Introduction to the Green Homes Grants and effective home upgrades



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Overview

- Introduction & context
- Basics of effective home upgrades
- The Green Homes Grants scheme
- How YCE can help







- Around 36% of carbon emissions in York come from housing while only 36% of York homes are well insulated.*
- Retrofitting of homes is crucial to achieving emissions targets, but unlikely to happen on its own.
- Our aim: get more York homes insulated and kick-start a market for home retrofit in the city.



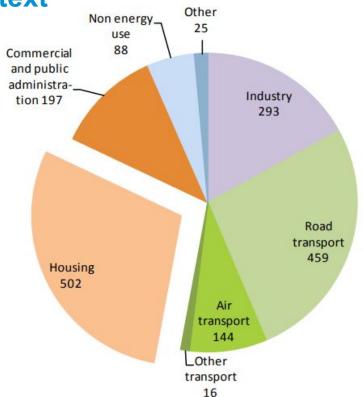








Context



Graph 1a: Final energy consumption by sector 2012 (UK, TWh, Total 1,724 TWh)



York declares 'climate emergency' after young people demand action





Carbon Co-op

Basics of effective home upgrades



Why retrofit?

A good house should:

- Provide comfortable shelter without costing the earth
- Be resilient to extreme weather such as flooding or high winds
- Help keep us healthy with good air quality



Fulford Passivhaus Plus (by L. Outing)

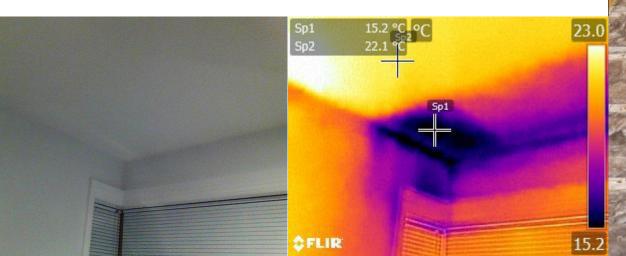
What is retrofitting?

Fabric first! (and maintenance)



(Super) insulation and its continuity

- Choose materials that suit the house, local conditions and your budget
- Down with U values! (watch Andy Walker's explanation: https://youtu.be/YZ4pmMneLOo)
- Mind the gaps!





Airtightness

- Removing any uncontrollable air flows caused by gaps and cracks in the building fabric
- Draught-proofing is a good start

What if you could combine all draughts etc. into one hole in a wall?

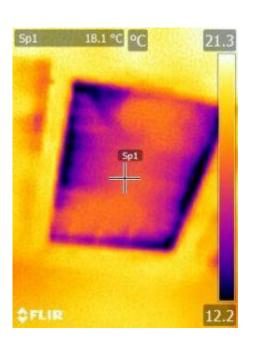


Building regs house





Building Sustainability Podcast



Ventilation and moisture control

- Seal/insulate tight, ventilate right!
- We spend up to 90% of time indoors
- Indoor air pollution: noxious chemicals, cooking, dust, mould, viruses, moisture...
- Good ventilation ensures fresh air supply and removes excessive moisture
- Be it opening windows or MVHR system, plan for it



Watch: https://youtu.be/aBWIXLMngBk

Whole house approach

- Each house is unique
- Doing just one thing can cause problems so a whole house plan is advisable
- If done well, you will benefit from increased comfort and improved health
- And save on energy bills while (probably) reducing carbon emissions

Action: make a whole house plan and ask lots of questions



Green Homes Grants



Outline of the scheme

Voucher scheme designed to help the economy recover, provide jobs in the retrofitting industry and improve home energy efficiency in England:

- up to £5,000 to cover up to two thirds of the total cost
- up to £10,000 to cover 100% of the cost for low income households
- £1.5 billion scheme
- you must be a homeowner or landlord
- contractors must be accredited by <u>TrustMark</u> or <u>Microgeneration</u>
 <u>Certification Scheme (MCS)</u>
- Open now until 31st March 2021

The process of applying

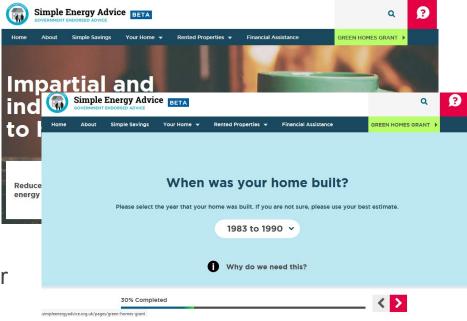
Plan measures: simplenerqyadvice.org.uk

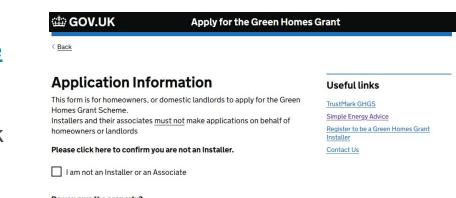
- Complete a short eligibility survey and find measures you can apply for
- Find accredited contractors
- Request quotes: we recommend three for each measure

Apply for the voucher:

https://green-homes-grant.service.gov.uk/home owner-and-landlord-application

When you get a confirmation, commission work and make sure it's done by 31st March 2021.





What the grants will fund

1 Primary measures

Insulation:

- Solid wall
- Cavity wall
- Under-floor insulation (solid or suspended floor)
- Loft
- Flat roof
- Room in roof
- Park home insulation

Low carbon heat (where the home is suitably insulated):

- Air source heat pump
- Ground source heat pump
- Solar thermal
- Biomass pellet boilers

Insulation top-ups are allowed

but not replacements

What the grants will fund

2 Secondary measures

Windows and doors:

- Draught proofing
- Double/triple glazing (where replacing single glazing)
- Secondary glazing (in addition to single glazing)
- Energy efficient replacement doors

Heating controls and insulation:

- Hot water tank thermostats
- Hot water tank insulation.
- Heating Controls (Smart heating controls, zone controls, intelligent delayed start thermostat and thermostatic radiator valves)

What the grants will fund

3 Supporting work

- New tanks & pipework
- New radiators/underfloor heating
- Architectural design work (where needed)
- Assessment & modelling (where needed)
- Damp treatment
- Repairs
- Improving controlled ventilation

Plus necessities like scaffolding, and waste removal

... but all must be in support of a primary or secondary measure

Matched funding

Government voucher provides two thirds of the quoted cost







Primary measures



Secondary measures



Further top-up may be needed

Funding - examples

Primary measure: Air source heat pump install, cost £7,200

Secondary measure: Replacement door, cost £800

Government pays full available amount of £5,000, you pay £3,000

(or £0 if on low income)

Primary measure: Cavity wall insulation, cost £900

Secondary measure: Upgrade all windows to double glazing, cost £5,000

Government pays: £1,200 (£600 for each measure). You pay £4,700

Things to consider before applying:

Pros

- It's free money!
- Should save carbon, reduce bills and improve comfort
- May incentivise new training
- Helps the economy
- Raises interest in retrofit

Potential cons

- Limited number of accredited contractors, more likely larger and non-local ones -- potential for delays and higher charges
- Quality standards not a guarantee; there's a serious shortage in certain skills
- Limited choice of materials
- Fixed and tight deadline

How can YCE help?



What YCE can and aims to offer

Currently we can:

- Recommend having a whole house review by <u>Andy Walker</u> or a local Retrofit Co-ordinator
- Book a thermal imaging survey
- Give feedback on your plans
- Push for a Retrofit Strategy for York and more support for homeowners
 - you can help by filling in survey

In the future:

- We will have our own Retrofit
 Co-ordinators and Assessor to do
 whose house assessments and
 advise homeowners
- We will be able to recommend local contractors

Events in the pipeline

- Thur 15th October: York Open Eco Homes 2
- Thur 29th October: YCE AGM featuring Paul Allen of Zero Carbon Britain and Andy Boyle of Otley 2030
- TBC Draught-proofing workshop
- York Environment Week
 - Wed 2nd Dec: What your home is made of (and why it matters)
 - Sat 5th Dec: Electric dreams



Sign up to our <u>mailing list</u> and also check out https://carbon.coop/ for great workshops and webinars

Questions?

