

How is the UK tackling climate change?



Last modified: 27 October 2016

Contents

The Climate Change Act

UK Climate Action

Carbon Pricing

Low-Carbon Energy Support

Energy Efficiency

Corporate Emissions
Reporting

International Climate Action

The Conservative
Government: Re-setting
Climate Policy

The landmark piece of UK legislation is the 2008 Climate Change Act. It commits governments to cut national greenhouse gas emissions by at least 80% by 2050 (from 1990 levels), and agree interim five-year 'carbon budgets' that take the country progressively towards that 80% target at the lowest possible cost.

Policy measures largely focus on energy, and especially electricity. Energy is the biggest source of UK emissions, and cost-effective low-carbon technologies exist in both energy supply and demand. Like most countries, UK energy policy-making is focused on cutting emissions while ensuring affordability and security of supply.

The Climate Change Act

Britain's [Climate Change Act](#) contained the world's first legally binding national commitment to cut greenhouse gas emissions. The headline target is to cut emissions by at least 80% from 1990 levels by the year 2050. The Act passed by an overwhelming cross-party majority ([463 to 3](#)).

The UK Climate Change Act is consistent with a non-binding [European Union target](#) to cut EU-wide emissions by 80-95% by 2050. Such targets are in line with what scientists say is needed to keep global average warming below 2 degrees Celsius – a target commonly regarded as the threshold of 'dangerous' climate change.

The UK Act requires governments to set legally binding '[carbon budgets](#)'. Each budget caps total greenhouse gas emissions over a five-year period. The budgets are proposed by the [Committee on Climate Change](#) (Committee), which was also established by the Act.

The Committee and the government set the budgets more than a decade ahead, to prepare the required policies and investment. Together, the budgets map out the most economically beneficial route to the 2050 target.

The government can adjust each carbon budget [under certain very limited conditions](#). Otherwise, it must accept the Committee's proposed emissions level, and the budget becomes legally binding.

The Committee [reports annually](#) to Parliament on the government's progress.

The government has [already legislated five carbon budgets](#), running from 2008 to 2032. Britain met its targets under the first budget, from 2008-2012 and is on-track to meet its second and third.

One of the first acts of parliament following the EU referendum was to approve the fifth carbon budget,

agreeing with the majority of [proposals](#) set out by the Committee. The fifth carbon budget covers the five years from 2028-32 (inclusive) and aims to cut emissions by 57% below 1990 levels. Major policies needed to meet the target include for most new car sales in the budget period to be electric vehicles, and for power sector emissions to fall to below a quarter of today's level.

The Committee proposed steps that the government needs to take today, to stay on track towards the fifth budget, including:

- Extend beyond 2020 financial support to cut carbon emissions from power generation under the so-called Levy Control Framework
- Develop new measures to boost energy savings in buildings, including a roadmap to make all new homes zero-carbon
- Set more ambitious targets for the car industry, to cut emissions and boost efficiency until 2030
- Start building low-carbon infrastructure, including electric vehicle charging, carbon capture and storage (CCS) and district heating.

Budget	Carbon budget level	% reduction below base year
1st Carbon budget (2008-12)	3,018 MtCO ₂ e	23%
2nd Carbon budget (2013-17)	2,782 MtCO ₂ e	29%
3rd Carbon budget (2018-22)	2,544 MtCO ₂ e	35% by 2020
4th Carbon budget (2023-27)	1,950 MtCO ₂ e	50% by 2025
5th Carbon budget (2028-32)	1,765 MtCO ₂ e	57% by 2030

UK Climate Action

Action on climate change can be divided between measures to cut carbon emissions and promote cleaner alternatives in energy supply; to support energy efficiency; drive corporate reporting of carbon emissions; and support climate action overseas.

For companies in energy-intensive sectors such as power generation, steel, chemicals and ceramics, the main policy measure for reducing emissions is the [European Union Emission Trading Scheme \(EU ETS\)](#). Membership of the scheme is mandatory for these companies. They receive permits to emit greenhouse gases and can trade them at the market rate (currently less than £5 per tonne). The overall cap on emissions is lowered progressively.

UK companies outside these sectors, and domestic consumers, are covered by a wide range of national policies. (The governments of Scotland and Wales, and the Northern Ireland Assembly, have additional targets and policies, which are covered in [a separate ECIU Briefing](#).) Energy policy measures that apply over all or most of the UK include:

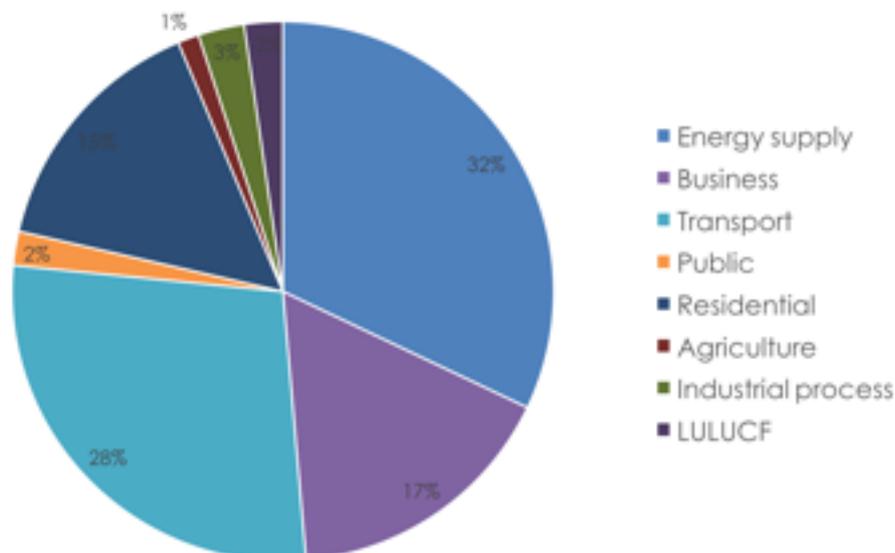
Carbon pricing

Carbon pricing penalises emissions from burning fossil fuels.

Britain applies carbon pricing under both national and EU schemes. The EU emissions trading scheme ([EU ETS](#)) forces all big factories and power plants to buy a permit for each tonne of CO₂ emissions. After gaining steadily in price since 2013, the cost of emissions allowances fell sharply in early 2016. Carbon permits lost more than 40% in value over a few months to around Eur5 per tonne. Britain has topped up that very low carbon price with its [Carbon Price Floor scheme](#), currently capped at £18 per tonne.

Meanwhile, in the transport sector, the UK charges car drivers a [Fuel Duty tax](#) on the road fuel they burn. Separately, in a major regulation against fossil fuels, the government has proposed [ending coal-fired power by 2025](#), but is yet to release details on how this will be achieved.

UK Greenhouse gas emissions in 2015



Low-carbon energy support

Britain faces a stretching, binding EU target to get 15% of its energy from renewable sources by 2020, [compared with 7% in 2014](#).

To drive uptake of renewables, the government has focused most support on the electricity sector, where the most cost-effective technologies are available.

In large-scale power generation, Britain is replacing the market-based Renewable Obligation with a [Contracts for Difference](#) (CfD) scheme, which guarantees a fixed price per unit of low-carbon power generation.

Under the CfD, projects compete against each other for support, in auctions. 'Established technologies', defined as onshore wind and solar power, compete in one auction. 'Less established technologies', including offshore wind and tidal, compete in a second.

Meanwhile, small-scale, household renewable power and heat are supported with [feed-in tariffs](#) which set a fixed price premium, for example for rooftop solar or biomass boilers and heat pumps.

Besides renewables, Britain is supporting [new nuclear power stations](#) under the CfD scheme, and support was on the cards for fossil fuel plants fitted with carbon capture and storage (CCS) until a £1bn scheme to commercialise the technology was [pulled in November 2015](#). And the country supports sustainable biofuels through [tradable Renewable Transport Fuel Certificates](#).

Energy efficiency

In the domestic sector, Britain's [Energy Company Obligation](#) (ECO) scheme requires large energy firms to boost the efficiency of homes, especially in disadvantaged areas and for

vulnerable people. Costs are passed to all consumers via energy bills.

The ECO scheme runs until 2017. It will be replaced by [a lower cost scheme](#) that will last until 2022.

In addition, Britain is presently driving a [rollout of smart meters](#) across all UK households by 2020. They are intended to increase consumer awareness of energy use, so helping people to reduce it.

In the business sector, polluters pay a Climate Change Levy ([CCL](#)) per unit of energy consumption. Energy-intensive users can opt out of CCLs, if they agree a [Climate Change Agreement](#) to boost their efficiency.

[European rules on energy efficiency for products](#) such as washing machines, refrigerators and cooking appliances deliver savings of around €465 (£360) per year on household energy bills. Energy labels, the requirements for which are set out under the EU's Energy Labelling Directive, help consumers choose energy efficient products.

Ecodesign regulations, created under the EU's Ecodesign Directive, require manufacturers to decrease the energy consumption of their products by establishing minimum energy efficiency standards.

Corporate emissions reporting

Britain [requires all UK companies listed on the FTSE main market](#) to report their emissions, in one of the world's first such mandatory schemes. The idea is to encourage companies to set targets and reduce emissions.

International climate action

Britain has played an active part in UN negotiations and contributes climate finance to vulnerable nations. In Paris in 2015, Britain joined a group of 20 countries which pledged to double spending on cleantech R&D. And it has increased international climate finance by 50%, to £5.8 billion from 2016-2021.

The Conservative government: re-setting climate policy

Since its election in May 2015, the Conservative government has said that it will focus on cutting energy consumer costs. In addition, it has said that it is danger of breaching the target it set for supporting low-carbon electricity, called the Levy Control Framework. As a result, it has slashed many low-carbon support schemes, including:

- scrapping £1 billion plans to support CCS
- ending support for onshore wind and solar under the Renewable Obligations scheme
- cutting feed-in tariffs for roof-top solar by 65%
- applying the CCL carbon tax for the first time to renewable power
- slashing road tax discounts for low-emissions cars
- scrapping a target for all new homes to be zero carbon by 2016
- scrapping the Green Deal scheme which provided grants for home energy efficiency
- deciding to sell most of the state-owned Green Investment Bank, which funded large-scale low-carbon projects including offshore wind.

