Implementing Technical Solutions – Drivers, Training, and Support

Action for Warm Homes

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NEA

Department for Business, Energy & Industrial Strategy

Annual Fuel Poverty Statistics in England, 2020 (2018 data)

30 April 2020 National Statistics

Headline Statistics

- In 2018, the **average fuel poverty gap** (the reduction in fuel bill that the average fuel poor household needs in order to not be classed as fuel poor) in England was estimated at £334, a slight increase from £328 in 2017.
- The **aggregate fuel poverty gap** for England continued to decrease in 2018 (by 3.4 per cent in real terms) to £802 million.
- The **proportion of households in England** in fuel poverty was estimated to have decreased by 0.7 percentage points from 2017 to 10.3 per cent in 2018 (approximately 2.40 million households).
- In 2018, further progress was made towards the interim 2020 **fuel poverty target**, with 92.6 per cent of all fuel poor households living in a property with a fuel poverty energy efficiency rating of Band *E* or better.

Fuel poverty target	2010 progress	2017 progress	2018 progress
Band E or above by 2020	81.1	92.2	92.6
Band D of above by 2025	32.7		
Band C or above by 2030	1.5		

A household's fuel poverty status depends on the interaction

- **Energy efficiency** – improvement in energy efficiency betw
- **Energy prices** – prepayment price cap has contributed to th for mainly low income households.
- **Incomes** – incomes increased at a faster rate for low incom the introduction of the National Living Wage in April 2016.

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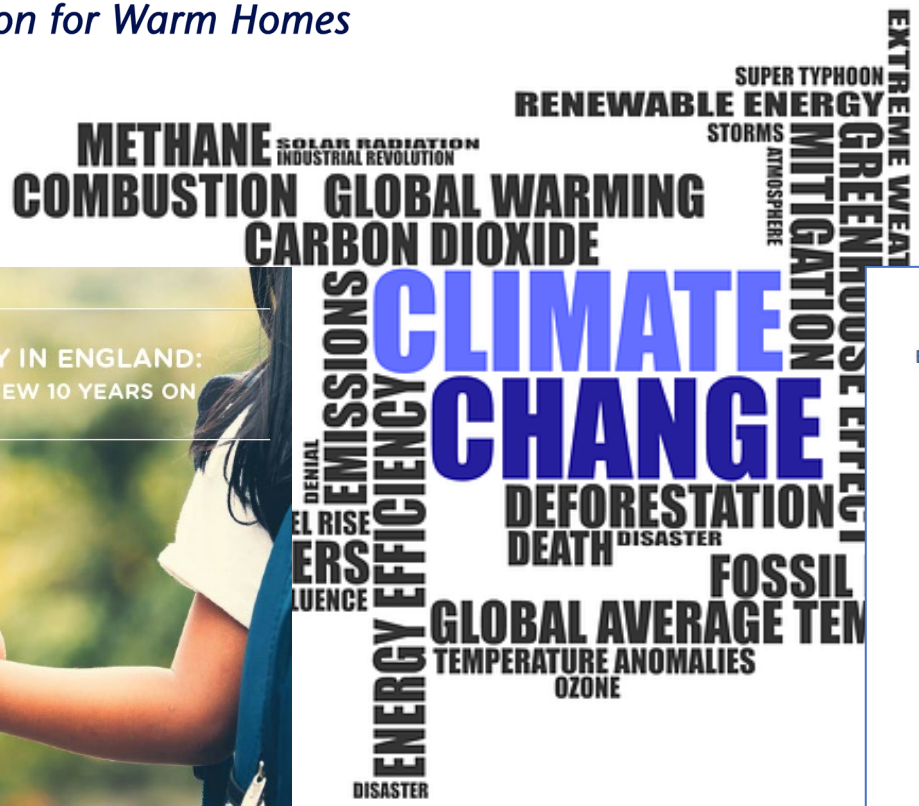
Action for Warm Homes



Office for National Statistics

Statistical bulletin

Excess winter mortality in England and Wales: 2018 to 2019 (provisional) and 2017 to 2018 (final)

More people die in the winter than the summer. We present data by sex, age, region and cause of death.

Contact:
Chris White
mortality@ons.gov.uk
+44 (0)1633 455865

Release date: 27 November 2019

Next release: November 2020

Notice

27 May 2020

Our most up-to-date figures on deaths involving the coronavirus (COVID-19) registered in England and Wales are available in the weekly deaths bulletin and accompanying dataset.

Get the latest statistics on COVID-19 deaths in each of the UK's constituent countries.

30 July 2020

the excess winter mortality index confidence intervals has been idence.

EVIDENCE REVIEW & ECONOMIC ANALYSIS OF EXCESS WINTER DEATHS

for the National Institute for Health and Care Excellence (NICE)

Review 2

Interventions and economic studies

London School of Hygiene & Tropical Medicine

Public Health England

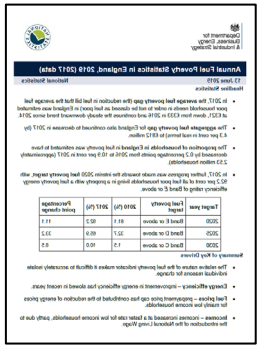
University College London

The Committee on Climate Change (CCC) recommended the UK Government sets an ambitious target to reduce greenhouse gas emissions to ‘net-zero’ by 2050.

“We agree with the committee; ending fuel poverty and ambition for our climate are indivisible. There is now a huge opportunity for the UK Government, devolved nations, industry and campaigners to demonstrate how the most vulnerable people in our society can be the first to benefit from this necessary transition.”

Adam Scorer - 02 May 2019

UK government release of 'statistical trends and analysis on fuel poverty in England'

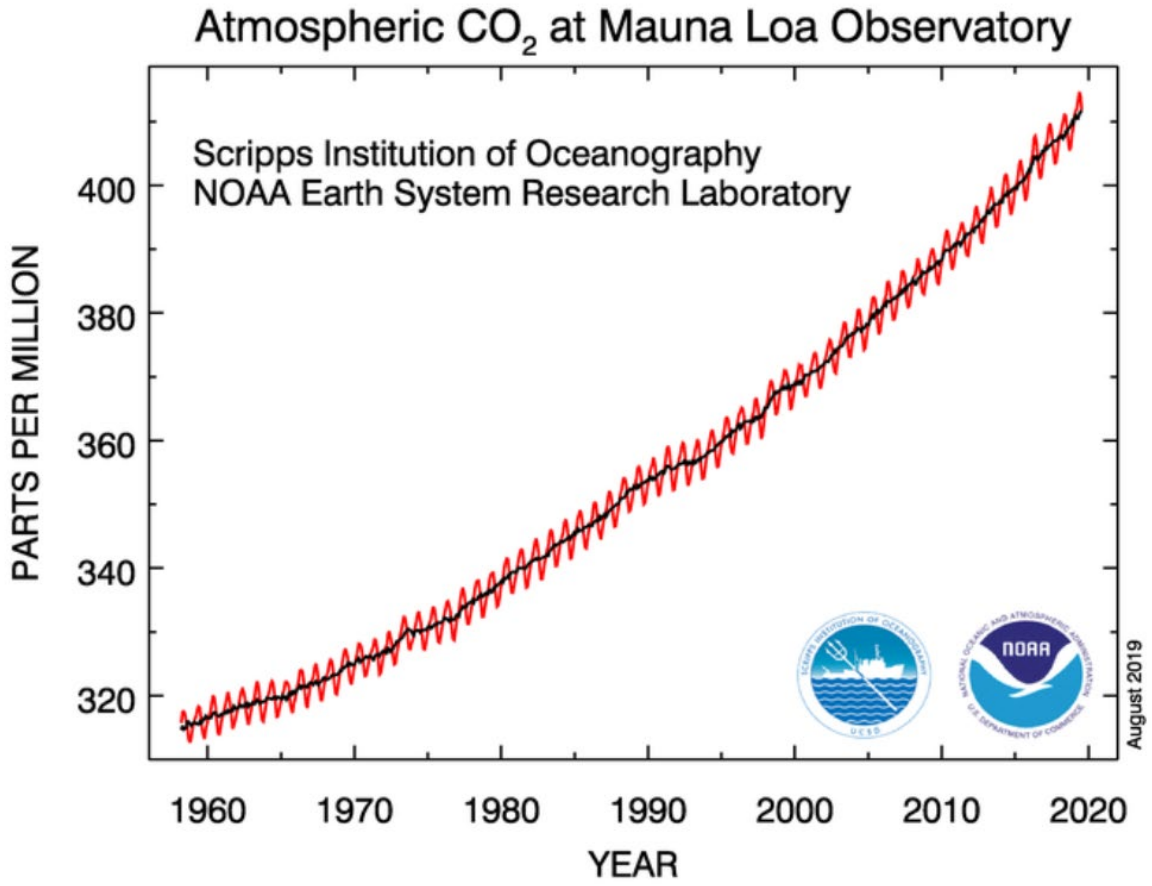


The Fuel poverty challenge must be at the heart of net zero carbon ambitions

"A commitment to a net zero carbon economy will require committing to energy efficiency at a far greater scale. If our responsibility to the fuel poor means anything, we must start in the homes of people whose lives are blighted by fuel poverty.

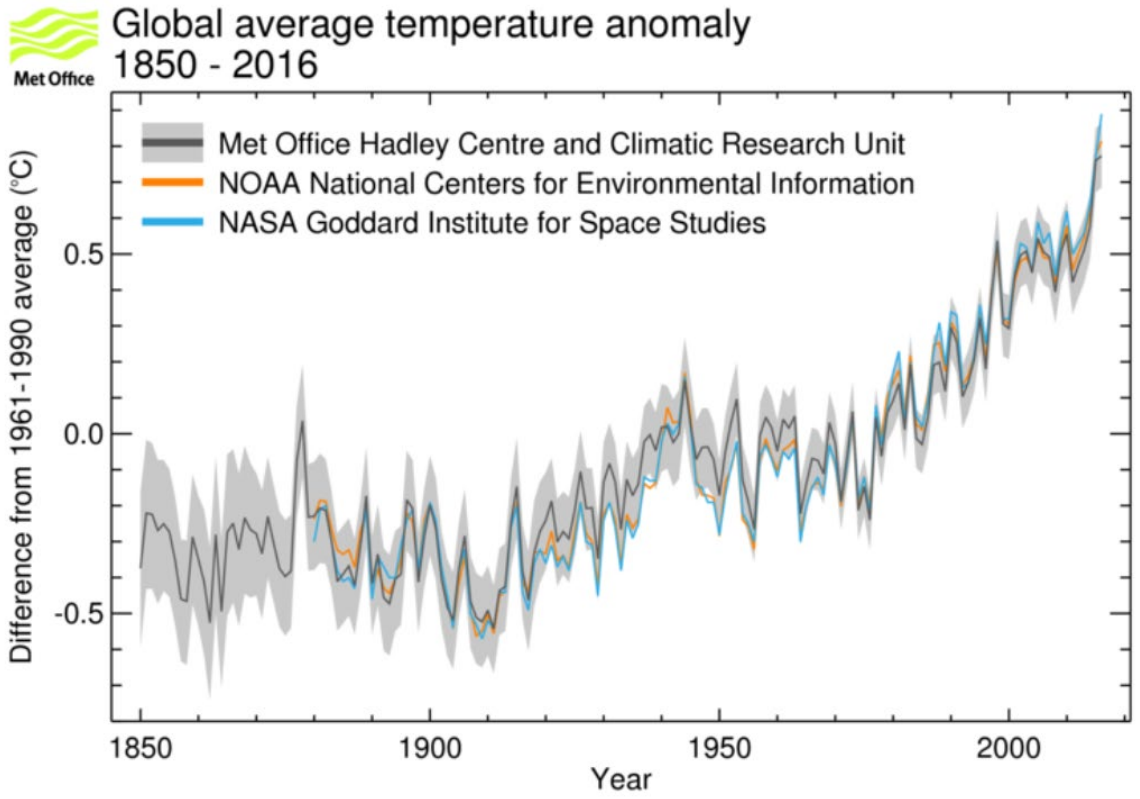
Adam Scorer - 14 June 2019

Atmospheric Carbon Dioxide rise



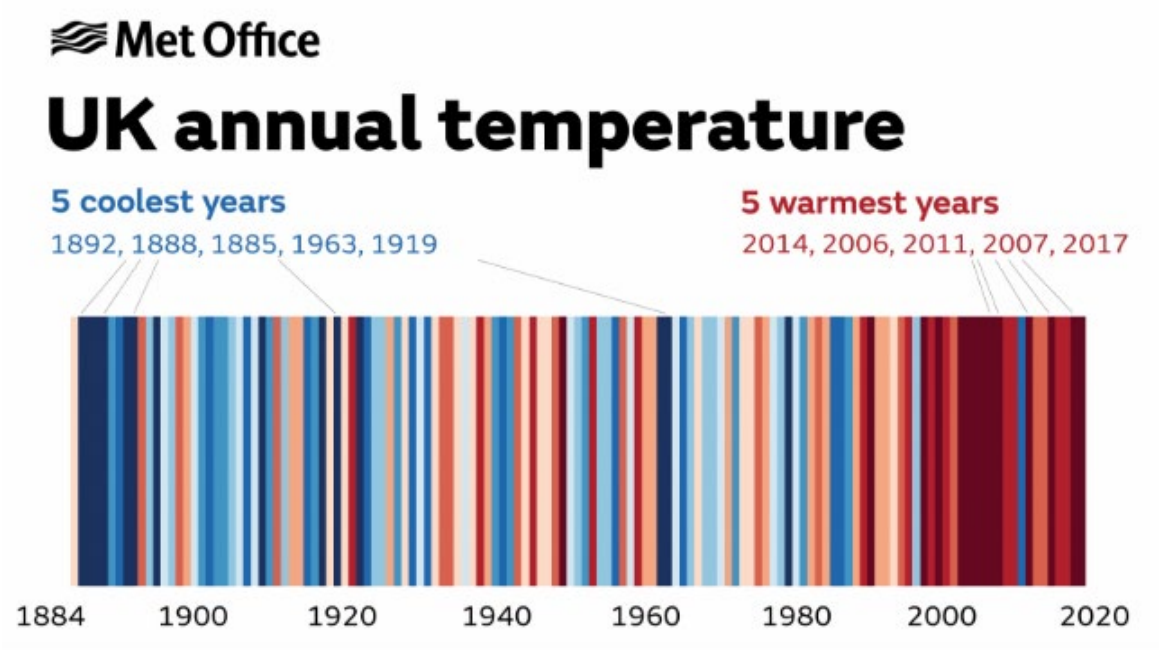
- CO_2 from 316ppm in Oct 1958 to 409ppm in Oct 2019

Temperature rise



- Average temperature rise of around 1°C

Temperature rise



- Cooler years are in blue and warmer in red
- 5 warmest years have occurred since 2006

Government Policy

- Climate Change Act 2008
  - 80% reduction in emissions by 2050
- Energy Act 2008
  - Feed in Tariffs
  - Renewable Heat Incentive
- Energy Act 2010, Energy Act 2013
- Energy Performance of Buildings Directive 2002/91/EC
  - The Energy Performance of Buildings (Certificates and Inspections) Regulations 2007

Department for Business, Energy & Industrial Strategy

Green Homes Grant: Local Authority Delivery

Guidance for Local Authorities

Department for Business, Energy & Industrial Strategy

Whole House Retrofit Innovation Competition

Competition Guidance Notes

Deadline for Expressions of Interest: 17:00, 1st August 2019
Deadline for Applications: 17:00, 15th August 2019

June 2019

ofgem Making a positive difference for energy consumers

The schemes we administer

Domestic Renewable Heat Incentive (DRHI) Show

Feed-in Tariff (FIT) Show

Renewables Obligation (RO) Show

Renewable Energy Guarantees of Origin (REGO) Show

Climate Change Levy (CCL) exemption Show

Energy Company Obligation (ECO) Show

Warm Home Discount (WHD) Show

Department for Business, Energy & Industrial Strategy

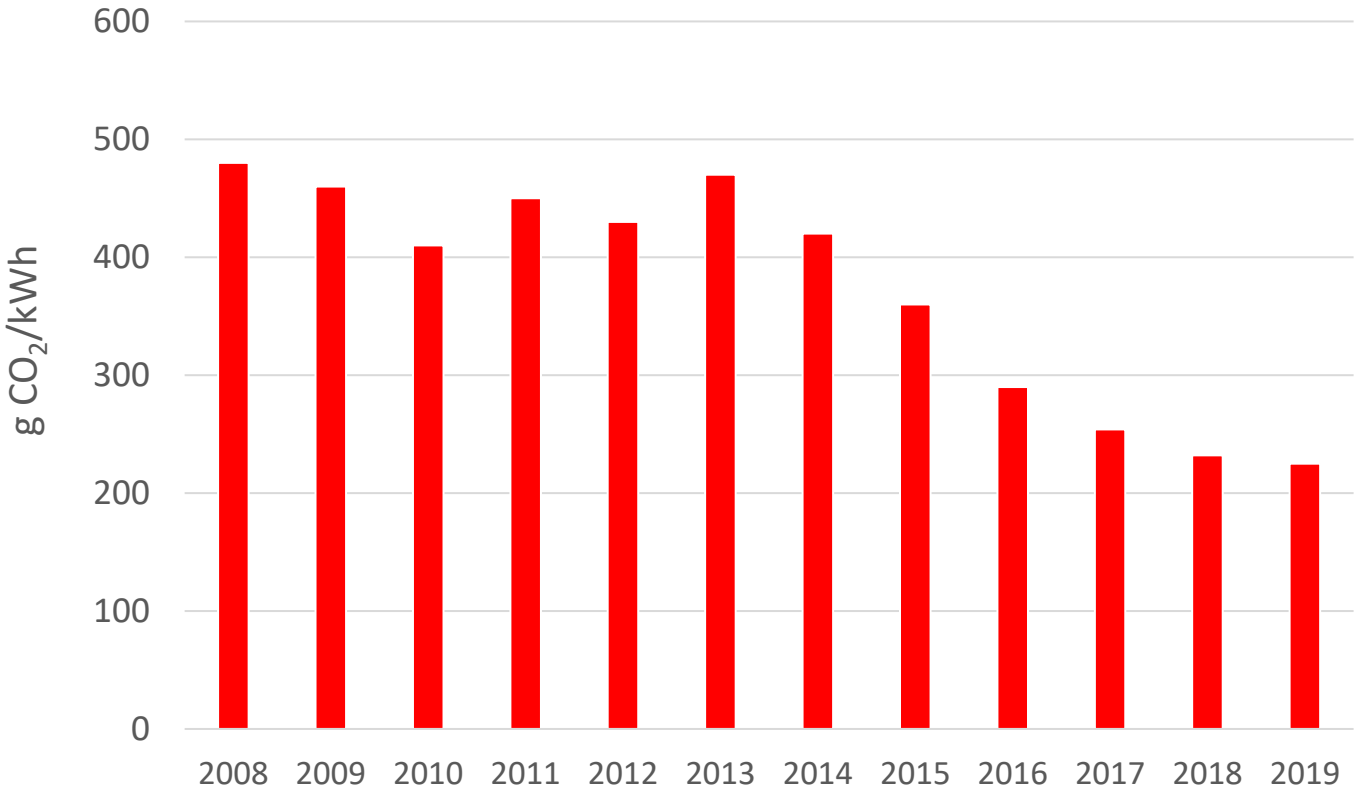
Electrification of Heat Demonstration Project Delivery Contractor

Invitation to Tender

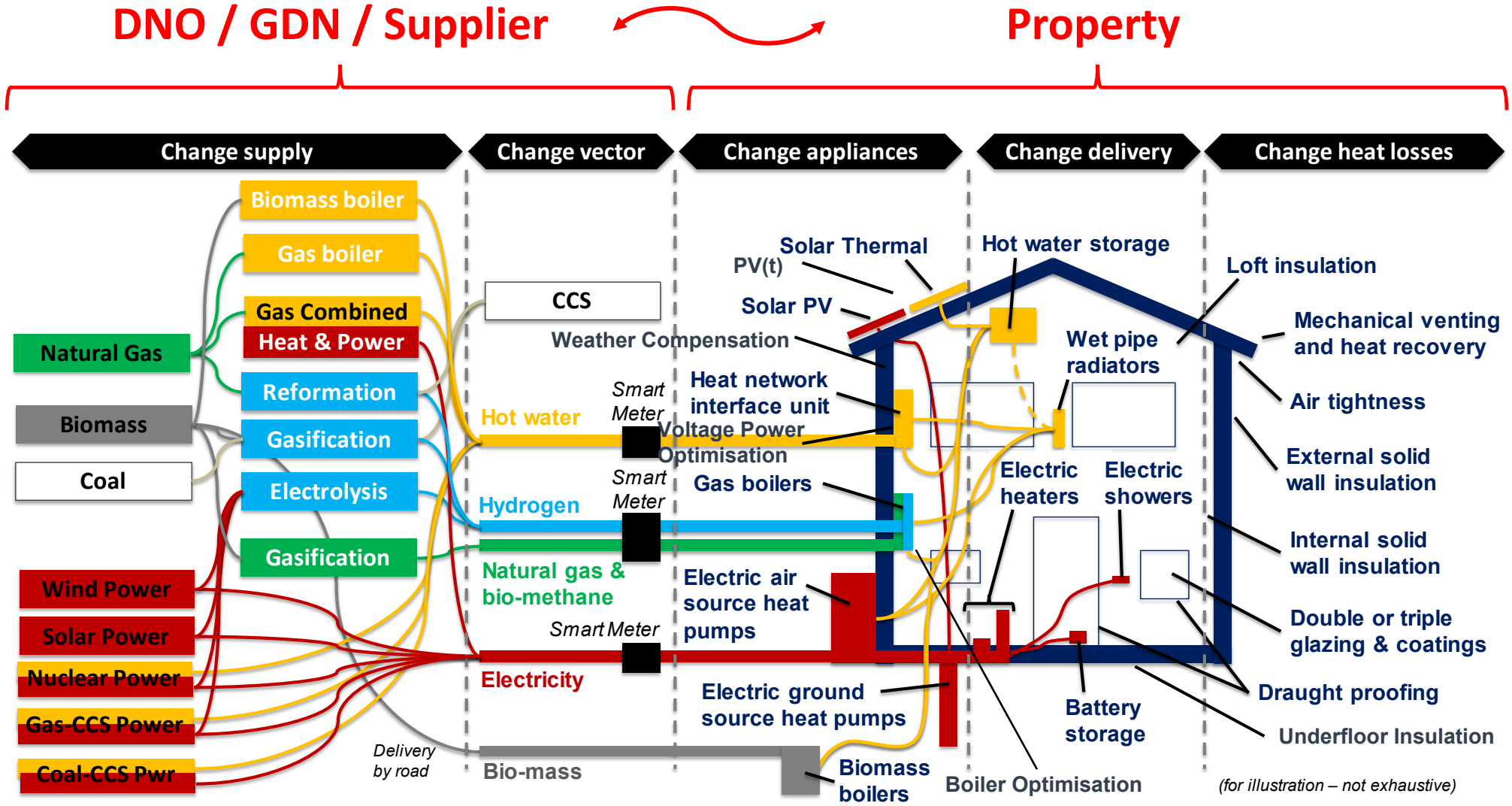
Tender Reference Number: 2174/12/2019

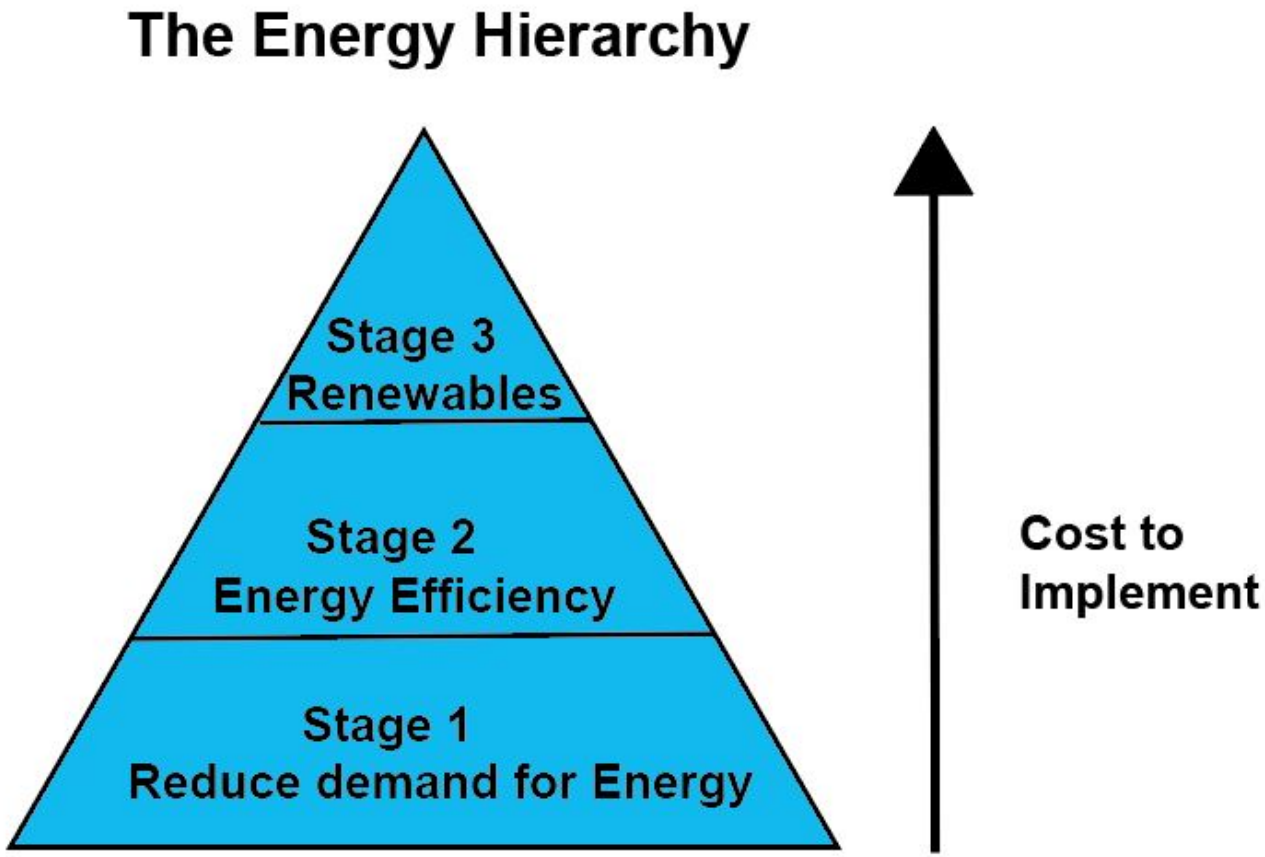
Deadline for Tender Responses: 29 January 2020 (5:00 pm).

Reduction in carbon intensity from the electricity grid



Complexity of the system





Reduce demand: Behaviour change Energy Efficiency: Small measures

Tesla Project – North Devon

Start Date	End Date	Number of days	Peak rate consumption (kWh)	Off peak rate consumption (kWh)	Average peak consumption (kWh/day)	Average off peak consumption (kWh/day)	Average total consumption (kWh/day)	Percentage off peak (%)
30-Nov-15	18-Dec-16	384	5688	7083	14.81	18.45	33.26	55.46%
18-Dec-16	18-Dec-17	365	6355	7597	17.41	20.81	38.22	54.45%

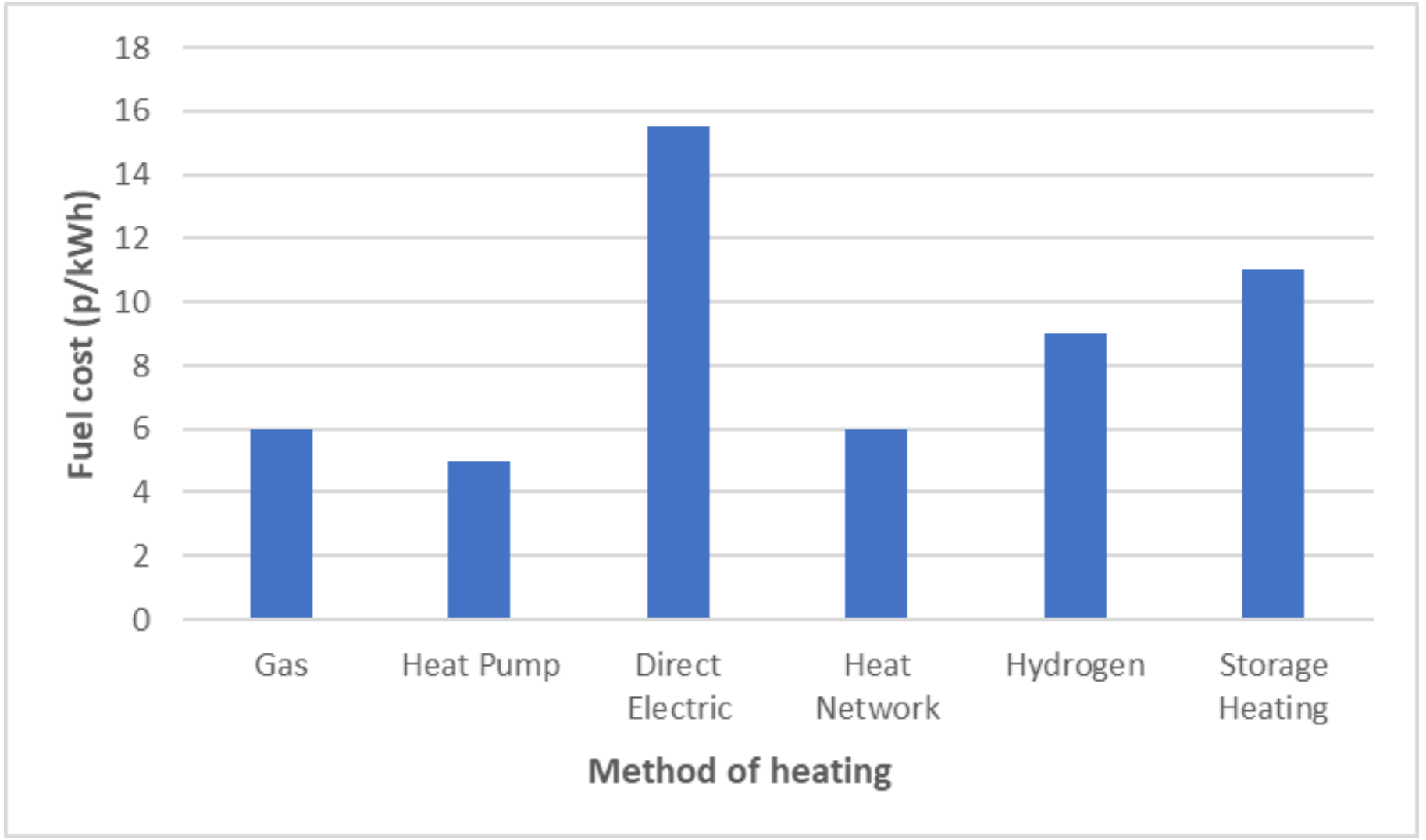
Technical Reference Number	Number of Residents	Annual Electricity Consumption (kWh)	Start Date	End Date	Total battery discharge (kWh)	Range in average battery discharge (kWh/day)	Total savings (£)	Range in savings (£/day)	Percentage off peak consumption (%)
T-01	3	11,910	01-Apr-18	31-Jan-19	3,334	9.1 to 13.0	£328	£0.77 to £1.29	80.52%
T-03	4	13,952	01-Apr-18	31-Jan-19	3,693	10.8 to 12.9	£368	£1.08 to £1.27	81.9% to 92.9%
T-05	4	7,402	01-Apr-18	29-Jan-19	3,327	9.1 to 12.2	£336	£0.91 to £1.24	79.4% to 94.3%
T-06	6	13,224	04-Apr-18	31-Jan-19	3,271	8.3 to 12.5	£323	£0.79 to £1.24	84.6% to 92.6%
T-09	3	10,888	01-Apr-18	31-Jan-19	3,462	10.1 to 12.2	£351	£1.05 to £1.25	84.3% to 96.4%
T-38	4	11,852	01-Apr-18	31-Jan-19	3,431	9.0 to 12.7	£345	£0.90 to £1.28	74.1% to 91.0%

The maximum saving equates to an annual rate of £440/year.

Boxergy – heat pump and batteries

- High Temperature Air Source Heat Pump
- Heat and Electricity Storage
- Time of use tariff
- Storage charged at cheapest times of day
- Can provide heat during peak rate times
- Heating cost may be lower than gas

Financial (running) costs to Householders of decarbonising heat



Customer Protections

APPROVED INSTALLER

MCS NICEIC

Registered Competent Person Electrical

ECA Excellence in Electrotechnical & Engineering Services

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Making a positive difference for energy consumers

Energy Company Obligation (ECO)
Appropriate Guarantees
V8.0 07/06/2018

Energy Company Obligation (ECO): Appropriate Guarantees[1]

Information regarding 'appropriate guarantees' for ECO insulation measures

Cavity, solid wall and mobile home insulation systems have respective standard lifetimes[2] of 42, 36 and 30 years where an installation is accompanied by an *appropriate guarantee*. An appropriate guarantee is one which meets all of the four criteria listed in our guidance documents.[3]

This document lists the guarantees that Ofgem has reviewed, and that Ofgem considers meet the criteria for an appropriate guarantee. If a supplier uses a guarantee listed here, Ofgem will, when assessing the savings notified by the supplier for cavity wall (including party wall), solid wall or mobile home insulation (and subject to no amendments being made to the listing as described below), accept that the guarantee is an appropriate guarantee.

Please note that this list contains appropriate guarantees that have been submitted to us to date. This list will be updated periodically to reflect any guarantees subsequently added.

Ofgem does not approve or endorse any guarantee listed here. Any person wishing to use one of the guarantees listed here must make their own assessment as to whether that guarantee provides adequate cover and whether the guarantee will be honoured. With respect to a guarantee listed here, Ofgem makes no judgement as to these matters. In particular, Ofgem makes no judgement as to the likelihood that a particular guarantee will be honoured if the issuing body ceases to exist or does not have sufficient funds to honour the guarantee. Neither a supplier, a body that has issued a guarantee listed here nor any other party is permitted to use the Ofgem logo in the course of marketing or otherwise represent that a guarantee is endorsed or approved by Ofgem. If any person has concerns that a supplier or company is misusing Ofgem's logos or claiming Ofgem's endorsement of a guarantee, they can contact the ECO team at eco@ofgem.gov.uk.

A supplier is not required to use a guarantee listed here. A supplier may choose to use another guarantee that the supplier considers meets the criteria for an appropriate guarantee. In this case Ofgem will, when assessing the savings notified by the supplier, make a judgement as to whether the guarantee is an appropriate guarantee. If the guarantee does not meet the criteria for an appropriate guarantee, Ofgem will be unable to attribute the savings notified by the supplier.

Ofgem may, without notice to the issuing body, amend any listing in this document if Ofgem is no longer satisfied that a particular guarantee meets the criteria for an appropriate guarantee. Such amendments will consist of the addition to the listing of the date after which the guarantee is no longer considered to meet the criteria for an appropriate guarantee. In particular, Ofgem will amend a listing in this way if we become aware that a particular guarantee being issued to ECO suppliers has been modified such that it no longer meets the criteria for an appropriate guarantee. Ofgem may also amend a listing in this way if the issuing body is unable to provide independent verification as to the adequacy of the quality assurance framework underlying the guarantee.

MCS

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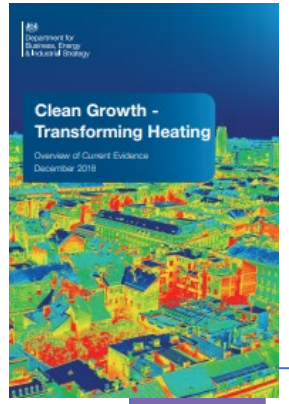
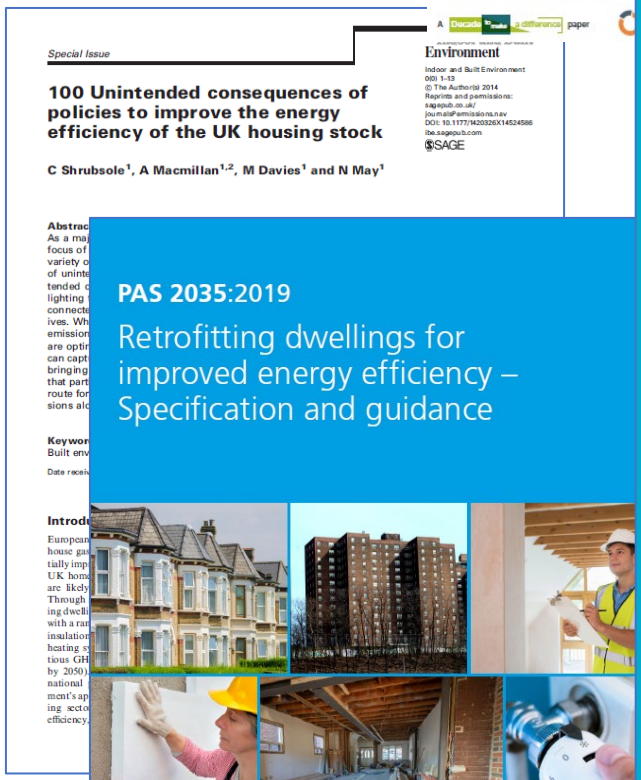
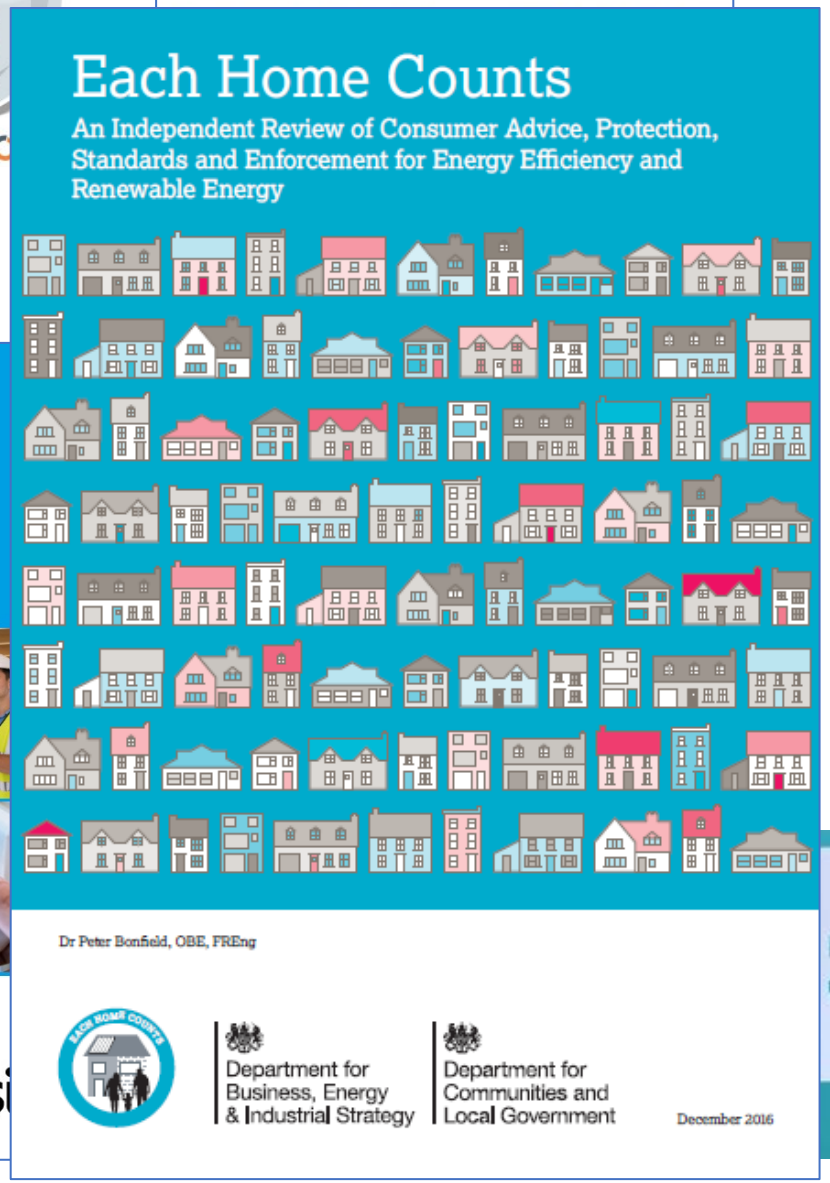
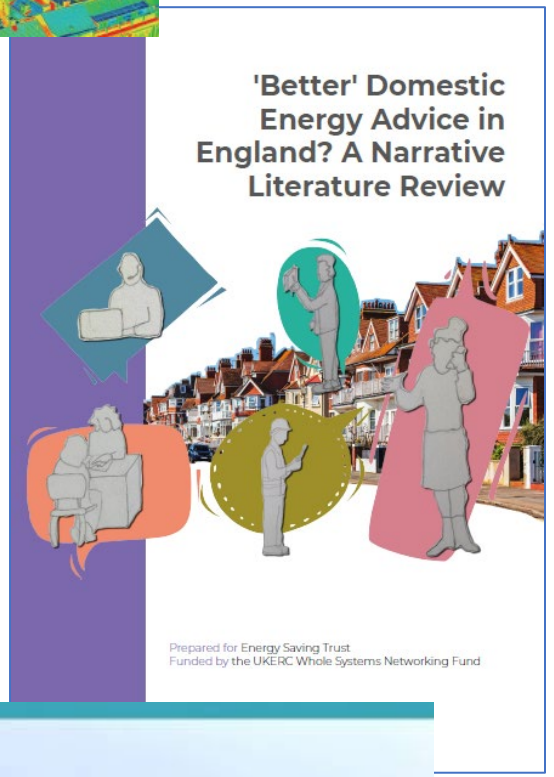
SOLID WALL INSULATION SWIGA GUARANTEE AGENCY

Customer Protections









Selecting an installer

- Choose experienced installer not cheapest
- Required accreditations
  - E.g. Gas Safe, NAPIT, MCS
- Get at least 3 quotes or have tender
- Look for a local installer
- Check quality of previous work
  - Number of installs
  - Reputation – financial, Checkatrade
  - References and photos
  - Example of quotations and household handover pack
- Cheaper components may perform less well

Technical Training Course Overview

Introduction *+ 8 optional modules*	¾ h
1. Heating Controls & Technologies	2h
2. Heat Pumps	2h
3. Electric Heating	2h
4. Insulation	2h
5. Solar & Energy Storage (Full & ½ Day Options)	3h / 5h
6. Biomass CHP & Heat Networks	2h
7. Electricity Tariffs	3h
8. Tackling Fuel-poor Homes through Decarbonisation	3h

All will be available soon as e-Learning options

All going through the NCFE accreditation process and are likely to be Level 4 (or 3)

Technical Training Course Overview

The modules can be:

1. Taken all together as a 3-day course
2. Taken as a bespoke “Pick and Mix” course to meet learner requirements
3. Adapted into a bespoke training session as a non-accredited delivered course (could be CPD)
4. Taken as an e-learning option at learners' convenience

Overall Course Objectives

- Explain the impact of technologies on households bills & comfort
- Select suitable technologies for properties
- Identify common installation mistakes
- State potential operational issues
- Explain how to engage and assist residents

Module summary

Electricity Tariffs

- Introduction to electricity tariffs
  - Metering and types of tariffs
- Time of use tariffs
  - Economy 7, Economy 10, Legacy tariffs
  - Green tariffs
  - Smart meters and Advanced time of use tariffs
- Case studies – technologies and tariffs
  - Storage heaters, water heating
  - Battery storage, heat pumps

Out new Technical Training will help make more sense of the complex landscape and ensure a better outcome for the fuel poor (and landlord)