

# The UK Low Carbon Transition Plan

An introduction to our national strategy for  
climate and energy



The challenge for the UK and the rest of the world is to reduce emissions and build a better, lower carbon future

## Decarbonise the UK

*and in doing so*

Keep our  
energy supplies  
safe and secure

Maximise economic  
opportunities

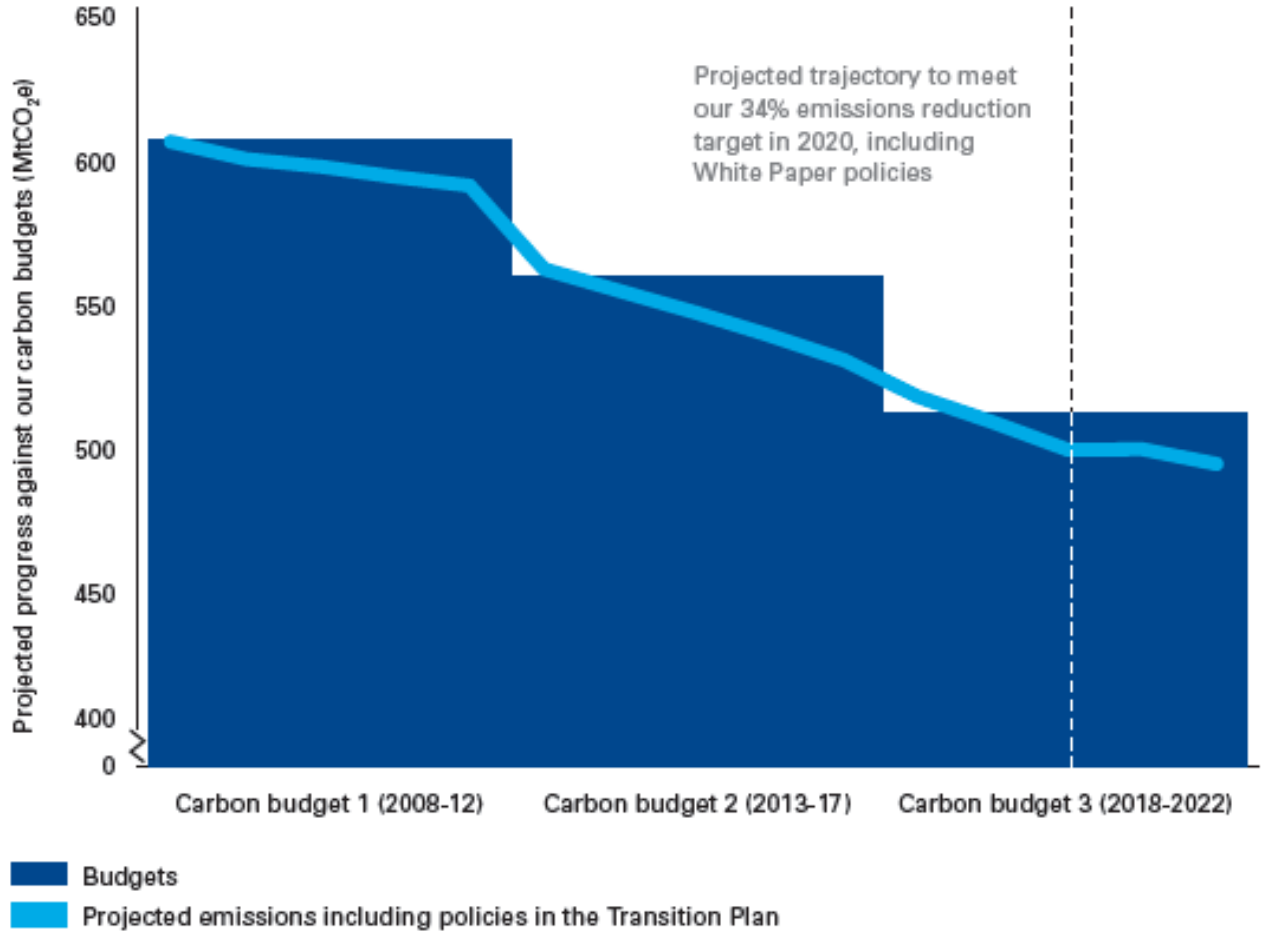
Protect the most  
vulnerable

# The Government will drive the transition to a low carbon UK using the world's first ever legally binding carbon budgets

Chapter 2: Driving the transition

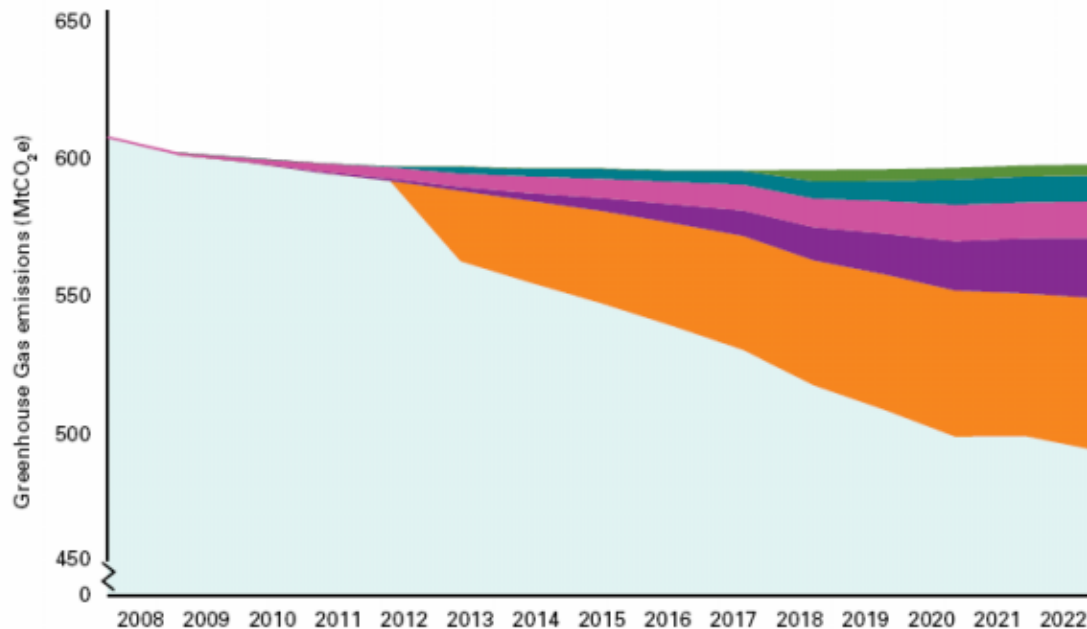
Carbon budgets are equivalent to a **34% cut in greenhouse gas emissions in 2020.**

The UK will also cut emissions by **80% by 2050.**



# This Transition Plan sets out how these budgets will be met

## All sectors will contribute emission savings



Source: Department of Energy and Climate Change

Note: The impact of policies prior to the 2007 Energy White Paper is included in the baseline; without these policies, UK emissions would be higher.

- The plan will ensure the UK meets its **15% renewable energy target** in 2020.
- **Government departments** have been allocated their own carbon budgets.
- The plan will help the **most vulnerable** and help ensure **secure energy supplies**

# The plan will ensure that 40% of UK electricity comes from low carbon sources by 2020

At the heart of the Plan is the **EU Emissions Trading System** which sets a declining limit or 'cap' for emissions from electricity generation and heavy industry.

Further action:

30% of electricity through  
**renewables** in 2020

Supporting up to 4 new  
**CCS** demonstrations

**New nuclear** power  
stations under way by  
2018

We will need a **bigger, smarter electricity grid** – later this year the Government will publish a vision for this.

**Maintain secure electricity supplies** by creating a supportive climate for timely investment

# Homes and communities will contribute 13% of emission cuts in 2018-22

The Government is making homes greener using new measures in the Transition Plan:

Extending the  
**Carbon Emissions Reduction Target**

Introducing the  
**Community Energy Saving Programme.**

Piloting “**pay as you save**” ways to help people make their whole house greener

Introducing **clean energy cash-back** schemes such as Feed-in Tariffs

The Government is helping people to play their part by:

- Rolling out **smart meters**
- Launching a new **personal carbon challenge** and developing more proactive services from the **Energy Saving Trust**
- Announcing ‘**Green Villages, Towns and Cities**’ competition

**Maintain secure gas supplies** by maximising UK economic production, improving import and storage capacity and strategic partnerships to source imports

# The Government is helping to make these changes more affordable through new measures, especially for the most vulnerable

The additional impact in 2020 of policies in this Transition Plan, relative to today, is £76 on annual bills, which is equivalent to approximately a **6% increase** from current energy bills.<sup>1</sup>

## Help for the most vulnerable households

## Help for all households

### Price:

Creating **mandated social price support** at the earliest opportunity.

### Energy efficiency:

Increasing the level of **Warm Front grants**.

Help fuel poor households via **clean energy cash back**.

### Income:

**Winter Fuel Payments** and **Cold Weather Payments** for the most vulnerable.

New powers to **Ofgem** to tackle **market abuse**.

Clarifying that Ofgem should help **tackle climate change and ensure security of supply**.

1. When previously announced climate policies are included, this figure is **8%**.

# The plan will ensure our workplaces contribute 9% of emission savings in 2018-22

Government helps reduce emissions from workplaces by:

- **The EU Emissions Trading System** which covers heavy industry
- **Incentivising energy saving**, e.g. through the Carbon Reduction Commitment
- **Providing advice** on how to cut carbon emissions e.g. via Carbon Trust.

Workplaces will contribute **9% of emission savings in 2018-22\***



\*Some workplaces also save emissions through their inclusion in the EU ETS. These are included in the savings attributed to the power and heavy industry sector.

# There are costs, but also opportunities from the transition to low carbon and the Government is helping businesses to grasp these

To help make the UK a world centre of the green economy the Government is:

Using **£405 million fund** to support low carbon industries

Facilitating business access to up to **£4 billion of new capital** from the European Investment Bank for renewable and other energy projects

Helping workers to develop the **skills** needed to thrive in a low carbon economy

The additional impact in 2020 of policies in this Transition Plan, relative to today, is equivalent to approximately a **15% increase** from current energy bills for businesses consuming a medium amount of energy.<sup>1</sup>

To make sure the transition happens in a **fair** way, the Government is:

- Providing **loans and grants**
- Ensuring markets are **competitive** and acting to keep **EU frameworks** fair.

1. When previously announced climate policies are included, this figure is **17%**.

# Transport will contribute 19% of emission savings in 2018-22

The Government is reducing emissions from **road transport** by:

## **Making engines more fuel efficient**

- New EU rules on car and van emission standards
- £30 million for low carbon buses

## **Supporting low carbon vehicles**

- £400 million to encourage development and uptake
- 10% of transport energy to come from renewable sources

## **Changing behaviour**

- £29 million for the first 'Sustainable Travel City'
- £145 million for cycling

**Rail:** increased energy efficiency and more electrification

European flights part of EU ETS from 2012; pushing for new global agreement on **international aviation and shipping**

**Maintain secure oil supplies** by maximising economic UK production, promoting a well-functioning global oil market, and improving UK fuel infrastructure

# The plan will ensure that farming, land and waste contributes 4% of emission savings in 2018-22

## Driving down emissions from farming, land and waste by:

Encouraging **voluntary action from English farmers** to reduce emissions at least 6% on 2020 levels

Encouraging **private funding for woodland creation**

Reducing **waste** to landfill and capturing more methane emissions

Supporting “**waste to energy**” **technology** (anaerobic digestion)

Enabled by research to improve emission **measurement and verification**

# The Transition Plan delivers emission cuts to 2020. But we need to consider now the possible pathways to 2050

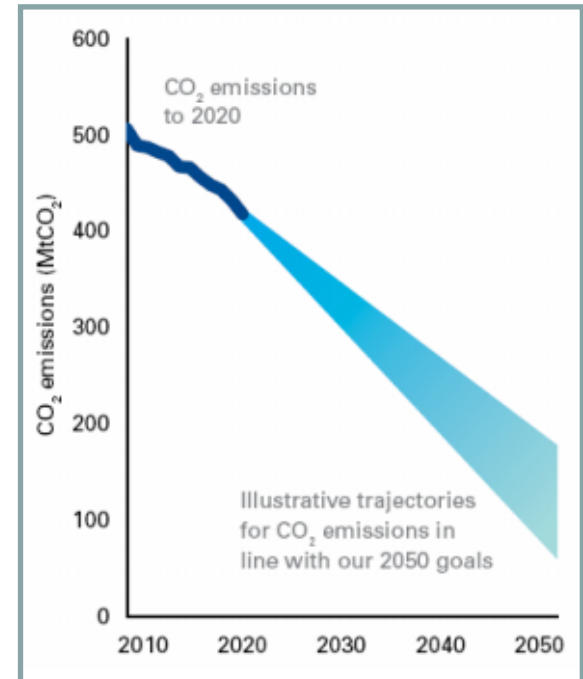
## What we might see in 2050

Early work shows  
**common themes** across  
most scenarios

Energy demand will have  
to fall significantly  
  
But electricity use likely to  
increase

But some **big  
uncertainties**

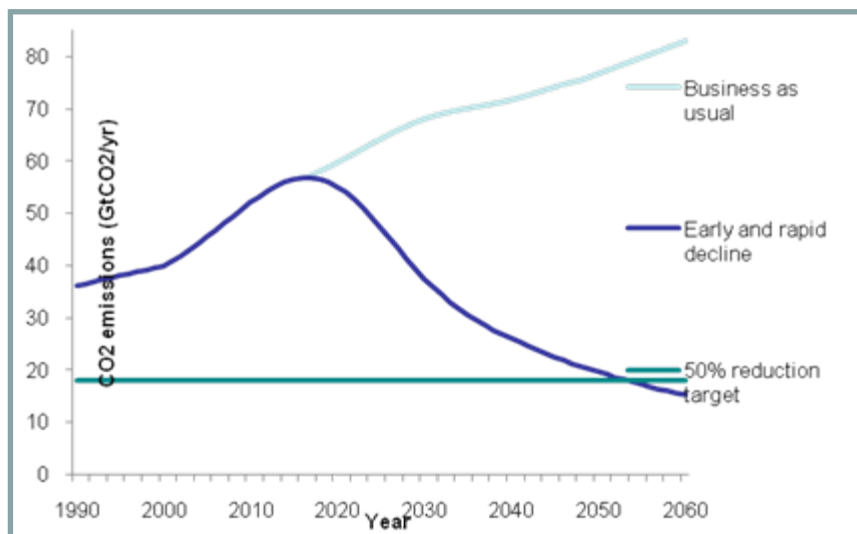
Such as, how much  
electricity or bio-energy is  
used in heat and transport



The Government will work with industry and the public to publish a **roadmap setting out the path to 2050** by spring 2010

# A global challenge needs a global response

To avert the most dangerous climate change, global emissions must peak within the next decade



IPCC analysis suggests that **developed countries** need to collectively reduce emissions by 25-40% below 1990 levels by 2020.

But developed countries cannot solve the problem on their own...

Research suggests **developing countries** need emissions to be 15-30% lower than business as usual by 2020

To limit climate change to 2°C, global emissions need to be cut by at least 50% of 1990 levels by 2050

The UK is playing a leading role in driving international negotiations and cannot expect others to sign up unless we show firm commitment to change ourselves

As a member of the EU, the UK is part of the largest single market in the world, giving us an opportunity to act on sufficient scale to influence low carbon development across the global economy.

**The Climate Change Act**, makes the UK the first country in the world to have a legally binding long-term framework to cut emissions, adapt to climate change, and commit to a low carbon economy.



Ahead of Copenhagen, it also signals that we are committed to taking our share of responsibility for reducing global emissions.

**The UK Low Carbon Transition Plan**, plots out how the UK will meet the cut in emissions set out in the budget of 34% on 1990 levels by 2020.



In the run up to Copenhagen in December, sets a clear strategy for delivering commitments. Illustrates opportunities and benefits associated with a low carbon economy.

The UK negotiates as part of the EU which gives us more leverage. The **Climate and Energy Package** represents the implementation phase of the EU's political commitment to move to a low carbon future. It contains measures to reduce greenhouse gas emissions by 20% by 2020 compared to 1990 emissions and a clear commitment to increase this target to 30% in the context of an international climate agreement.

# Other Government publications supported the launch of the UK Low Carbon Transition Plan

