

# Hot Jobs: decarbonising our buildings

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**9<sup>th</sup> May 2019**



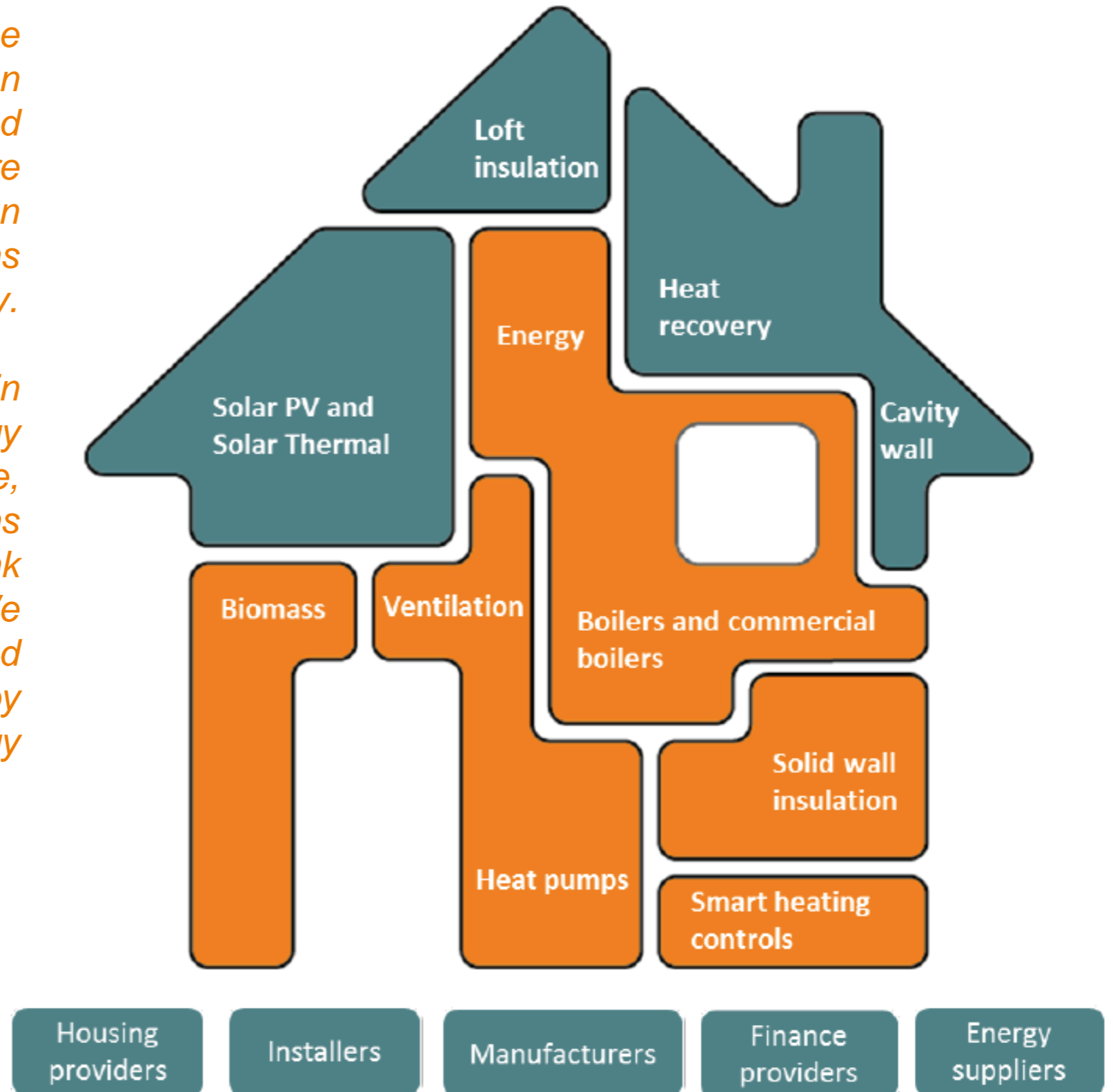
# Presentation Overview

- Introduction to the Sustainable Energy Association
- The Challenge
- The Opportunity
- Managing the Transition

# The Sustainable Energy Association

*In a world of finite resources, the Sustainable Energy Association exists to help create living and working spaces fit for future generations. Our work seeks to align the interests of business, politicians and consumers to make this a reality.*

*We are industry leaders in energy in buildings. We are technology agnostic and provide objective, evidence-based policy positions which help shape how we think about, generate and use energy. We are constructive, collaborative and committed to achieving our vision, by ensuring that buildings are energy efficient, low carbon and warm.*



# The Challenge



# The Challenge

We must make significant reductions in CO<sub>2</sub> emissions by 2050 in order to avoid the worst impacts of climate change



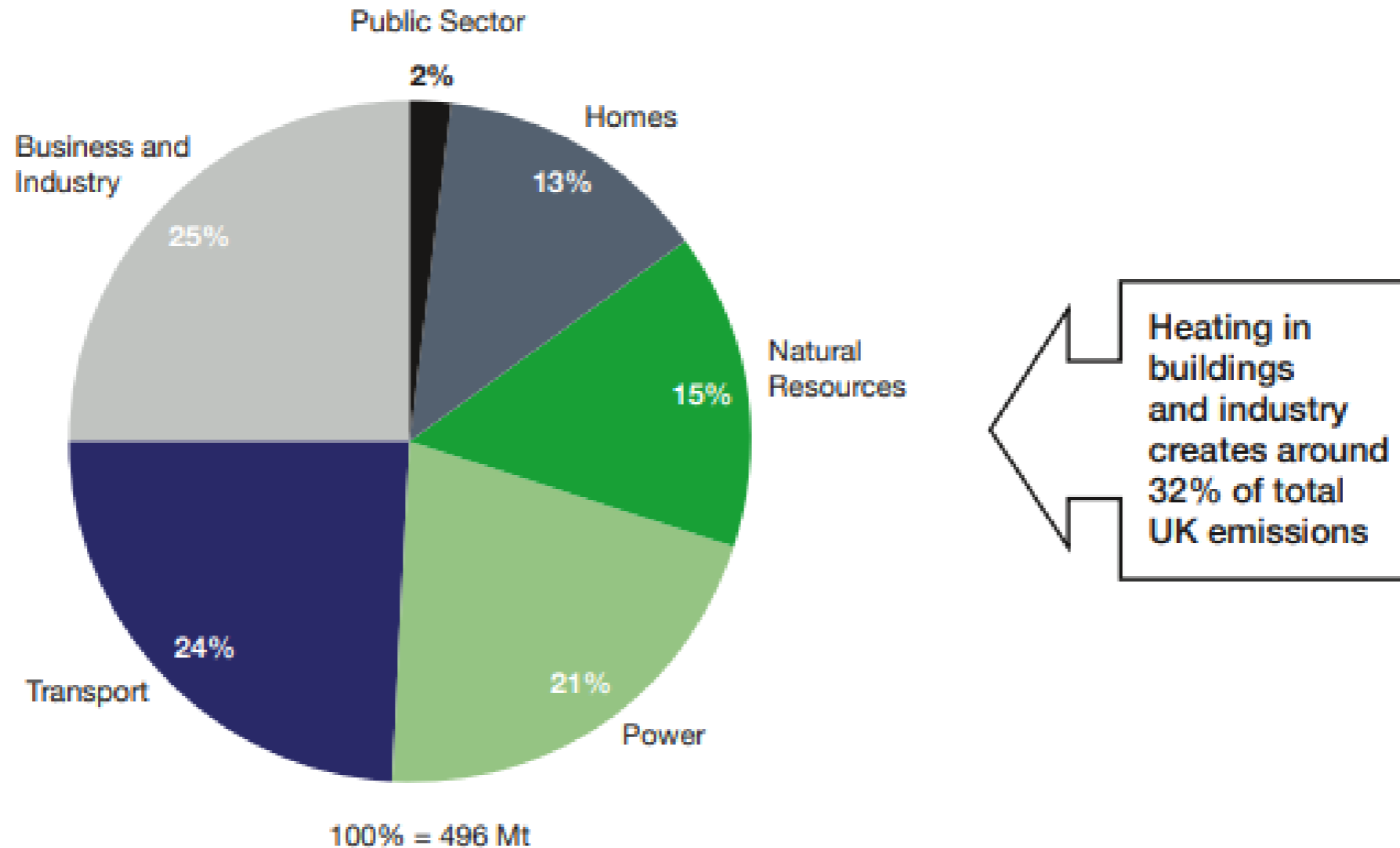
Climate Change Act 2008

**The UK's Climate Change Act 2008** makes it the duty of the Secretary of State to ensure that the net UK carbon account for all six Kyoto greenhouse gases for the year 2050 is at least 80% lower than the 1990 baseline.

**Latest Committee on Climate Change Report published 2<sup>nd</sup> May calls for Net Zero by 2050**



# UK emissions by sector



Source: BEIS

Heating of buildings must be low-carbon by 2050 to achieve a net-zero target.  
Roll-out of energy efficiency measures in new and existing homes required - around 6 million cavity walls, 6 million solid walls and 21,000 loft insulation  
Energy efficiency 'the first fuel' is key.

# But - energy efficiency is like broccoli

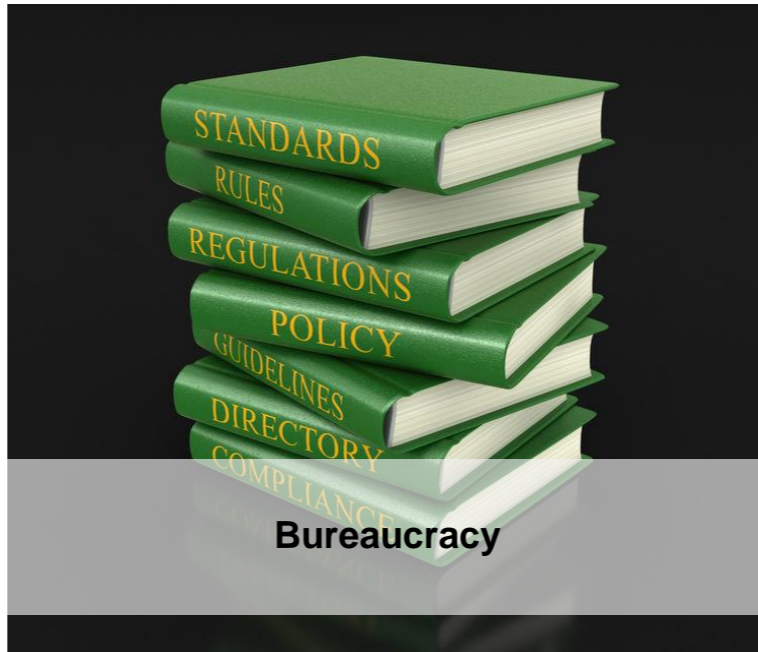
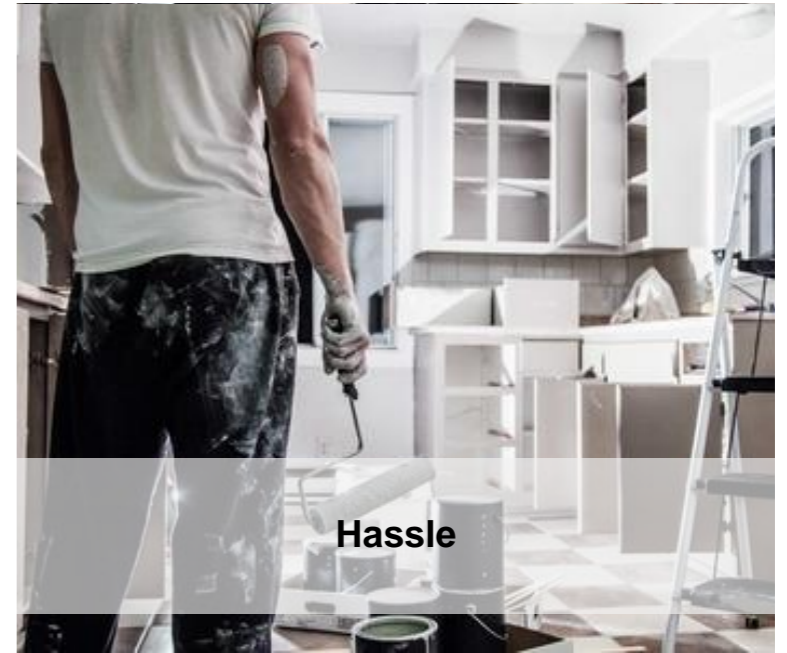
Convincing people to tackle energy-saving projects or install low carbon heating is as easy as convincing a child to eat vegetables.....

You can explain the wonderful long-term benefits but it doesn't get a good response!





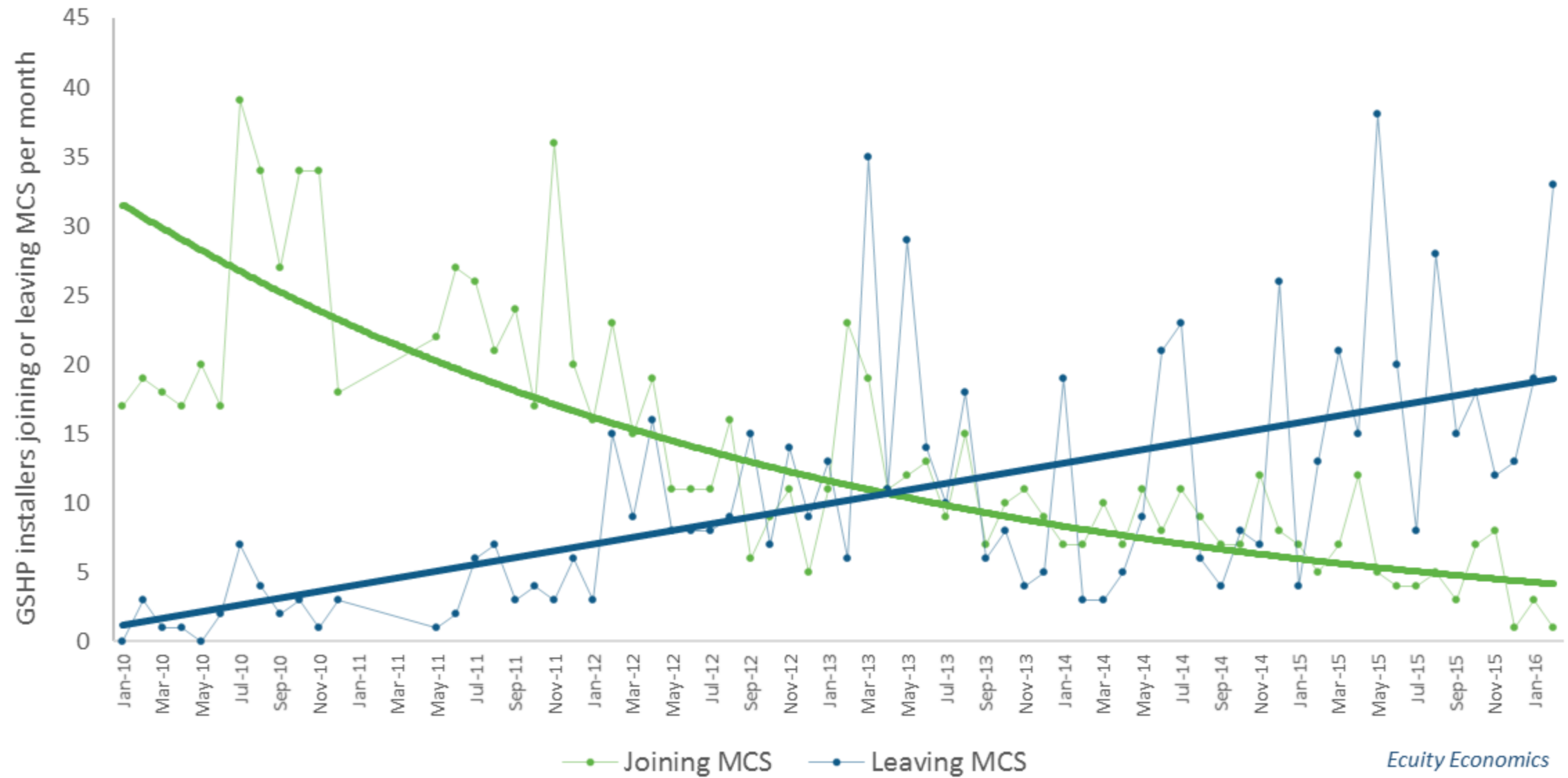
# Barriers





# Installers leaving MCS

Number of GSHP installers joining or leaving MCS by month



# Skills challenges

- **There is a skills shortage**  
Around 1.5 million boilers installed every year in 240 working days so around 6,300 installed every day
- **The workforce is ageing**  
Average age for a gas engineer is 55  
Some are thinking about retirement  
Not enough younger engineers coming to fill the gap  
Need more young people in the industry
- **We need a low carbon transition**  
We will need a workforce with new skills  
Also crucial to consider the impact on traditional jobs
- **Cost of training and accreditation can be prohibitive**



# The Opportunity



# Clean Growth

- The move to cleaner economic growth is one of the greatest industrial opportunities of our time.
- Our modern Industrial Strategy is about increasing the earning power of people in every part of the country.
- We need to do that while not just protecting, but improving the environment on which our economic success depends.
- We need higher growth with lower carbon emissions.
- The opportunity for people and business across the country is huge

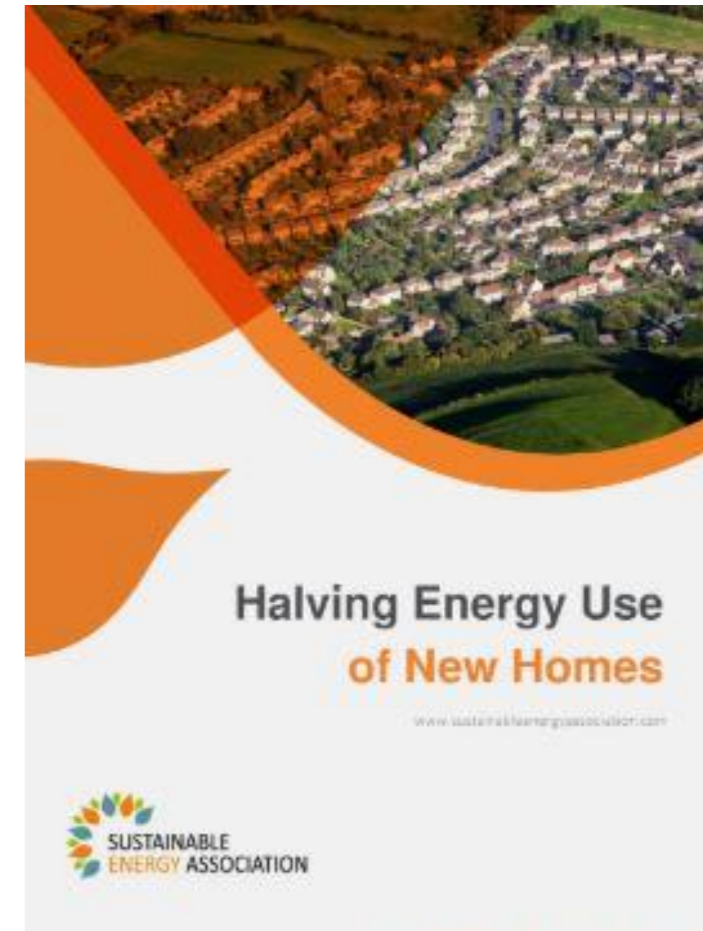


**The low carbon economy could grow 11 per cent per year between 2015 and 2030, four times faster than the projected growth of the economy as a whole.**



# The Building Mission

- **At least halve the energy use of new buildings by 2030**  
We need to reduce the emissions created by heating our homes and businesses, which account for almost a third of UK emissions.
- Cutting emissions in these areas can benefit us all through reduced energy bills, which will help improve the UK's productivity, and improve air quality, while the innovation and investment required to drive these emissions down can create more jobs and more export opportunities.





# The Opportunity

- Step up energy efficiency
- Build better buildings
- Improve energy efficiency of existing stock
- Install renewable heating
- Better public procurement
- Invest in skills and training

Retrofitting homes with energy efficiency measures and installing low-carbon heat into new and existing homes will require new skills so could generate more high-skilled jobs.

There will also be more service jobs linked to low-carbon industries, in areas like carbon markets and climate finance and consultancy services (including engineering consulting), where the UK could also have a competitive advantage given its existing expertise

Committee on Climate Change

# Policy for achieving Net Zero

- **A clear trajectory of standards**

This includes standards for energy efficiency, detailed plans on phasing out the installation of high-carbon fossil fuel heating and improvements in the efficiency of existing heating systems.

- **A regulatory and support framework for low-carbon heating**

By 2035 at the latest, all new heating system installations are low-carbon. In order to develop supply chains, this will require signalling well in advance, alongside deployment of heat pumps at scale in the 2020s.

- **An attractive package for householders aligned to trigger points**

Such as when a home is sold or renovated.

- **A nationwide training programme to upskill the existing workforce.**

The UK Government should use initiatives under the Construction Sector Deal to tackle this low-carbon skills gap.

New support to train designers, builders and installers is urgently needed for low-carbon heating (especially heat pumps), energy and water efficiency, ventilation and thermal comfort, and property-level flood resilience.

# Managing the transition

# Managing the transition

The transition will necessitate a shift in employment, away from some inherently high-emitting activities (e.g. fossil fuel supply) to highly-skilled jobs to deliver the emissions reductions required.

A strategy will be needed to ensure a just transition across society, with vulnerable workers and consumers protected



Our scenarios involve a major move away from fossil fuels, which is likely to result in fewer jobs in oil and gas in future (extraction, power generation and heat), affecting wider supply chains in these sectors.

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# Managing the transition

Scottish Government created the Just Transition Commission to produce a report that provides recommendations for action that will:

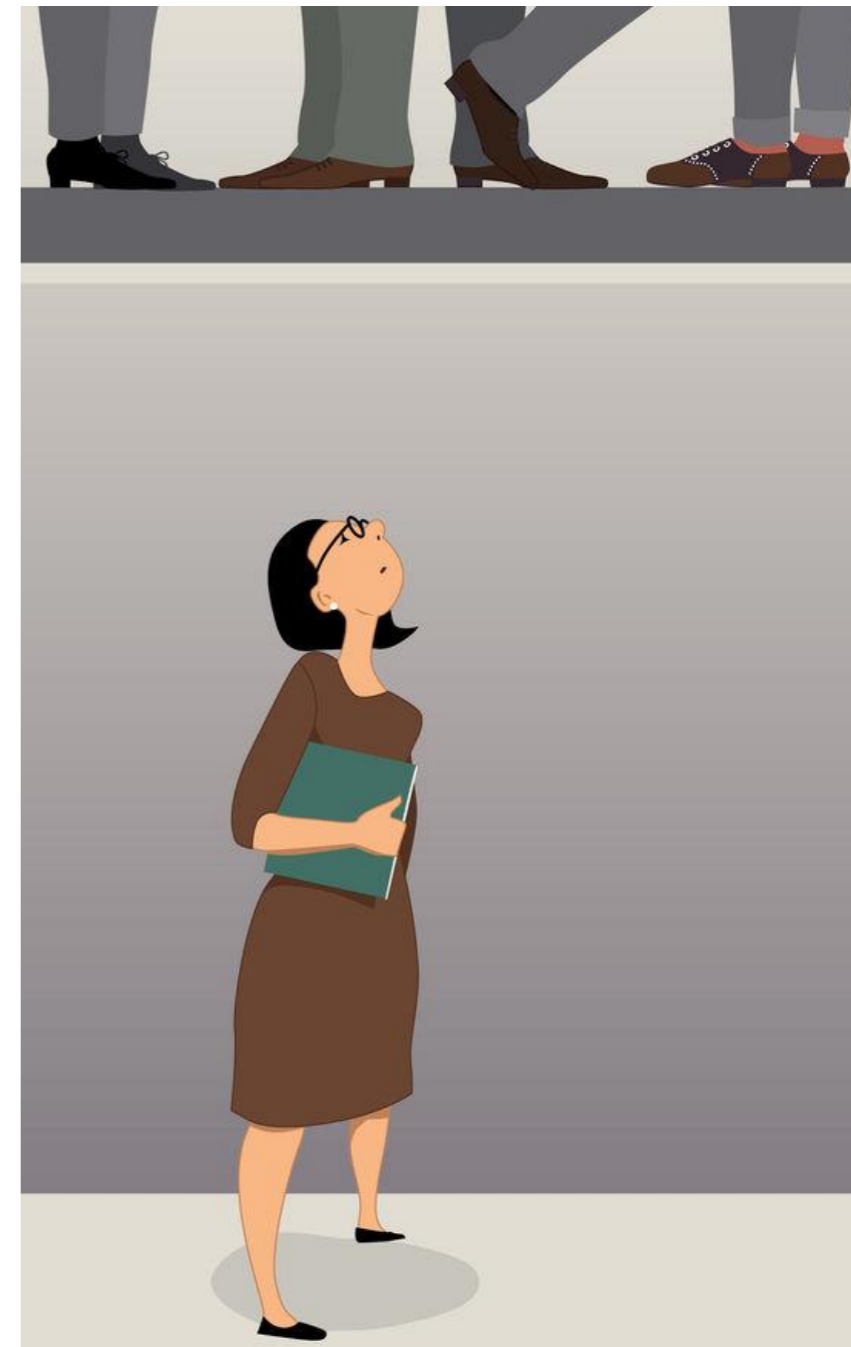
- Maximise the economic and social opportunities that the move to a carbon-neutral economy by 2050 offers.
- Build on Scotland's existing strengths and assets
- Understand and mitigate risks that could arise in relation to regional cohesion, equalities, poverty(including fuel poverty) and a sustainable and inclusive labour market



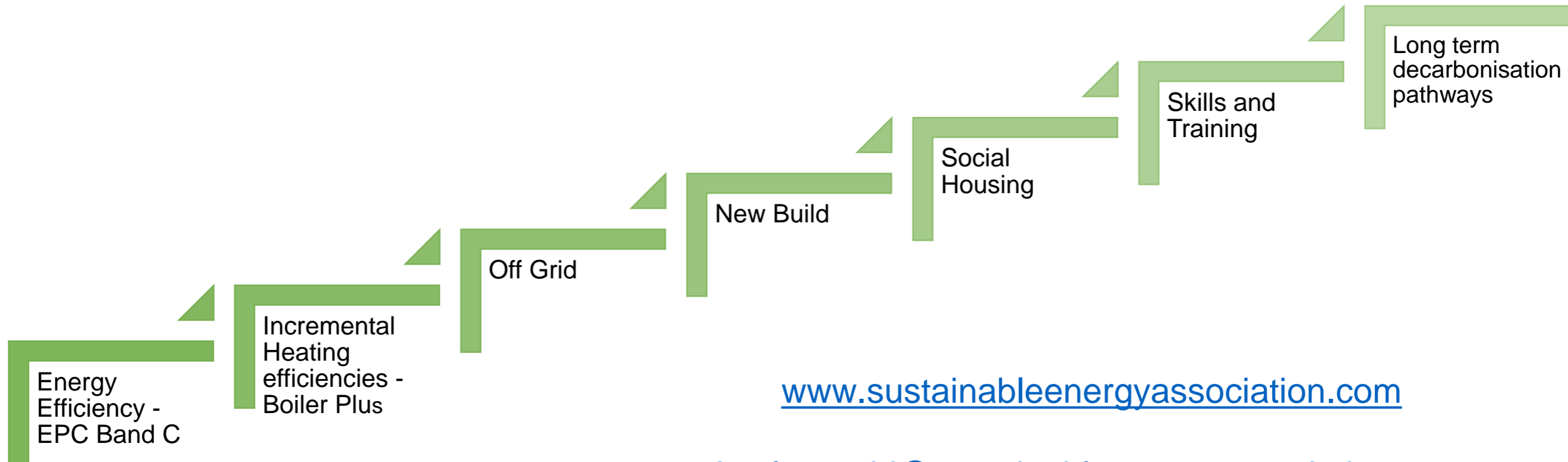


# Ensuring equal opportunities

- Jobs in the renewable sector appeal to young
- Older people need to be kept on side - we need them too
- Energy efficiency and low carbon will produce jobs throughout the country – regional cohesion, also white and blue collar jobs
- Can encourage innovation and support SMEs
- Need to ensure opportunities are available for all/inclusive - remove the glass ceiling *and the glass bottom*



# SEA: Further steps



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**Thank You**

