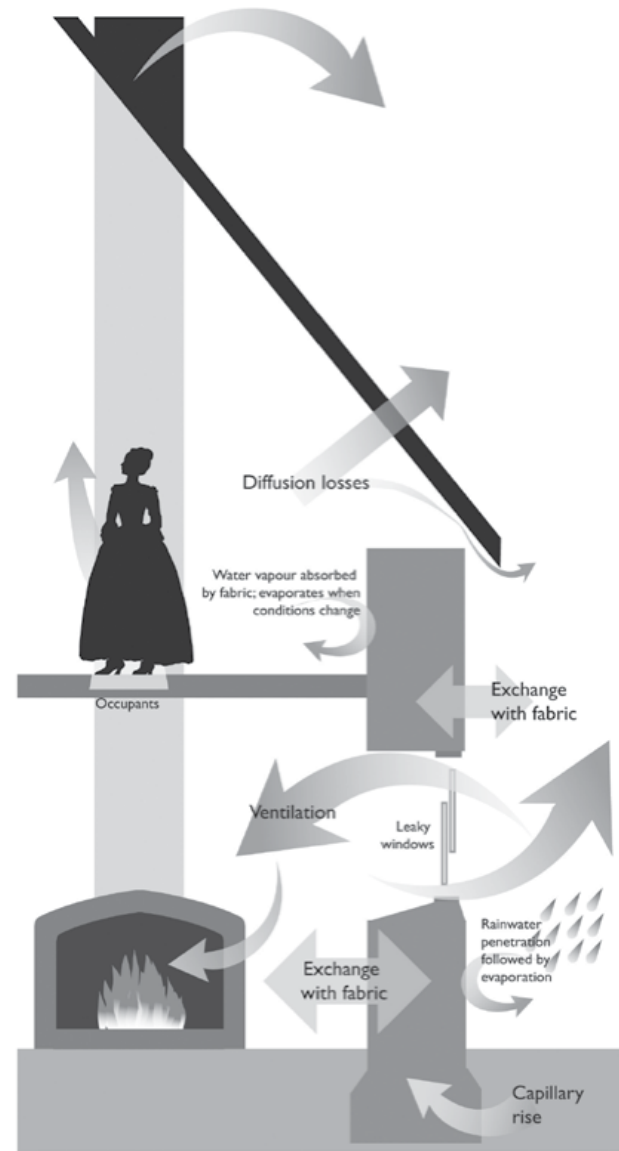
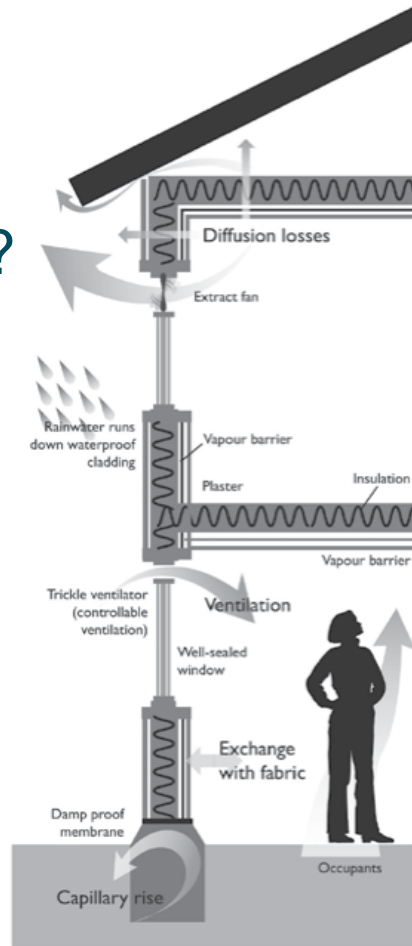
Is it traditional or modern?

When was it built?

Is it in a conservation area?

This will help you understand how it was constructed.

Also important to understand changes which have been made later.



# Funding (non means

- **Boiler Upgrade Scheme**, started 1<sup>st</sup> April (replaces Renewable Heat Incentive):
  - Grants of £5,000 for ASHP or biomass boiler, £6,000 for GSHP
  - To replace an existing fossil fuel heating system
  - Limited availability - 90,000 homes
  - Accessible through MCS accredited heat pump installers
  - Hybrid systems, air-to-air systems and solar thermal not eligible
  - EPC required with no recommendation for loft or cavity wall insulation.
- **Smart export guarantee (solar PV)** – payments from electricity supplier for exporting electricity generated on site.
- Some local authorities back **low interest loans** for energy efficiency improvements, such as **Lendology** in the South West.



# Funding (means tested)

Eligibility is complicated – call us for more advice! Generally speaking, to get a grant, you must be on a low income (on means tested benefits, or household income below £30K, sometimes savings limits apply)

- **Home Upgrade Grant scheme (HUGS)** – central government funding:
  - Local authority led schemes
  - Mostly for off-gas properties
  - Wall and roof insulation, low carbon heating, heating controls
  - Grant amount depends on the EPC band and fuel type.
- **Energy Company Obligation (ECO)** – funding from energy suppliers:
  - Cavity wall, party wall, loft, underfloor insulation
  - Replacement mains gas boilers (only if with other measures), new gas central heating.
- **SSEN enabling works fund** – must live in the SSEN area (SSEN are an electricity distributor):
  - To pay for work to enable installation of energy saving measures, e.g. loft clearance, scaffolding, minor structural repairs
  - Must be eligible for a grant funded scheme paying for the measure itself.



# Finding contractors

**Trustmark** – government endorsed quality scheme

<https://www.trustmark.org.uk/homeowners>

**National Insulation Association** – quality assurance scheme for insulation

<https://www.nia-uk.org/find-an-installer/>

**Microgeneration Certification Scheme** – quality assurance scheme for renewables

<https://mcscertified.com/find-an-installer/>

**Green Register** – find sustainable construction professionals in the South West

<https://www.greenregister.org.uk/search>







# Other useful resources

**Sustainable Traditional Buildings Alliance Responsible Retrofit Wheel**

<https://responsible-retrofit.org/wheel/>

**Historic England energy efficiency guidance**

<https://historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/>

**Green Building Forum – tips, discussion, inside info from real green builders**

<http://greenbuildingforum.co.uk/>

**Designing Buildings Wiki – construction industry website**

<https://www.designingbuildings.co.uk/>

**Green Building Encyclopaedia**

<https://greenbuildingencyclopaedia.uk/>





Project run by the Centre for Sustainable Energy, initially funded by central government. The funding ended March 2021 so we now charge for our services. We offer a range of services to help homeowners make energy saving improvements and retrofit with confidence:

- Introductory energy advice
- Full survey and coordinator plan
- Site inspection and project management
- Referrals to installers and contact details for builders
- We cover Bristol, B&NES, North Somerset, South Gloucestershire, Somerset County, Swindon and Wiltshire
- **Discounted surveys are available in some areas – check the website**

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# Get in

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