

CCC Insights Briefing 1

The UK Climate Change Act

The Climate Change Act has strengthened climate policy-making in the UK.

The UK Climate Change Act was passed in 2008. It is the primary legislation that underpins action to address climate change by the UK. It provides a comprehensive framework for climate change mitigation and adaptation, underpinned by legally binding emissions targets for 2050 and the coming 15 years. It assigns clear duties and responsibilities for action based around independent expert advice and monitoring.

The Act is credited with helping the UK to deliver sustained reductions in greenhouse gas emissions alongside a growing economy. The Act has received widespread support from business and enabled a positive narrative on UK climate action.

This briefing introduces the Act and its structure and highlights learning from its twelve years in operation.

This briefing is structured in three sections:

- Background to the UK Climate Change Act
- The four pillars of the Climate Change Act
- Learning from the Act

This briefing is one of a series on the workings of the UK Climate Change Act and the Climate Change Committee (CCC).

Box 1: CCC 'Insights' Briefings

This briefing is part of a series of eight that document the work of the UK Climate Change Committee (CCC) under the Climate Change Act. The CCC is the UK's independent advisory body on climate change mitigation and adaptation tasked with providing regular advice to Government on emissions targets and adapting to a changing climate. The CCC publishes annual assessments of progress towards meeting these targets, biennial assessments of progress in adapting to climate change, and supporting analyses on key emerging issues. These briefings are intended as a practical guide to give insights on the CCC's work and learning over the twelve years since its foundation in 2008.

The briefings in this series are:

- UK Climate Change Act
- The Climate Change Committee
- The UK's Net Zero target
- Advising on the level of the UK's carbon budgets
- Monitoring progress in reducing the UK's greenhouse gas emissions
- Conducting a climate change risk assessment
- Monitoring progress on adapting to climate change in the UK
- Past Climate Change Committee reports

1. Background to the UK Climate Change Act

The Act enshrines in law the need to reduce emissions and prepare for climate change.

The UK Climate Change Act was a world-first national 'framework' legislation providing a comprehensive and overarching law setting out the UK's approach to reducing emissions and preparing for the impacts of climate change.* It reflected growing recognition that effective climate action needs a long-term coordinated approach to provide clarity and direction to Government, business and citizens.

The notion behind the Act was that while politicians might disagree on *how* to respond to climate change, they shouldn't disagree on *whether* to respond.

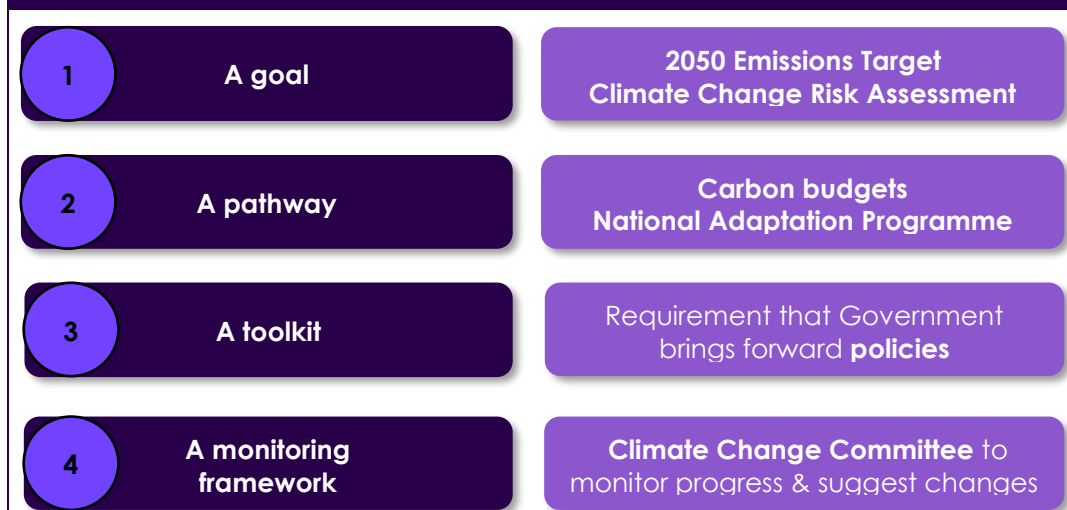
The Act has enjoyed continued cross-party support.

The Act was passed in the UK Parliament in November 2008 by an overwhelming cross-party majority (only 5 MPs out of 646 voted against it) and has continued to be strongly supported across the UK and devolved legislatures since. Its passage benefited from a strong civil society campaign¹ and several prominent reports in the preceding years that made clear the evidence for the expected damages from future climate change and the rationale for addressing it, including the IPCC 4th Assessment Report (2007)² and the Stern Review on the Economics of Climate Change (2006)³ – which was commissioned by the UK Government.

2. The four pillars of the Climate Change Act

The basic framework of the Act ensures that long-term goals are evidence-based and translated into near-term action.

Fig. 1:
The four pillars of the UK Climate Change Act



The Act's 2050 target provides a long-term direction for climate policy.

The Climate Change Act provides an overall framework for climate mitigation and adaptation action across the UK. This framework has four key pillars (Fig. 1):

- **A long-term goal.** The Act contains a legally binding goal for reducing UK greenhouse gas (GHG) emissions by 2050. Initially, this was 'at least 80%' below 1990 levels, based on advice from CCC.

In 2019, in recognition of the 2015 UN Paris Agreement and following CCC advice, the long-term goal was updated to 'at least 100%' below 1990

* The Act also includes other provisions, for example to introduce charges on plastic bags and relating to emissions trading – these are not covered in this note.

levels (i.e. Net Zero GHG emissions). The Act does not contain a single long-term goal for adapting to climate change, instead it requires an assessment of the risks to the UK from the current and predicted impacts of climate change to take place every five years.

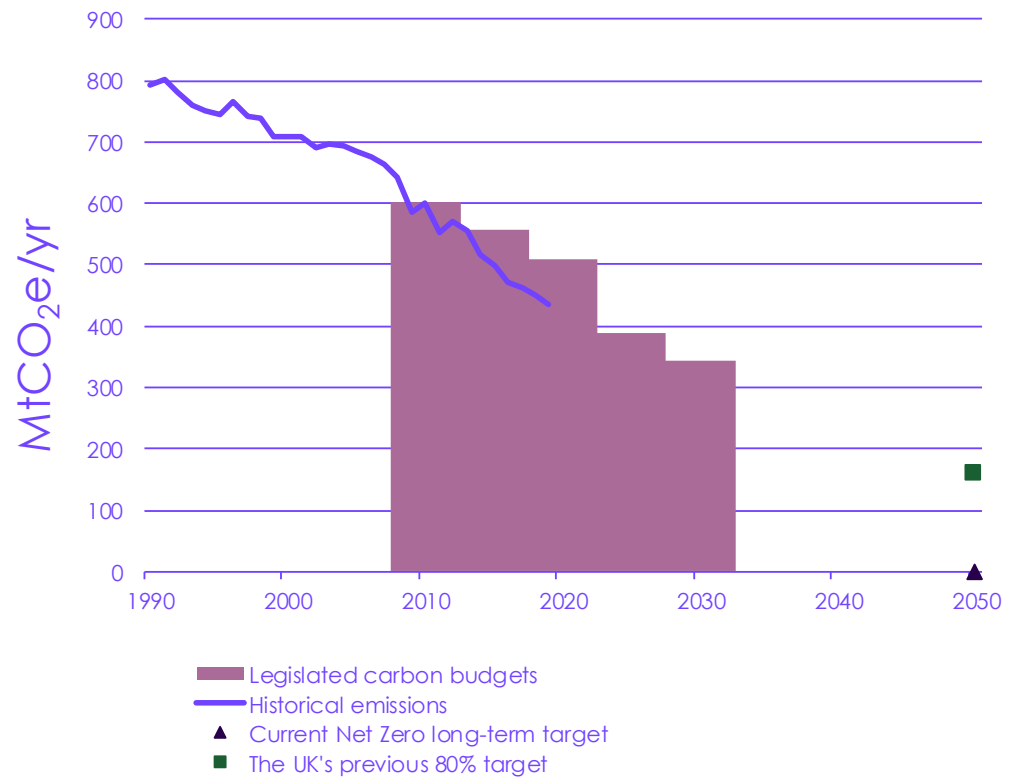
Carbon budgets ensure action happens now to get on track to the 2050 target.

The Government must prepare policies to meet the carbon budgets and prepare for climate risks.

Independent advice ensures targets are robust, while helping make evidence-based policy that is regularly reviewed and updated.

- **A pathway to the long-term goal.** 'Carbon budgets' set legally-binding limits for UK GHG emissions over five-year periods as interim milestones on the pathway towards the long-term emissions goal (Fig. 2). On adaptation, the Act requires the Government to set out its objectives for adaptation and a programme to meet them.
 - The carbon budgets are legislated twelve years in advance of the budget start date to provide enough time for Government to develop and enact policies and for businesses to invest.
 - A five-year period was chosen rather than annual targets to provide greater flexibility - for example, to accommodate a particularly cold winter leading to increased heating emissions in a particular year.
- **A requirement for policies to deliver the pathways.** The Act obliges the Government to develop and publish policy programmes to deliver the legislated emissions reductions and to address the risks identified in the latest climate change risk assessment.
- **An independent advisory body - the Climate Change Committee (CCC).** The Act created the CCC as the independent statutory adviser. It includes two Committees (effectively boards) covering mitigation and adaptation. Members are expert and politically impartial and supported by an analytical secretariat. The CCC advises on the appropriate level of UK carbon budgets, and on key climate risks facing the UK. The CCC also monitors progress on reducing emissions (every year) and adapting to climate change (every two years). The Government is obliged to respond to the CCC's assessments, creating an annual cycle of policy development.

Fig. 2 Emissions pathways to carbon budgets and the Net Zero target



Source: CCC (2020) Reducing UK emissions: 2020 Progress Report to Parliament

The provisions of the Act balance the primacy of elected representatives in making decisions with the use of independent advisers in interpreting evidence:

- The Act prescribes several factors to consider in setting carbon budgets. Budgets must have a view to meeting the 2050 target and consider: climate science, international circumstances, technology, the economy and competitiveness, taxation and spending, fuel poverty, energy supplies, and differences in devolved administrations. The Act does not exclude other factors or prescribe how to consider these factors, but their inclusion in the Act ensures that the CCC's advice reflects political priorities.
- The CCC is only advisory – the final decisions on the legislated targets and on all policies to meet them rests with the Government. However, the Government must take account of the CCC advice, and were it to diverge from the CCC proposed targets the Government must set out the reasons why.
- There are limited penalties in the Act for non-compliance. Rather it creates a framework for maximum scrutiny and transparency should a Government not honour its climate commitments.

Politicians set out the factors to consider in setting emissions targets. The CCC recommends the appropriate target. Final decisions rest with the Government.

That provides a powerful lever for action, so long as public opinion favours climate action. The Act also provides a legal route for challenge of specific policy decisions should these be inconsistent with the obligations in the Act. Judicial review cases can be brought by members of the public and other interested parties with legal standing (viewed broadly in the context of climate). Government's decisions have been subject to legal challenge in the past.

The UK also has three devolved administrations, some with their own climate change framework legislation. Box 2 discusses their key features.

Within the UK, Scotland and Wales have their own climate laws, based on a similar framework to the UK Act.

Box 2:

Climate change legislation in the UK's constituent countries

The UK has three devolved administrations – Northern Ireland, Scotland and Wales – each with differing powers and policy remits. In the UK, some policy areas important to climate policy are devolved to these administrations (e.g. agriculture and forestry, transportation, and housing), while others (e.g. energy supply and trade) remain reserved to the UK Government.

Whilst the emissions from all three devolved administrations are covered under the UK-wide targets in the Climate Change Act, the devolved legislatures have created their own climate framework laws and are also advised independently by the CCC:

- **Scotland:** In 2009 Scotland introduced parallel legislation - the Climate Change Act (Scotland) 2009, which follows a similar four pillar framework to the UK Act (i.e. end goal, interim targets, policies and independent advice/monitoring). The Scottish Act was amended in 2019 to target Net Zero emissions by 2045, as advised by the CCC. The Scottish Act differs slightly from the UK Act, for example in having annual targets rather than five-year carbon budgets.
- **Wales:** The 2016 Environment (Wales) Act mirrors the four UK pillars, with a long-term target, interim emissions budgets and a requirement for policies, with advice and monitoring from the CCC. The Welsh Government (following CCC advice) intends to increase the 2050 target to 95% as a fair contribution to the UK-wide Net Zero 2050 target and has expressed ambition to set a Net Zero target for Wales in the future.
- **Northern Ireland:** Northern Ireland does not at present have dedicated climate change legislation. The CCC has advised the Northern Ireland Executive on the fair share of emissions reductions in line with the overall UK emissions budget, noting circumstances specific to Northern Ireland, particularly the large proportion of livestock agriculture emissions relative to the UK.

Climate change adaptation is largely devolved, with the UK and devolved administrations collectively producing the five-yearly UK Climate Change Risk Assessment. Devolved administrations (and for England the UK Government) produce the follow-up Adaptation Programs for policies to address the highlighted risks.

3. Learning from the UK Climate Change Act

Since the Climate Change Act was passed in 2008, successive UK Governments have met their obligations under the Act. The framework of the Act has strengthened the use of evidence in policy-making while both the Act and the CCC have been strongly supported by policymakers, businesses and society.

The existence of the Act is widely credited with having been an important contributing factor to the continued reductions in the UK's greenhouse gas emissions (which by 2019 had reduced by 41% below 1990 levels) while the UK economy grew (by 78% over the same period).

The Act has broadly been successful in strengthening the UK response to climate change and the effectiveness of UK policy to reduce emissions.

However, progress in reducing UK emissions has been unbalanced, with the power sector contributing most of the reductions whilst several other sectors (e.g. transport) have to date not seen emissions fall at all.

Several areas where the framework of the UK Act works well have been apparent over the twelve years of its existence:

- **The long-term target has focused minds.** The initial 80% greenhouse gas reduction target, and particularly the recent Net Zero target, have focused policymakers and businesses on engaging in the challenges ahead. It has also ensured that policy is designed with a longer time horizon in mind, as is appropriate for the energy sector where investments have long lifetimes. The Climate Change Risk Assessment has improved understanding of climate risks.
- **Clearly assigning duties and responsibilities has raised the profile of climate change.** The clear legal obligations on a specific Minister, as well as the Act's status as primary legislation, has helped climate change to receive more regular attention at the highest levels of Government.
- **A medium-term pathway and regular progress assessment has helped improve policy making.** The CCC has been a natural focal point for the UK's knowledge network around climate change and has formed a bridge between researchers, businesses and policymakers. The setting of carbon budgets twelve years in advance is sufficiently short to provide a useful focal point for decision making today, whilst also being far enough away to make setting ambitious targets politically easier.⁴
- **The presence of an independent adviser has helped resolved political differences.** When politicians disagreed on the appropriate level for the 2050 target before the Act was finalised in 2008, it was set on the CCC's advice. When new coalition partners disagreed in 2010 on the role of renewables and nuclear in the energy sector, the CCC were asked within the coalition's programme for Government to advise on renewables.
- **The Government has generally followed independent advice from the CCC.** Successive UK Governments have accepted the CCC's advised level of the carbon budget for all five of the legislated budgets thus far. The 2050 target was also legislated and then updated in line with the CCC's advice. Many policy developments have also followed from CCC advice.
- **The Act has shown it can be robust to updated knowledge and international circumstances.**
 - In 2019 the 2050 long-term target was amended to Net Zero greenhouse gas emissions by 2050, as advised by the CCC, to reflect the increased ambition of the 2015 UN Paris Agreement and wider updates to the evidence base on tackling climate change.
 - In 2011, the Government passed the fourth carbon budget but subject to review with respect to comparison with EU-wide climate measures. In 2013 the CCC concluded that the relevant circumstances had not materially changed and Government accepted this advice leaving the fourth carbon budget unchanged.⁵
- **The Act has had international significance.** The broad model of the Climate Change Act has been taken up in similar framework laws in other parts of the world (Box 3).

The UK's experience helps demonstrate the value of evidence-based climate policy and shows that emissions reductions are compatible with a growing economy.

Progress on delivery of adaptation policies has been comparatively slower than for mitigation. Some duties and emissions sources are also not well covered by the Act.

However, experience has simultaneously shown areas where the Act could be improved or where the response has been less effective:

- **Progress on adapting to climate change has been slower.** The framework of the Act has helped drive important action on adaptation, updated on a five-yearly cycle. However, in practice delivery of adaptation policies has been slower as it has generally been under-prioritised relative to mitigation and received less attention. As the goals of adaptation action are more difficult to quantify than the simple metric of UK-wide GHG emissions, it has been more challenging to effectively hold Government to account.
- **No clear timelines for Government policy development.** The Act requires policy proposals to be brought forward to meet the legislated carbon budgets and address the highlighted climate risks but does not provide a precise timeframe under which this must take place. This can lead to delays in policy introduction and resulting action. For example, it was nearly sixteen months after the legislation of the UK's Fifth Carbon Budget (for the period 2028 – 2032) that the Government's *Clean Growth Strategy* was published as its policy programme to meet that budget.
- **Treatment of emissions from international aviation and shipping remains unclear.** Interim carbon budgets and the end goal are set factoring in the UK share of international aviation and shipping emissions, but these emissions fall out of the scope of current carbon budget accounting under the Act. While the Government has accepted that they must be covered by the UK's 2050 Net Zero target they have not yet formally set out how they will be included in UK climate targets.
- **Carbon budget accounting methodologies can be complex.** While the 2050 target is legislated as a percentage reduction on UK emissions in 1990, the interim carbon budgets are legislated as absolute emissions totals. This makes the level of ambition needed to achieve the carbon budgets sensitive to changes in estimates of the UK's emissions to reflect improved scientific understanding (for example better measures of emissions from peatlands). These changes can act to make carbon budgets artificially harder or easier to achieve depending on their specifics. Accounting around the EU Emissions Trading System has also caused confusion at times. This can be disruptive to policymaking by creating a moving target.
- **Other parts of the UK's contribution to climate change are not addressed.** The carbon budgets focus exclusively on the UK's emissions from domestic activity in accordance with international emissions accounting rules. Other parts of the UK's contribution to tackling global climate change, including its overseas carbon footprint and contributions to international climate finance, are not covered by the Act, although the CCC considers these aspects when providing its advice to Government.

The next decade will bring a new set of challenges for UK climate policy and for the UK Climate Change Act. This includes a more ambitious near-term decarbonisation pathway on the path to Net Zero emissions by 2050. This will require actions from all sectors of the economy, a much greater engagement of people in decarbonisation, and ensuring that the transition is conducted in a fair and equitable way. The lessons from the first twelve years of the Act will be important for both the UK and other countries in delivering on this ambition.

Climate laws have been adopted around the world with similar core components – long-term goals, interim targets and independent advice, backed by legislation.

Specifics have been adapted to reflect local conditions and politics.

Box 3:

International applications of framework climate legislation

There are now a significant number of approaches to climate change legislation either enacted or in development around the world. These often have a similar structure to the UK model with variations which reflect specific governance, economic and demographic circumstances. In some cases, the UK Government and CCC have directly provided insight and learning to support the development of these.

Prominent examples of climate framework laws include:

- **New Zealand's** (2019) Climate Change Response (Zero Carbon) Amendment Act sets a domestic target to reduce all net emissions of GHGs to zero by 2050, excepting biogenic methane which is to be reduced by 24 – 47% below 2017 levels by 2050. Interim five-year emissions budgets are set ahead towards meeting these end goals, and the New Zealand Government is required to develop and implement aligned policies for climate change adaptation and mitigation. An independent Climate Change Commission provides expert advice and monitoring.
- **Germany's** (2019) Climate Action Law aims for climate neutrality by 2050, sets interim and sector-specific targets, and sets up an independent expert climate commission to provide guidance.
- **France's** (2019) Law on Energy and Climate sets an end goal of climate neutrality by 2050, sets an interim 2030 target and related sectoral targets, and establishes an independent High Council on Climate tasked with issuing advice and recommendations to the French Government.
- **Sweden's** (2018) Climate Act set an end goal of Net Zero emissions by 2045, with ten-year interim milestone targets, and a requirement to produce a climate action plan to achieve them every four years. An independent Climate Policy Council is tasked with monitoring progress and reporting to Government.
- **Denmark's** (2019) Climate Act sets a goal for climate neutrality by 2050 and sets five-year interim targets 10 years ahead. The independent Climate Council advises emissions pathways and policies and evaluates the implementation of climate change measures by the Government.
- **Mexico's** (2012, amended 2018) General Law on Climate Change sets long term goals (50% reduction by 2050 relative to 2000), interim 2030 emissions target (22%, rising to 36% conditional on international support), with the Climate Change Council of independent experts providing advice, policy recommendations and review of climate strategy.

The specifics of these laws vary between countries, but in all cases the laws involve setting interim targets on the pathway to a long-term goal and independent evidence-based advice.

Endnotes

- ¹ Friends of the Earth (2005) *The Big Ask* <https://friendsoftheearth.uk/climate-change/big-ask-how-you-helped-make-climate-change-history>
- ² Intergovernmental Panel on Climate Change (2007) *4th Assessment Report: Climate Change 2007*
- ³ Stern (2006) *Stern Review on the Economics of Climate Change*
- ⁴ Averchenkova, A., Fankhauser, S. & Finnegan, J. (2020) The impact of strategic climate legislation: evidence from expert interviews on the UK Climate Change Act. *Climate Policy*
- ⁵ UK Government (2014) *Review of the Fourth Carbon Budget* <https://www.gov.uk/government/speeches/review-of-the-fourth-carbon-budget>



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