

NEW ZEALAND
PRODUCTIVITY COMMISSION
Te Kōmihana Whai Hua o Aotearoa



Examining the UK Climate Change Act 2008

Research Note

September 2017

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The New Zealand Productivity Commission Research Note: Examining the UK Climate Change Act 2008

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Date: September 2017

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ISBN: 978-1-98-851900-5

Acknowledgements: Sincere thanks to the Commissioners and the Low-emissions inquiry team for their input into this note. Since this research note was prepared, we have also had the benefit of speaking with Baroness Bryony Worthington about the UK Climate Change Act, and I am very grateful to the Baroness for taking the time to share her valuable insights with us.

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Abstract

This research note was prepared as a background resource for the Productivity Commission's *Low-emissions economy* inquiry. It considers the United Kingdom's Climate Change Act 2008, including by examining the background to the Act's introduction, its key design features and performance to date. The note identifies lessons from the UK experience that may be relevant for New Zealand.

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Overview

The United Kingdom (“UK”) was a world-leader in 2008 when it enacted ambitious domestic climate change legislation. Almost ten years later, the UK’s Climate Change Act 2008 (“the Act”) remains very highly regarded and has acted as a model for legislation in other jurisdictions.

Despite its ambitious nature, the legislation had overwhelming support during its passage through Parliament. A series of events had seen climate change rise rapidly up the UK policy agenda after the 2005 election, and by the end of 2006 there was cross-party support for a Climate Change Bill. Key driving forces included a grassroots Friends of the Earth campaign (called The Big Ask), intense party political competition, leadership within government and the influence of expert reports (particularly the Stern Review). The draft Bill was subject to pre-legislative scrutiny, including public consultation and consideration by Parliamentary committees, before being introduced into Parliament in November 2007 and receiving Royal assent in November 2008.

The Act sets up a framework for the UK to achieve its long term greenhouse gas emission reduction goals and to ensure steps are taken to adapt to climate change impacts. The core pillars of the Act are:

- setting a statutory long-term 2050 target, with accompanying five-yearly carbon budget ‘stepping stones’ to the long-term target;
- establishing an independent advisory and watchdog body (the Committee on Climate Change);
- a suite of reporting requirements, based around mandatory reporting to Parliament; and
- (in addition to climate change mitigation provisions) a framework to drive action on adapting to climate change.

Notably, the legislation places clear and unqualified legal duties on the Secretary of State to meet the 2050 target and carbon budgets. There is however uncertainty and debate about whether these duties would be enforceable by the courts in practice; but regardless of strict legal enforceability, the existence of the duties in primary legislation elevates their status and has implications that go beyond any formal sanctions.

The Act has performed very well to date. The legislation has driven action, including the setting of five carbon budgets that collectively cover the period 2008-2032. Regular reporting to Parliament has enhanced transparency and accountability, and the independent Committee on Climate Change is highly regarded. It is however premature to judge the Act an overall success, particularly in relation to its goal of meeting the long-term emissions reduction target. Whilst there remains cross party support for the Act at a high-level, in more recent years this has not been matched by commitment to detailed policies that will deliver the ‘step change’ needed to meet future carbon budgets. Although the UK met its first carbon budget and is on track to meet budgets to 2022, there is currently a ‘policy gap’ for meeting the subsequent budgets to 2032. Implementing the Act is likely to become increasingly challenging, so the toughest test for the Act (and its political durability) is yet to come.

The UK’s experience shows that ambitious climate change legislation is possible (given the right pre-conditions). The Act appears to be a valuable tool for helping to achieve long-term climate change goals by setting a clear emissions reduction pathway via the carbon budget system and by providing a framework that ensures climate change stays on the political agenda, with procedures and reporting obligations driving ongoing action and improving transparency and accountability. Nonetheless, the legislation only provides the *framework*; it is not a substitute for ongoing political commitment to a low emissions economy. Should New Zealand enact framework climate change legislation, the UK Act provides a useful model to consider but care would need to be taken to ensure legislation is appropriately tailored to suit the New Zealand context.

1 Context

This research note has been prepared as a background resource for the Productivity Commission's *Low-emissions economy* inquiry (see Box 1). This note does not represent the views of the Commission.

Box 1 **Low emissions economy inquiry**

The Government has asked the Productivity Commission to undertake an inquiry into how New Zealand can maximise the opportunities and minimise the costs and risks of transitioning to a lower net-emissions economy. The purpose of the inquiry is to "identify options for how New Zealand could reduce its domestic greenhouse gas emissions through a transition towards a lower emissions future, while at the same time continuing to grow incomes and wellbeing." The inquiry includes consideration of regulatory and institutional systems, processes and practices.

The final report to Government is due on 30 June 2018.

The terms of reference and other information about the inquiry can be found at <http://www.productivity.govt.nz/inquiry-content/3254?stage=2>

In 2008, the UK Parliament passed legislation that was world leading in setting a domestic legally binding long-term greenhouse gas emissions reduction target, accompanied by a system of carbon budgeting. The adoption of the Climate Change Act 2008 was seen as a landmark commitment to action on climate change and an historic step.

This research note examines the background to the introduction of the Act, the Act's key design features, supporting institutions and its success or otherwise in achieving its objectives. The paper concludes by considering relevant lessons for such a statutory framework in New Zealand. It is noted that the idea of New Zealand adopting a similar model to the UK Act has recently been gaining traction, and is the approach recommended by the Parliamentary Commissioner for the Environment in her July 2017 report.² Generation Zero are also campaigning for a Zero Carbon Act based on the UK model but with some alterations.³

² PCE, 2017.

³ Generation Zero, (2017), Zero Carbon Act Summary. Retrieved from <http://zerocarbonact.nz/zcasummary/>. See also Generation Zero, (2017), International case studies and lessons for New Zealand: A Zero Carbon Act research paper. Retrieved from <http://zerocarbonact.nz/assets/Uploads/Zero-Carbon-Act-International-case-studies-April-2017.pdf>.

2 The Act's origins

This section explores the origins of the Act by discussing:

- the key background to the introduction of the Climate Change Bill; and
- the process from publication of the draft Bill to the legislation being enacted.

2.1 Getting to the Climate Change Bill

The concept of a long term UK climate change target can be traced back to a Royal Commission report published in 2000⁴ and by the early 2000s climate change was "recognised at the heart of UK government."⁵ The more immediate origins of the Act however stem from a series of events that saw climate change rise rapidly up the UK policy agenda after the 2005 election and the idea of a climate change bill gain cross-party political traction.⁶

The Act was the product of multiple factors coming together: "[w]idespread political consensus, high-level political patronage, strong economic conditions and cross-societal support all combined to facilitate the adoption of the [Act]."⁷

More specifically, the following factors appear to have played a key role in getting to the Climate Change Bill (and ultimately the Act):

- Friends of the Earth campaign ("The Big Ask");
- party political competition;
- leadership within government; and
- expert reports, in particular the Stern Review.

These factors are discussed below.

The Big Ask campaign

A campaign by Friends of the Earth ("FoE") termed "The Big Ask" played a significant role in the creation of the Act.⁸ Launched in 2005, The Big Ask campaigned for new legislation to combat climate change:

- FoE drafted a Bill requiring annual emission reductions and worked to get it introduced in Parliament in April 2005 by a cross-party group of MPs. There was no debate or vote on the Bill and Parliament then dissolved before the general election.
- The Big Ask was officially launched in May 2005, with the campaign seeking legislation that would commit the UK to a 3% year-on-year emissions reduction. The Big Ask rallied support via public meetings and events, and lobbied MPs.
- FoE persuaded MPs from three major parties to table a Parliamentary petition (Early Day Motion No. 178) in support of new climate change legislation. The Early Day Motion read as follows:⁹

⁴ See Macrory, 2012, p.261-2 regarding the Royal Commission on Environmental Pollution, (2000) 22nd Report, Energy - the Changing Climate.

⁵ Benson & Lorenzoni, 2014, p.203.

⁶ Carter, 2014; Institute for Government, n.d.

⁷ Benson & Lorenzoni, 2014, p.208.

⁸ See Friends of the Earth, n.d.; Carter, 2014; Institute for Government, n.d.

⁹ Retrieved from <http://www.parliament.uk/edm/2005-06/178>.

That this House agrees with the Government's Chief Scientific Adviser that climate change is a threat to civilisation; welcomes the cross-party agreement in favour of major cuts in greenhouse gas emissions, and particularly in carbon dioxide emissions, by 2050; believes that such a long-term target will best be met through a series of more regular milestones; and therefore notes the Climate Change Bill that was presented by a cross-party group of honourable Members in the final days before the General Election, and hopes that such a Bill will be brought forward in this Parliament so that annual cuts in carbon dioxide emissions of 3 per cent. can be delivered in a framework that includes regular reporting and new scrutiny and corrective processes.

- Lobbying from The Big Ask eventually secured 412 out of 612 MP signatures in support of the Early Day Motion.

The "major political coup"¹⁰ for the campaign came on 1 September 2006, when David Cameron (at the time, new leader of the Opposition Conservative Party) shared a platform with FoE and called for climate change legislation to be included in the next Queen's speech.

In the Queen's Speech on 15 November 2006, the Government announced that it would be introducing a Climate Change Bill.

Party political competition

The Big Ask's success in gaining cross-party support for climate change legislation was a product of the intense party political competition on climate change between the Labour Government and the Conservative opposition.¹¹ The election of David Cameron as leader of the Conservatives was significant. Cameron sought to modernise and 'decontaminate' the Tory brand, and "[t]he fight to be the perceived champion of the climate change agenda came to a head over the Climate Change Bill."¹² Arguably, intense party competition, rather than public pressure, was the main driving force behind the Act's adoption.¹³

Leadership within government

In addition to the influence of party politics, the leadership of individuals within government also played an important role in bringing about the Act.

Prime Minister Tony Blair gave an influential speech in September 2004 on the 'urgent issue' of climate change and the need for the UK to lead by example. The Prime Minister thereafter took a strong leadership position on climate change.

David Miliband, who became Secretary of State for the Department of Environment, Food and Rural Affairs in May 2006, also played a key role. Miliband had future leadership ambitions and a desire to make an impression.¹⁴ His "focus on the issue and the pace he injected"¹⁵ was influential. More specifically:

The sustained attention Miliband was able to give the issue helped create the necessary agreement at the political level and gave the civil servants working on the bill the space and political stability to develop the details. This was complemented by the emergence of a network of officials, committed to making the policy happen, who helped navigate the bill through their colleagues.¹⁶

Miliband set up a new centralised cross-departmental Office of Climate Change ("the OCC") in September 2006 to consider climate change issues. The OCC "facilitated cross-government action by providing a coherent flow of information to top decision makers in those departments"¹⁷ and "by sensitively providing a unified and accurate body of advice to multiple ministers, the OCC made

¹⁰ Carter, 2014, p.426.

¹¹ Rollinson, 2010; Institute for Government, n.d.; Carter, 2014.

¹² Rollinson, 2010, p.29.

¹³ Rollinson, 2010, p.1.

¹⁴ Carter, 2014, p.428.

¹⁵ Institute for Government, n.d., p.123.

¹⁶ Institute for Government, n.d., p.123.

¹⁷ Institute for Government, n.d., p.123.

cooperation on a single climate change bill possible.”¹⁸ Interestingly, one of the FoE campaigners involved in The Big Ask, Bryony Worthington, was brought into government and played a key role in drafting the bill.¹⁹

Influential expert reports

The need for action on climate change gained credibility and momentum from influential expert reports.

The Stern Review, a report commissioned by the Government and authored by economist Nicholas Stern, was released on 30 October 2006. A key conclusion of the Stern Review was that early action should be taken to stabilise climate change because delaying action would be dangerous and much more costly. The report “marked a turning point in the climate change debate”²⁰ and was influential in changing attitudes in both the private and public sector. There was a “discernible shift in attitudes within the business community, a section of which began to see action on climate change as compatible with its commercial interests, particularly after the Stern Report introduced a new economic discourse to bolster the scientific case for climate change mitigation.”²¹ The Stern Review, with its “reframing [of] climate change as an economic, not an environmental, issue” also changed internal government attitudes, including that of the Treasury.²²

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change in early 2007, which solidified the scientific consensus that anthropogenic climate change is real, added to the momentum for climate change action.

2.2 From draft Bill to Act

Scrutiny of the draft Bill

The draft Climate Change Bill was published in March 2007. David Miliband (Secretary of State for the Environment) described the Bill as providing a:

clear, credible and long-term framework that will provide greater clarity and confidence for businesses and individuals to plan and invest in delivering the changes needed to move to a low carbon economy. It will demonstrate leadership through example - a vital factor in helping to secure future international agreements.²³

The Bill was subject to public consultation,²⁴ as well as pre-legislative scrutiny from three Parliamentary Committees.²⁵

Around 17,000 responses were received to the public consultation, with an “overwhelming majority” of respondents supportive of the Bill’s aim to set and enable the achievement of ambitious emission reduction targets.²⁶ Those supporting the Bill included for example the Confederation of British Industry, which described the Bill as “a big step forward in combining the two things we really need: long term clarity on policy direction and flexibility in its delivery.”²⁷

¹⁸ Institute for Government, n.d., p.123. The paper includes a useful discussion on the internal government politics and process for securing agreement on the bill.

¹⁹ Institute for Government, n.d., p.123.

²⁰ Institute for Government, n.d.

²¹ Carter, 2014, p.427.

²² Institute for Government, n.d., p.123.

²³ Miliband, D. 2007, March 13, Written Ministerial Statement: Climate Change Bill (col 6WS). Retrieved from <https://publications.parliament.uk/pa/cm200607/cmhansrd/cm070313/wmstext/70313m0001.htm>.

²⁴ Defra, 2007, Draft Climate Change Bill – Consultation Document.

²⁵ The Ad Hoc Joint Committee on the Draft Climate Change Bill, the Environment, Food and Rural Affairs Select Committee, and the Environmental Audit Committee.

²⁶ Secretary of State, 2007, Taking Forward the UK Climate Change Bill, p.6.

²⁷ Secretary of State, 2007, Taking Forward the UK Climate Change Bill, p.10.

It is noted that a number of changes were made to the Bill as a result of the pre-legislative scrutiny process (including to increase the strength of the UK's carbon management framework and to increase transparency and accountability).²⁸

Overwhelming Parliamentary support

The Climate Change Bill was introduced to the House of Lords in November 2007, and passed to the House of Commons in April 2008 before receiving Royal Assent on 26 November 2008.²⁹

The Bill's passage through Parliament was "remarkably consensual",³⁰ as evidenced by the near unanimous vote in favour of the Bill at its Third Reading in the House of Commons: Ayes 463, Noes 3.

Various amendments were made to the Bill in Parliament, including changes put forward by the Government. The amendments included increasing the 2050 target from "at least 60%" to "at least 80%" and applying the target to all greenhouse gases.³¹

²⁸ Secretary of State for Environment, Food and Rural Affairs, 2007, Taking Forward the UK Climate Change Bill, pp.7-8.

²⁹ The Act is available at <http://www.legislation.gov.uk/ukpga/2008/27/contents>.

³⁰ Benson & Lorenzoni, 2014, p.205.

³¹ As discussed later in this paper, those amendments were made in line with advice from the 'shadow' Committee on Climate Change (which was established in non-statutory form in advance of the Bill becoming law).

3 Key features of the Act

3.1 Purpose and key objectives

At a high level, the Act “sets up a framework for the UK to achieve its long-term goals of reducing greenhouse gas emissions and to ensure steps are taken towards adapting to the impact of climate change.”³²

The government’s consultation document on the draft Bill explained that “this Bill would create a framework to achieve a more coherent approach to managing climate change in the UK - ambitious targets, powers to achieve them, a strengthened institutional framework and clear and regular accountability to Parliament.”³³ The document also gave the rationale for the legislation as being:

- To demonstrate leadership by example to help foster collective international action.
- To create a clear and coherent framework to enable the UK to meet domestic and international commitments.
- To provide greater clarity and certainty for UK industry, households and individuals to effectively plan for and invest in a low carbon economy.
- To maximise social and economic benefits and minimise costs to the UK as we pursue these goals.
- To help the UK towards being better adapted to the impacts of unavoidable climate change.³⁴

The Act itself does not contain an express ‘purpose’ provision. The long title to the Act simply describes the key elements of the Act:

An Act to set a target for the year 2050 for the reduction of targeted greenhouse gas emissions; to provide for a system of carbon budgeting; to establish a Committee on Climate Change; to confer powers to establish trading schemes for the purpose of limiting greenhouse gas emissions or encouraging activities that reduce such emissions or remove greenhouse gas from the atmosphere; to make provision about adaptation to climate change; to confer powers to make schemes for providing financial incentives to produce less domestic waste and to recycle more of what is produced; to make provision about the collection of household waste; to confer powers to make provision about charging for single use carrier bags; to amend the provisions of the Energy Act 2004 about renewable transport fuel obligations; to make provision about carbon emissions reduction targets; to make other provision about climate change; and for connected purposes.

3.2 The Act’s core pillars

The core pillars of the Act are:

- setting targets in statute and introducing carbon budgeting;
- establishing an independent Committee on Climate Change (“the CCC”);
- reporting requirements; and
- adaptation procedures.

The Act also contains enabling powers to reduce emissions that are not considered in this note, namely powers to introduce new domestic trading schemes through secondary legislation, plus a suite of specific policy measures to support emission reductions such as amendments to the Renewable Transport Fuel Obligations and the power to introduce charges for single use carrier bags: *Parts 3 and 5 of the Act*.

³² Explanatory Notes to the Act, p.1.

³³ Defra, 2007, p.8.

³⁴ Defra, 2007, p.18.

3.3 Carbon target and carbon budgets

Part 1 of the Act provides for a long-term carbon target and a system of five-yearly carbon budgets.

Long term carbon target

Current target

The Act enshrines a greenhouse gas emission reduction target for 2050 into primary legislation. Section 1(1) states that:

It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline.

Notably, the target puts a legal duty on the Secretary of State³⁵ that is “expressed in absolute unqualified terms, with a set date and a clear and measurable goal.”³⁶

Amending the target

The Act allows the carbon target to be amended, but only in certain circumstances and subject also to procedural constraints:

- Both the level of the 2050 target and the baseline year can be amended, but only if specified statutory tests are met and procedural steps are followed: *sections 2 and 3*. For example, the key trigger for changing the target’s percentage reduction is that it appears to the Secretary of State that there have been significant developments in either scientific knowledge about climate change, or in European or international law or policy: *section 2(2)(a)*.³⁷
- The 2050 target or the baseline year can be amended by secondary legislation (that is, by order of the Secretary of State) but is subject to the affirmative resolution procedure (meaning the order must be formally approved by both the House of Commons and House of Lords).³⁸ Before laying a draft order before Parliament the Secretary of State must take certain steps, including obtaining and taking into account the advice of the CCC: *section 3*.

Carbon budgets

In addition to the long term 2050 target, the Act introduces a system of five-yearly carbon budgets as stepping stones to the 2050 target.

In formulating the legislation, the government considered the issue of the appropriate budgetary period and concluded that five yearly budgets provided a good balance between predictability and flexibility. The government was of the firm view that five yearly budgets were preferable to annual targets (based on consistency with relevant international and EU time periods, the need for flexibility given factors like the impact of annual weather fluctuations on emissions, and time lags in the availability of emissions data).³⁹

Setting carbon budgets

Section 4 of the Act provides that:

It is the duty of the Secretary of State—
 (a) to set for each succeeding period of five years beginning with the period 2008-2012 (“budgetary periods”) an amount for the net UK carbon account (the “carbon budget”), and

³⁵ In the UK, a Secretary of State is a Cabinet minister in charge of a government department. The Act refers simply to the “Secretary of State” but does not specify which Secretary of State. Under the Interpretation Act 1978, “Secretary of State” is defined as meaning “one of Her Majesty’s Principal Secretaries of State.”

³⁶ Macrory, 2014, p.263.

³⁷ The 2050 target can also be amended if a change is made to the range of greenhouse gases covered by the target or if emissions from international aviation or international shipping are added to the target: *section 2(2)(b)*.

³⁸ The affirmative resolution procedure involves a draft order being laid before Parliament, with the Houses of Parliament able to approve or annul (but not amend) the draft order. For discussion of the affirmative resolution procedure see Kelly, 2016.

³⁹ Secretary of State, 2007, Taking Forward the UK Climate Change Bill, pp.19-20.

(b) to ensure that the net UK carbon account for a budgetary period does not exceed the carbon budget.

The first three carbon budgets (that is, budgets for 2008-12, 2013-17 and 2018-22) were required to be set before 1 June 2009. Subsequent budgets must be set 11 ½ years in advance: *section 4*.⁴⁰

The Act sets limits on the levels of carbon budgets covering the year 2020 and the year 2050 by requiring that those budgets are set in a way that is consistent with meeting, respectively, a medium term 2020 target (being a 34% emissions reduction by 2020 against 1990 levels)⁴¹ and the 2050 target (currently set at 80% reduction by 2050): *section 5*.⁴²

Every carbon budget must be set “with a view to meeting” the 2050 target and the 2020 target, as well as with a view to complying with the UK’s European and international obligations: *section 8*.

The Government must take into account specified matters in making decisions relating to carbon budgets: *section 10*. The matters to be taken into account include (but are not limited to)⁴³

- scientific knowledge about climate change;
- technology relevant to climate change;
- economic circumstances, particularly the likely impact of the decision and the competitiveness of particular sectors of the economy;
- fiscal circumstances, particularly the likely impact on taxation, public spending and public borrowing;
- social circumstances, particularly the likely impact on fuel poverty;
- energy policy, particularly the likely impact on energy supplies and the carbon and energy intensity of the economy;
- differences in circumstances between England, Wales, Scotland and Northern Ireland;
- circumstances at European and international level; and
- the estimated amount of the UK’s reportable emissions from international aviation and international shipping for the relevant budgetary period.

Carbon budgets are set in secondary legislation - by order of the Secretary of State subject to the affirmative resolution procedure (that is, the order must be approved by both Houses of Parliament): *section 8*.

The Act sets out procedures that the Secretary of State must follow before setting a carbon budget, which include:

- consulting the CCC, and taking into account the CCC’s advice;⁴⁴ and
- if the budget is not set at the level recommended by the CCC, then publishing a statement explaining why not: *section 9*.

What is the net UK carbon account?

⁴⁰ Section 4(2) provides that subsequent budgets must be set “not later than 30 June in the 12th year before the beginning of the period in question.”

⁴¹ The level of the 2020 target in section 5(1)(a) was increased from 26% to 34% in 2009 via The Climate Change Act 2008 (2020 Target, Credit Limit and Definitions) Order 2009 (SI 2009/1258).

⁴² There is also the ability to set further percentage targets/ranges for years after 2050, and the 2020 target percentage and any post-2050 percentages can be amended, subject to specified substantive and procedural tests: *sections 6 and 7*.

⁴³ Section 10(7) expressly provides that nothing in section 10 is to be read as restricting the matters that the Secretary of State or the Committee may take into account.

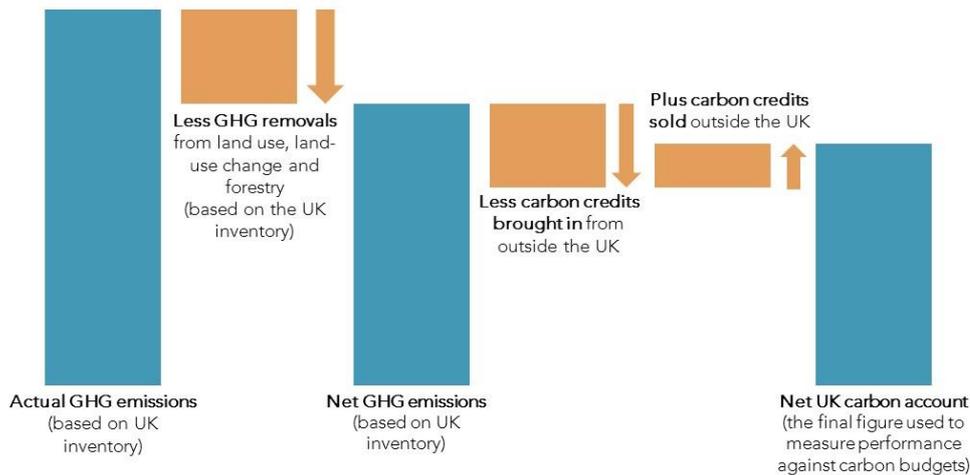
⁴⁴ Representations by the devolved administrations must also be taken into account.

Importantly, the 2050 target and carbon budgets are not set in relation to gross actual UK emissions, but rather in relation to the “net UK carbon account”.

Essentially, the “net UK carbon account” is calculated by starting with gross UK emissions, subtracting UK emission removals (from land use, land-use change or forestry), and then adjusting for carbon units brought into the UK from overseas or sold overseas: *sections 27 and 29*.

Figure 1 illustrates how the net UK carbon account is calculated.

Figure 1: net UK carbon account



Source: Adapted from the Department for Business, Energy & Industrial Strategy, Annual Statement of Emissions: Reporting UK 2015 emissions to Parliament under the Climate Change Act 2008, March 2017, p.4.

The net UK carbon account currently excludes emissions from international aviation and international shipping: *section 30*. Unless and until regulations are made providing for such emissions to be counted in the UK’s emission sources, international aviation and international shipping emissions must still however be taken into account by the CCC and government when (respectively) advising on, and setting, carbon budgets: *section 10(2)(i)*.

Carbon accounting details are set in regulation, including for example what carbon units can be added to or subtracted from the net UK carbon account, and the mechanics of a carbon accounting system: *sections 26-28*.

The setting of budgets on a net carbon account basis means that part of the budget for those sectors of the economy covered by the EU Emissions Trading Scheme (“EU ETS”) (primarily the power sector and energy intensive industry) is based on the UK’s share of the EU ETS cap, rather than actual emissions in those sectors.⁴⁵

Budget flexibility

The Act contains some mechanisms that provide an element of flexibility in how carbon budgets are met, but within clear boundaries:

- As discussed above, carbon budgets are set in relation to the “net UK carbon account”, which includes the ability for the UK to acquire international carbon credits to help meet its budget. However, a limit must be set on the use that can be made of international carbon credits in each budgetary period: *section 11*. Like carbon budgets, limits on international carbon credits are set by order of the Secretary of State but subject to the affirmative resolution procedure, and the

⁴⁵ See CCC, 2015, The Fifth Carbon Budget, pp.13-14.

government must take into account the CCC's advice. Limits must be set at least 18 months before the start of the relevant budgetary period.

- 'Banking' and 'borrowing' emissions between budgets is permitted – any part of a budget surplus can be "banked" by adding it to the next budget, but "borrowing" is limited to a maximum of 1% of the next budget. The CCC's advice must however first be obtained and taken into account before the Government exercises its power to bank or borrow: *section 17*.

Framework for meeting carbon budgets

The Act also includes mechanisms directed at ensuring carbon budgets are met. In particular:

- After a carbon budget is set, the Government must lay a report before Parliament providing "indicative annual ranges" for the net UK carbon account for each year of that budget period: *section 12*.
- The Government must both prepare, and report to Parliament on, proposals and policies that the Secretary of State considers will enable the current and future carbon budgets to be met. The proposals and policies must be prepared with a view to meeting the 2050 target and, taken as a whole, must contribute to sustainable development. The report on proposals and policies for meeting carbon budgets must be laid "as soon as is reasonably practicable" after making an order setting a carbon budget, and (inter alia) must explain how the proposals and policies affect different sectors of the economy: *sections 13 and 14*.

The Government also has a duty to have regard to the need for UK domestic action on climate change when considering how to meet the 2050 target and any carbon budget: *section 15*.

To determine whether carbon target and budget objectives have been met, the Act requires statements about UK emissions (including the net UK carbon account) to be laid before Parliament annually, at the end of each budgetary period, and in 2052 as a final statement on 2050 emissions: *sections 16, 18, 20*.

Amending carbon budgets

Carbon budgets can be amended, but only in limited circumstances.

A budget may only be amended if there have been significant changes in the factors on the basis of which the decision to set (or previously amend) the budget was made. A more stringent test applies to amending a budget after the start of the budgetary period, in that the significant changes justifying the amendment must have occurred since the budget period began: *section 21*.

The procedure for amending a carbon budget mirrors that of setting a budget – that is, by order of the Secretary of State subject to the affirmative resolution procedure, and the CCC's advice must first be obtained and taken into account (with an explanation given for any departure from the CCC's advice): *sections 21 and 22*.

Budgetary periods can also be altered but only to keep them in line with similar periods under any European or international agreement that the UK is party to: *section 23*.

3.4 Committee on Climate Change

Part 2 of the Act creates a new independent advisory body, the Committee on Climate Change.

Section 32 and Schedule 1 establish the CCC.

Nature of the CCC

The CCC is an independent non-departmental public body. The constitution of the CCC is set out in Schedule 1, and includes the key features summarised below.

*Membership*⁴⁶

- One chair, plus between five and eight other members.
- Members appointed by the national authorities (being the Secretary of State and the devolved administrations of Scotland, Wales and Northern Ireland) following consultation with the chair.
- Appointment decisions must “have regard to the desirability of securing that the Committee (taken as a whole) has experience or knowledge of” the following:
 - business competitiveness;
 - climate change policy at national and international level, and in particular the social impacts of such policy;
 - climate science, and other branches of environmental science;
 - differences in circumstances between England, Wales, Scotland and Northern Ireland, including capacity for action;
 - economic analysis and forecasting;
 - emissions trading;
 - energy production and supply;
 - financial investment;
 - technology development and diffusion.⁴⁷

*Term of office and remuneration*⁴⁸

- No fixed term. Members hold and vacate office “in accordance with the terms of the member’s appointment.”
- Members can be reappointed (and can also be removed in limited circumstances, for example following persistent absence, bankruptcy or being “otherwise unable or unfit” to carry out their duties).
- Remuneration and allowances are as determined by the national authorities.

*Staff*⁴⁹

- The chief executive is appointed by the Committee (but must be approved by the national authorities).
- The Committee has the power to appoint other employees.

*Sub-committees*⁵⁰

- One mandatory sub-committee, which is the Adaptation Sub-Committee (“ASC”). The ASC:
 - Comprises a chair and at least five other members.
 - Members are appointed by the national authorities (following consultation with the CCC chair regarding the ASC chair appointment, and consultation with the ASC chair regarding other ASC members).
- The Committee has a general power to establish other sub-committees.
- Sub-committees may include persons who are not members of the Committee.

⁴⁶ Clauses 1-2.

⁴⁷ The list of desirable expertise is deliberately in alphabetical order “to avoid giving any impression that one particular area of expertise is more important than any other”: Secretary of State, 2007, Taking Forward the UK Climate Change Bill, p.25. The document also notes that it was essential that members be appointed for their individual expertise and serve in a personal capacity, rather than representing specific stakeholder groups (p.25).

⁴⁸ Clauses 3-10.

⁴⁹ Clauses 11-14.

⁵⁰ Clauses 15-16.

*Proceedings*⁵¹

- The Committee has the discretion to regulate its own procedure, and that of any sub-committee.
- Meeting minutes must be published.

*Reports and accounts*⁵²

- Each financial year, the Committee must prepare and publish an annual report on the discharge of its functions and a statement of accounts.

*Information*⁵³

- The Committee must provide certain information, if requested, to the Secretary of State (or the devolved administrations).

Core functions: to advise and report

The CCC's core statutory functions are to advise (including in particular on carbon budgets) and to report (on the UK's progress towards meeting its climate change targets).

The CCC's key advisory and reporting duties are discussed below. The role of the ASC (the adaptation sub-committee) in advising and reporting on adaptation issues is discussed separately in the adaptation section that follows.

Advisory role

The scheme of the Act is clear: the CCC advises, but decisions are made by the government (with key decisions requiring Parliament's approval). The question of whether the CCC should have greater involvement in policy-making was expressly considered during the pre-legislative scrutiny process. The government's clear view (supported by Parliamentary committees) was that the CCC's role should be advisory only:

We continue to believe that the Committee's role should be to provide advice on budgets but that the Government should be responsible for setting them: as the Joint Committee argued, giving the responsibility for setting budgets to the Committee would probably be unworkable and would mean devolving significant policy decisions to an unelected body.⁵⁴

The CCC has a duty to advise the Secretary of State on carbon budgets: *section 34*. Specifically, for each budgetary period the CCC must advise on:

- the level of the carbon budget;
- the extent to which the budget should be met by domestic emission reductions versus use of international carbon units;
- the respective contributions towards meeting the carbon budget that should be made by the sectors of the economy covered by trading scheme versus non-traded sectors of the economy; and
- sectors of the economy in which there are particular opportunities for emission reduction contributions.

The CCC's advice on carbon budgets must take into account the same matters as the government must consider when setting budgets (outlined above), which include climate change science and technology but also matters such as economic, fiscal and social circumstances: *section 10*. The CCC must give

⁵¹ Clauses 17-19.

⁵² Clauses 22-24.

⁵³ Clause 25.

⁵⁴ Secretary of State, 2007, Taking Forward the UK Climate Change Bill, p.25.

reasons for its advice and must give its advice at least six months before the deadline for setting the relevant carbon budget: *section 34(3) and (4)*.⁵⁵

It is noted that the Act does not directly require the CCC to advise on proposals and policies for meeting carbon budgets. Section 13 simply requires the Secretary of State to prepare such proposals and policies "as the Secretary of State considers" will enable carbon budgets to be met.

The CCC must also:⁵⁶

- give advice relating to the consequences of treating emissions from international aviation and international shipping as domestic UK emissions: *section 35*.
- provide advice, analysis, information or other assistance if requested by the Secretary of State:⁵⁷ *section 38*.

Advice given by the CCC must be published: *sections 33-35*.

Progress reports

As well as its advisory role, the CCC also has reporting duties. In particular, the CCC must report annually to Parliament on the Committee's views on:

- progress made towards meeting existing carbon budgets and the 2050 target;
- further progress that is needed to meet those budgets and the 2050 target; and
- whether those budgets and that target are likely to be met: *section 36*.

The CCC's annual report must also include an assessment of progress in implementing the Government's adaptation programme (see adaptation section below).

3.5 Reporting framework

The Act sets up a new reporting framework, which is designed to "enhance the overall transparency and accountability of UK action on climate change".⁵⁸

Various elements of the reporting framework are outlined in the above sections on carbon budgets/targets and the CCC, but in summary the framework involves mandatory direct reporting to Parliament by both the government and the CCC. In particular:

- the government must report annually on the UK's greenhouse gas emissions;
- the CCC must report annually on progress towards budgets and targets;
- the government must respond to the CCC's progress reports; and
- after each carbon budget is set, the government must report on its proposals and policies for meeting current and future carbon budgets.

The government must also report on final figures for each budgetary period and for the net UK carbon account in 2050. Specific reporting obligations are also triggered if carbon budgets or the 2050 target are not met:

⁵⁵ The CCC's initial advice on the first three carbon budgets was due by 1 December 2008: *section 34(4)(a)*.

⁵⁶ As discussed later in this paper, the CCC was also required to advise by 1 December 2008 whether the 2050 target should be amended: *section 33*.

⁵⁷ Or if requested by the Scottish Ministers, Welsh Ministers or the relevant Northern Ireland department. The CCC's role in providing other advice on request is also specifically triggered by section 49 of the Infrastructure Act 2015, which requires the CCC to advise on the likely compatibility of UK onshore petroleum with meeting carbon budgets.

⁵⁸ Secretary of State, 2007, Taking Forward the UK Climate Change Bill, p. 10.

- If the carbon budget for a budgetary period is exceeded, the Government must report to Parliament on proposals and policies to compensate in future periods for the excess emissions: *section 19*.
- If the 2050 target is not met, the Government's final statement to Parliament on 2050 emissions must explain why the target has not been met: *section 20*.

As discussed below, the Act also requires the government and the CCC to report to Parliament on adaptation issues.

3.6 Adaptation⁵⁹

Whilst most of the Act is focused on a framework for climate change *mitigation*, the Act does also address climate change *adaptation*. Part 4 of the Act sets up a framework to drive action on adapting to climate change.⁶⁰ The key elements of the adaptation framework are duties on the Government to:

- Assess, and report to Parliament on, the risks for the UK of the impact on climate change. Impact reports are required every five years and must take into account advice from the CCC: *section 56*.
- Develop an adaptation programme setting out the Government's proposals and policies for adaptation to climate change. The adaptation programmes must be laid before Parliament "as soon as is reasonably practicable" after each section 56 impact report is tabled with Parliament: *section 58*.

The CCC also has two functions relating to adaptation:

- It must advise the Government on the preparation of the impact reports: *section 57*;
- Its annual progress report must include an assessment of the progress made towards implementing the objectives, proposals and policies set out in the Government's adaptation programmes: *section 59*.

The Act also gives the government the power to issue guidance and direction to other bodies with public functions and statutory utility operators on: assessing the risks of climate change, preparing policies and proposals to address those risks, and assessing implementation progress: *sections 61-69*.

3.7 Enforcing the Act

The Act is unusual in imposing unqualified requirements on Ministers to achieve a particular outcome,⁶¹ namely the Secretary of State's duty to meet the 2050 target and interim carbon budgets (the "primary duties"). In addition to these primary duties, the Act contains procedural obligations (such as reporting to Parliament on various matters).

Legal enforceability

So what happens if the requirements of the Act are breached? In theory, the Act is enforceable by the courts through judicial review. In practice however, the position is not clear-cut.

Whilst failure to comply with the Act's procedural obligations (such as to produce reports) would be judicially reviewable, there is uncertainty and debate regarding the legal enforceability of the primary duties.⁶² Although the government took the clear view when formulating the Act that the primary

⁵⁹ It is acknowledged that the Productivity Commission's *Low-emissions economy* inquiry has only very limited terms of reference in relation to adaptation issues. The adaptation aspects of the Act are nonetheless briefly outlined in this paper in order to provide a complete picture of the UK's statutory framework on climate change.

⁶⁰ See Secretary of State, 2013, *Post-legislative Scrutiny of the Climate Change Act*, p.7.

⁶¹ See discussion of the Act's "outcome duties" in Reid, 2012.

⁶² See discussion in McMaster, 2008; Macrory, 2014; McHarg, 2011; Reid, 2012; Church, 2015.

duties would be enforceable in the courts,⁶³ there are potential obstacles to judicial enforcement of these duties. Issues include:

- Challenges in finding an effective and appropriate remedy
 - As discussed above, the Act requires the government to report to Parliament if carbon budgets or the 2050 target are not met (that is, to report on proposals and policies to compensate in future periods for the excess emissions if a carbon budget is exceeded, and if the 2050 target is not met, to explain why not).⁶⁴ It is therefore arguable that the appropriate remedy is that provided in the Act itself and that “the legislation explicitly envisages political accountability of government to Parliament rather than legal accountability to the courts.”⁶⁵
 - The courts could potentially make a declaration that a primary duty has been breached, but a mere declaration would be “something of a pyrrhic victory.”⁶⁶ Finding an effective remedy poses challenges. The court could, for example, order the government to purchase emissions credits on the open market to make up the target or budget shortfall, but that would likely defeat limits set under the Act on the use of international carbon credits.⁶⁷
 - The timing for any judicial review also presents challenges. A breach will only occur after the relevant date: for example, in the case of the long-term target, after 2050. Legal action brought before then risks being judged premature, but if left until after 2050, then it is potentially futile (particularly given the difficulties in identifying an effective legal remedy).⁶⁸
- Role of the courts in complex policy priority and resource allocation decisions
 - Meeting carbon budgets and the 2050 target “requires a complex aggregation of legal, financial, policy and practical measures taken by government and others over a prolonged period.”⁶⁹ Enforcing the primary duties (particularly if that involved granting a remedy beyond mere declaratory relief) would therefore require the courts to intervene in an area they are typically reluctant to tread - that of getting drawn into “complex and polycentric issues of policy prioritization and resource allocation.”⁷⁰

Whilst the conventional view appears to be that the primary duties will be difficult to enforce in the courts, there is an alternative view that greater judicial interventionism is warranted (particularly given the clear and unqualified nature of the duties) and that the primary duties are capable of effective legal enforcement.⁷¹ In any event, the *risk* of judicial review itself carries weight and has been cited as a factor that has influenced government decisions in practice.⁷²

⁶³ Secretary of State, 2007, Taking Forward the Climate Change Bill, p.23.

⁶⁴ Sections 19 and 20.

⁶⁵ Macrory, 2014, p.266. The section 19 and 20 reporting duties were added to the Bill in response to concerns from one of the Parliamentary Committees about whether the target duty was legally enforceable. The Committee wanted a compliance mechanism to compel the Secretary of State to redress any failure to meet the target. The Government maintained its firm view that the legislation (including the 2050 target) was legally enforceable by the courts via judicial review, but did add the section 19 and 20 reporting duties.

⁶⁶ Macrory, 2014, p.263.

⁶⁷ Church, 2015, p.131.

⁶⁸ Reid, 2012, pp.10-11 and Macrory, 2014, p.263.

⁶⁹ Reid, 2012, p.3.

⁷⁰ McHarg, 2011, p.478. See also discussion in Reid, 2012.

⁷¹ McHarg, 2011; Macrory, 2014; Reid, 2012; Church, 2015 (particularly pp.129-133).

⁷² David Kennedy, former CCC Chief Executive, cited judicial review risks as influential in the government’s decision to accept the CCC’s fourth carbon budget: see Kennedy, 2011.

Beyond strict legal enforcement: wider implications of the primary duties

Regardless of whether the Act's primary duties are legally enforceable, the existence of the duties in primary legislation has wider (and arguably more significant) implications.⁷³ In particular:

- Clear political accountability
 - Having statutory duties, coupled with requirements to report to Parliament, helps to ensure the government is held politically accountable for any failure to comply with those duties. The clear nature of 2050 target duty and its ability to be readily understood by the public also aids in maintaining political pressure.⁷⁴ Arguably, the real importance of putting the primary duties into law “[lies] in the visibility given to an issue, rather than any formal sanctions, as the crucial means of influencing behaviour.”⁷⁵
- Greater permanence and scrutiny
 - Compared with simply announcing a carbon target in policy statements, putting the 2050 target into primary legislation “allowed for a more formal, longer, and more transparent process for adopting the targets, involving deeper scrutiny.”⁷⁶ It also helps guard against policy ‘u-turns’:

expressing the duty in primary legislation gives it a moral dimension and permanence which cannot be replicated in mere statements of government policy. Such policy statements can be readily changed and fudged, and while the statutory duty could be removed by a future government this would have to be done by new legislation, subject to public and parliamentary scrutiny rather than simply announcing a change of policy.⁷⁷

- Indirect legal and governance implications
 - Even if the 2050 target duty is not directly enforceable, “the very existence of the duty...may have indirect legal implications in that the courts may invoke the duty to interpret other legislation or judge the legality of government acts by reference to these requirements.”⁷⁸ The statutory status of the primary duties also gives the climate change targets ‘enhanced status’ within government; the duties become a relevant consideration more generally in the exercise of government functions (including wider policy decisions) and gain extra weight in internal resource allocation decisions.⁷⁹

The statutory duties therefore have value, even in the face of uncertainty about their strict legal enforcement. As observed by Lord Rooker during the passage of the Climate Change Bill in the House of Lords:

Putting a duty such as this into law is important in itself. It is not just about the punishment in the event of failure; it is about trying to change institutional behaviour through a change in the law...By putting these duties into law, we are giving them a constitutional significance which will permeate down to every level of decision making. There is no other way of achieving an equivalent effect without using the law. The duty should be looked at in this broader constitutional sense, rather than just in terms of what happens in court.⁸⁰

⁷³ Macrory, 2014, p.263.

⁷⁴ Macrory, 2014, pp.263-264.

⁷⁵ Reid, 2012, p.14.

⁷⁶ Reid, 2012, p.13.

⁷⁷ Macrory, 2014, p.264.

⁷⁸ Macrory, 2014, p.264.

⁷⁹ Reid, 2012, p.14.

⁸⁰ House of Lords, 2007 November 27, Climate Change Bill Second Reading (col 1209). Retrieved from <https://publications.parliament.uk/pa/ld200708/ldhansrd/text/71127-0014.htm>.

4 The Act in practice

This section focuses on the Act in practice by:

- Briefly discussing the institutions supporting the Act; then
- Considering how the Act has performed so far, and its political durability.

4.1 Institutions supporting the Act⁸¹

The CCC

The Act's key "institutional innovation"⁸² is the CCC. As discussed above, the CCC is an independent non-departmental body. Lord Adair Turner chaired the CCC from 2008 to 2012, and was succeeded by the current chair, Lord Deben (member of the House of Lords and former Conservative MP, who was Secretary of State for the Environment from 1993-1997).⁸³ The CCC currently comprises the chair plus seven other members.⁸⁴ The CCC describes itself as being made up of experts in the fields of climate change, science, economics, behavioural science, and business. More specifically, its current members have backgrounds in politics, engineering, behavioural science, business/private sector, meteorology, economics, climate change science and sustainable energy.⁸⁵

Around 30 staff support the CCC.⁸⁶ The CCC is almost exclusively funded by government grants, and received £3,382,291 for 2016-17.⁸⁷ Net expenditure of the CCC for 2016-17 totalled £3,472,236, approximately two-thirds of which was staff (including committee members) costs (with research costs the next biggest expense).⁸⁸ Publications by the CCC, plus other information including Committee member details and meeting minutes, are available on the CCC's website.⁸⁹

It is noted that the CCC was initially set up in 'shadow form' in March 2008 (prior to the Act being passed in November 2008), which enabled the CCC to meet the otherwise impossible statutory deadlines of advising on the level of the first three budgets and the level of the 2050 target by 1 December 2008.⁹⁰

Government

Alongside the CCC, government institutions play a key role in supporting the Act (particularly in light of the various duties on the Secretary of State and associated reporting requirements). Until July 2016, the Department of Energy and Climate Change ("DECC") had primary responsibility for climate change

⁸¹ In the UK, the devolved administrations (Scotland, Wales and Northern Ireland) also have their own institutions involved in implementing aspects of the Act. This paper focuses on the central UK government institutions.

⁸² Lockwood, 2013.

⁸³ Lord Deben also runs Sancroft (a corporate responsibility consultancy working with blue-chip companies around the world on environmental, social and ethical issues) and is Chairman of Valpak Limited and of The Personal Investment Management and Financial Advice Association.

⁸⁴ The CCC's Annual Report and Accounts 2016-17 (July 2017) notes that in practice chairs and committee members are normally appointed for a fixed period up to five years (p.21).

⁸⁵ Brief biographies of Committee members are available at <https://www.theccc.org.uk/about/committee-on-climate-change/>.

⁸⁶ Staff numbers in 2016/17 totalled 28.2 (CCC, 2017, Annual Report and Accounts 2016-17, p.28), which compares with 31 staff noted in the 2013 Triennial Review. During the pre-legislative scrutiny phase, the parliamentary committees all emphasised the importance of ensuring that the Committee is adequately resourced: Secretary of State, 2007, Taking Forward the UK Climate Change Bill, p.30.

⁸⁷ CCC, 2017, Annual Report and Accounts 2016-17, p.52.

⁸⁸ CCC, 2017, Annual Report and Accounts 2016-17, p.40.

⁸⁹ www.theccc.org.uk

⁹⁰ As required by section 33(3) and section 34(4)(a). The Government explained the rationale for the shadow CCC as follows: "To ensure that the Committee is able to provide high quality advice by this deadline, and so that it is fully up and running as soon as possible after it gains its full legal responsibilities and status, the Government is setting up the Committee in shadow form this year as a non-statutory advisory body. We consider that this achieves the best balance between establishing the Committee in sufficient time to begin its analysis and ensuring it has sufficient resource to discharge its duties effectively, while retaining flexibility to respond to any changes as the Bill passes through Parliament.": Secretary of State, 2007, Taking Forward the UK Climate Change Bill, p.28.

issues, led by the Secretary of State for Energy and Climate Change.⁹¹ Following Theresa May's appointment as Prime Minister in July 2016, DECC was merged with the Department for Business, Innovation and Skills to form the Department for Business, Energy and Industrial Strategy ("BEIS").

BEIS is led by the Secretary of State for Business, Energy and Industrial Strategy, with supporting Ministers who include the Minister of State for Climate Change and Industry. The abolishment of DECC has been criticised as being a 'major setback', with concerns raised that the decision signals a downgrading of climate change on the government's agenda.⁹² The alternative view is that bringing energy and climate change issues together with industrial strategy has the potential to create a strong platform from which to decarbonise the UK economy.⁹³ The current Secretary of State for Business, Energy and Industrial Strategy, Greg Clark, has expressed the view that:⁹⁴

In the run up to Copenhagen, and before the Climate Change Act, the creation of DECC reflected the need to bring climate change action to the top of the political agenda.

But now the debate about whether to reduce emissions is over. The question, post the remarkable Paris agreement, is how you make it happen and in so doing, how to capture the huge economic opportunity of climate change action for UK businesses.

That is why bringing together climate, energy, business and industrial strategy is so important. Indeed, the imperative to act on the low carbon economy will underpin our industrial strategy.

Parliament

Parliament has an important role in approving key decisions under the Act via the affirmative resolution procedure (such as the setting of carbon budgets). The Act's reporting framework also ensures that implementation of the Act is subject to ongoing Parliamentary scrutiny. Parliament's scrutiny of the Act includes Select Committee inquiries - for example, the House of Commons established an Energy and Climate Change Committee in 2008 to scrutinise DECC's work, and following the establishment of BEIS in 2016 a new Business, Energy and Industrial Strategy Committee now covers climate change issues.⁹⁵ Committee inquiries have included, for example, the Energy and Climate Change Committee's 2015-16 inquiry into setting the fifth carbon budget (which reflected one of the Committee's stated key goals of influencing the long-term approach to climate targets).⁹⁶

4.2 How has the Act performed to date?

Performing well so far, but challenges ahead

The Act is highly regarded. Its implementation to date has achieved, or progressed towards, many of its key objectives, including demonstrating UK leadership, enhancing transparency and accountability, and "setting a clear framework and ensuring ongoing impetus for UK action".⁹⁷ A 2016 report by NGO ClientEarth observes that:

The UK is rightly proud of the Climate Change Act. The Act sets statutory emission reduction targets that give stakeholders, investors and the wider business community clear signals about the direction of travel. It establishes a framework of regular reporting and reappraisal that helps keep climate change politically salient. It provides independent expert guidance through the Committee on Climate Change. And it charts a path for emissions reductions which reduces disruption and costs over the long-term. It adds credibility to the UK's positive climate diplomacy and it acts as a model and catalyst for the creation of similar climate laws around the world.⁹⁸

⁹¹ Between 2008 and 2016 the position of Secretary of State for Energy and Climate Change was held by Ed Miliband, Chris Huhne, Ed Davey, then Amber Rudd. Climate change adaptation is led by the Department for Environment, Food and Rural Affairs.

⁹² Vaughan, 2016, Abolition of Decc 'major setback for UK's climate change efforts'.

⁹³ Fankhauser, 2016, Why the end of DECC could be good news on climate change.

⁹⁴ Clark, G, 2016, Speech at the annual UK energy conference. Retrieved from <https://www.gov.uk/government/speeches/greg-clark-speech-at-energy-uk>.

⁹⁵ Information about UK Parliamentary Committees is available at <http://www.parliament.uk/business/committees/>.

⁹⁶ House of Commons Energy and Climate Change Committee, 2016, Setting the Fifth Carbon Budget.

⁹⁷ Solomon Williams, 2017, The UK Climate Change Act: standing strong in a time of change.

⁹⁸ Church, 2016, Mind the Gap, p.39.

Research in 2014 by Benson and Lorenzoni highlights that “many of our interviewees professed admiration of an Act which, as a politically acceptable compromise, enshrines a long-term framework with inbuilt flexibility to enable administrations to respond to changing circumstances.”⁹⁹

Despite all of the Act’s achievements, it is however premature to judge the Act an ultimate success, particularly in terms of its fundamental goal of reducing emissions to achieve the long term target. Some sticking points are already evident and there are significant challenges ahead. The heart of the issue is that implementing the Act is likely to be increasingly challenging (requiring “much tougher political choices about the nature of UK society”¹⁰⁰) and there is a growing gap between targets and implementation of policies to achieve those targets.¹⁰¹

Key aspects of the Act’s performance, including challenges faced in implementing the Act, are discussed below.

UK leadership

One aim underpinning the Act was to demonstrate leadership by example. The Act can be judged a success in this regard.

The UK has taken an international leadership role on climate change issues, both within the EU and in wider international negotiations (including those leading to adoption of the Paris Agreement), and the existence of the Act has arguably enhanced its credibility in that role.

The Act is viewed as world-leading and has been cited as a model for climate change legislation in various countries, including:

- Denmark’s Climate Change Act (2014);
- Finland’s Climate Act (2015);
- Norway’s climate change law (2017);
- French legislation; and
- Mexico’s General Law on Climate Change (2012).¹⁰²

Australian legislation also includes some features similar to those in the UK Act, such as the establishment of the Climate Change Authority (a national independent statutory body)¹⁰³ and Victoria’s Climate Change Act 2017 includes elements such as a long-term emission reduction target, five yearly interim targets and a reporting system.¹⁰⁴

It is noted that the detail of the legislation in other countries would need to be examined in order to understand the extent to which it replicates the Act (and the rationale for any departures from the UK model).

Value of the CCC

The CCC has an excellent reputation. It has produced reports that carry “immense authority”¹⁰⁵ and has high credibility. A review of the CCC was carried out in 2013 as part of a Cabinet Office process for

⁹⁹ Benson & Lorenzoni, 2014, p.206.

¹⁰⁰ Benson & Lorenzoni, 2014, p.208.

¹⁰¹ Gillard, 2016, p.35.

¹⁰² Church, 2016, Mind the Gap, p.44. The Government’s October 2016 response to the CCC’s progress report notes that the Act is “seen as a model for climate legislation, with it being replicated in other countries, such as France.” (p.8). Scotland has also enacted the Climate Change (Scotland) Act 2009.

¹⁰³ The Climate Change Authority was established under the Climate Change Authority Act 2011. Information about the Authority is available on its website at <http://climatechangeauthority.gov.au/>.

¹⁰⁴ Information about Victoria’s Climate Change Act 2017 is available at <https://www.climatechange.vic.gov.au/legislation/climate-change-act-2017>. See also discussion in Generation Zero, 2017, International case studies and lessons for New Zealand: A Zero Carbon Act research paper, pp.18-21.

¹⁰⁵ Macrory, 2014, p.267.

reviewing the functions of non-departmental public bodies. The review team concluded that there was an extremely strong case for the CCC's functions and noted that:

From the evidence gathered from all stakeholder groups, there is a consensus that it is essential that there remains an independent source of advice for Government, both at Ministerial and official levels, on the key issues of climate change. It is considered that the CCC has the necessary expertise to provide the detailed analysis and advice required to ensure that Government sets and maintains appropriate targets and is held accountable, as set out in its core functions under the 2008 Climate Change Act.¹⁰⁶

Comments from stakeholders during the review process included that "the ASC and CCC are viewed as highly credible, transparent brokers of climate and energy-related information" and that "the CCC's and ASC's advice sets the framework for having the debate with Government" and "provides a point of reference that others hang on to including [Parliamentary] select committees".¹⁰⁷ The review report also noted that, although much of the CCC's analysis can and has been replicated by government departments (such as modelling work), the CCC has "raised the bar" on climate change analysis.¹⁰⁸

The review also revealed some interesting different perspectives within government about the CCC's role. Benson and Lorenzoni note that:

Although the UK government's recent review of the CCC was overall positive, it pointed to discrepancies emerging among departments who support focus and action on mitigation and those who are more reticent, indicating that some feel that the CCC risks undermining its credibility by straying into lobbying when providing advice – that it should be more realistic and also consider real-world politics...in formulating guidance.¹⁰⁹

More recently, a 2016 Parliamentary Select Committee report on the fifth carbon budget records positive stakeholder feedback about the CCC, including for example that the CCC produces "very professional, highly robust and scientifically relevant reports" and that the government takes the CCC's advice very seriously.¹¹⁰

The CCC has produced a large body of work¹¹¹ and, to date, the CCC's advice has been highly influential. As discussed further below, the first five carbon budgets have all been set at the levels recommended by the CCC. The government has not however accepted all aspects of the CCC's advice. For example, in 2012 the CCC recommended that international aviation and shipping emissions be formally included in carbon budgets but the government instead decided to defer a final decision on that matter,¹¹² and in 2016 the CCC recommended that no international carbon units be used to meet the third carbon budget (other than those traded under the EU ETS) but the government instead set a credit limit of 55MtCO₂e (around 2% of the total budget).¹¹³

The CCC has described the philosophy behind its recent advice on the fifth carbon budget as follows:

The basic premise behind the Committee's advice is that the budget should follow the lowest cost path to the long-term target. That lowest cost path is likely to involve steady action, avoid stop-start investment and ensure sufficient lead time for making more difficult changes. That has been the clear message from the Committee's extensive discussions with businesses and other stakeholders. It is also borne out by the analytical evidence set out in the Committee's reports.

By following that steady-action path, the Committee's recommended budget best satisfies the multiple criteria, including affordability, competitiveness and security of supply, laid out in the Climate Change Act.¹¹⁴

¹⁰⁶ DECC, 2014, Triennial Review, p.11.

¹⁰⁷ DECC, 2014, Triennial Review, p.10.

¹⁰⁸ DECC, 2014, Triennial Review, p.15.

¹⁰⁹ Benson & Lorenzoni, 2014, p.206.

¹¹⁰ House of Commons Energy and Climate Change Committee, 2016, Setting the Fifth Carbon Budget, pp.7-8.

¹¹¹ The CCC's Corporate and Business Plan 2016-2019 includes a summary of key achievements for 2015-2016 (pp.3-6). CCC publications are available on its website.

¹¹² CCC, 2012, Scope of Carbon Budgets – Statutory advice on inclusion of international aviation and shipping.

Department of Energy and Climate Change, 2012, International aviation and shipping emissions and the UK's carbon budgets and 2050 target.

¹¹³ Lord Deben letter to Secretary of State Amber Rudd dated 24 February 2016 and The Climate Change Act 2008 (Credit Limit) Order 2016.

¹¹⁴ Thompson, 2016, The fifth carbon budget – a balanced path to a necessary goal. Retrieved from <https://www.theccc.org.uk/2016/03/31/the-fifth-carbon-budget-a-balanced-path-to-a-necessary-goal/>.

As noted earlier, the CCC does not have a statutory duty to advise on proposals and policies for meeting carbon budgets. Nonetheless, the CCC's role under section 34 in providing advice in connection with carbon budgets (which includes advice relating to the contributions to be made by different sectors of the economy), alongside its progress reporting role, mean the CCC does in practice analyse and comment on policy measures. For example, the CCC's fifth carbon budget report includes discussion on particular priorities for policy development¹¹⁵ and outlines emission reduction scenarios, including a central scenario that represents the CCC's best estimate of a cost-effective path for the UK to reach the 2050 target (but the CCC's report is however clear that the scenarios are not prescriptive paths that must be followed).¹¹⁶ The CCC's 2017 progress report also includes policy recommendations, though recognises it is for the government to determine the policy package to meet carbon budgets.¹¹⁷

Driving action and accountability

The Act's framework has driven action. There has been high levels of compliance with the Act's procedural and substantive obligations.¹¹⁸ A suite of reports and plans have been prepared, statutory instruments made and material reported to Parliament.¹¹⁹ For example:

- Five carbon budgets have been set (as discussed further below).
- Proposals and policies for meeting the statutory carbon budgets have been published (the 2009 Low Carbon Transition Plan and the Carbon Plan 2011).¹²⁰
- Limits have been set on the net amount of carbon units that may be credited to the UK for the first, second and third carbon budgets.¹²¹
- Annual statements of emissions have been published.¹²² The most recent such statement is the Annual Statement of Emissions for 2015, which was presented to Parliament in March 2017.¹²³
- Regulations have been made setting out carbon unit and carbon accounting details (such as specifying the types of carbon units to be used for carbon accounting).¹²⁴
- The CCC has produced annual progress reports, which the government has formally responded to. The most recent CCC progress report was laid before Parliament in June 2017,¹²⁵ with the government's response due by 15 October 2017.

As well as actions taken to comply with direct statutory obligations, wider impacts of the Act are also evident. The Act has influenced policies in practice, with policies across various sectors (such as energy

¹¹⁵ At pp.125-126.

¹¹⁶ At p.16.

¹¹⁷ For example, the CCC's 2017 progress report includes a possible package of measures to deliver required emission reductions (based on the CCC's fifth carbon budget scenarios), but with the express acknowledgement that the government "may choose to aim for a different balance of effort": CCC, 2017, Meeting Carbon Budgets: Closing the policy gap, p.12.

¹¹⁸ Benson & Lorenzoni, 2014.

¹¹⁹ The Government's 2013 Post-legislative Scrutiny of the Climate Change Act 2008 memorandum summarises key actions taken to implement the Act in its first five years: Secretary of State, 2013.

¹²⁰ The 2009 Low Carbon Transition Plan set out the approach for meeting the first three budgets. The Carbon Plan 2011 then set out updated proposals and policies, and outlined the approach for also meeting the fourth carbon budget to 2027.

¹²¹ As required by section 11 of the Act. See The Climate Change Act 2008 (Credit Limit) Order (SI 2011/1602), The Climate Change Act 2008 (2020 Target, Credit Limit and Definitions) Order 2009 (SI 2009/1258), and The Climate Change Act 2008 (Credit Limit) Order 2016.

¹²² As required by section 16 of the Act.

¹²³ Department for Business, Energy & Industrial Strategy, Annual Statement of Emissions - Reporting UK 2015 emissions to Parliament under the Climate Change Act 2008, March 2017.

¹²⁴ The Carbon Accounting Regulations 2009 (SI2009/1257).

¹²⁵ The CCC's 2017 Report to Parliament included the CCC's report entitled 'Meeting Carbon Budgets: Closing the policy gap', as well as the Adaptation Sub-Committee's report on 'Progress in preparing for climate change'.

and transport) introduced for the purpose of reducing emissions.¹²⁶ The courts have also recognised the Act's relevance to government policy decisions, with the High Court indicating that the Act must be considered in the context of policy decisions about the construction of a third runway at Heathrow airport.¹²⁷

The framework set by the Act has helped "move climate change from political fashion to the permanent agenda."¹²⁸ Arguably, without the processes mandated by the Act, UK action on climate change would have been less ambitious. Commentators have pointed in particular to the power of the Act in securing the ambitious fourth and fifth carbon budgets.¹²⁹

The planning and reporting obligations placed on government and the CCC also have value in "produc[ing] a kind of transparent dialogue that invites political accountability."¹³⁰

Carbon budgets and the 'policy gap'

The Act has now resulted in the setting of five carbon budgets, which collectively cover the period 2008-2032.¹³¹ The budgets require increasingly ambitious levels of emissions reductions, as shown in Table 1.

Table 1 Carbon budgets

Carbon budget	Timeframe	Budget level	Reduction below 1990 levels
First budget	2008 to 2012	3,018 MtCO ₂ e	25%
Second budget	2013 to 2017	2,782 MtCO ₂ e	31%
Third budget	2018 to 2022	2,544 MtCO ₂ e	37% by 2020
Fourth budget	2023 to 2027	1,950 MtCO ₂ e	51% by 2025
Fifth budget	2028 to 2032	1,725 MtCO ₂ e	57% by 2030

Source: Adapted from CCC website: <https://www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/>

Fourth carbon budget controversy

Initially, the setting of budgets was relatively smooth, with the Government accepting the CCC's recommendations for the level of the first, second and third budgets (which were all set in 2009). The fourth budget however was "very ambitious to facilitate the UK being firmly on a downward path in the 2020s"¹³² and proved much more controversial.

Cabinet was split over whether to accept the CCC's advice and "an unusually public row between different government departments developed."¹³³ Some ministers, including the Chancellor of the Exchequer, argued for a lower target with greater reliance on purchasing overseas credits (based on concerns about the costs of committing to the budget and adverse impacts on the UK's economic

¹²⁶ Benson & Lorenzoni, 2014, p.206.

¹²⁷ See discussion of *R on the application of the London Borough of Hillingdon and others v Secretary of State for Transport* [2010] EWHC 626, 26 March 2010 in Macrory, 2014, pp.270-272.

¹²⁸ Institute for Government, n.d.

¹²⁹ Macrory, 2014, p.272; Church, 2016; Lockwood, 2013.

¹³⁰ Church, 2016, Mind the Gap, p.13.

¹³¹ As required by the Act, the carbon budgets were set by statutory order: the first three budgets were set by The Carbon Budget Order 2009 (SI 2009/1259), the fourth budget by The Carbon Budget Order 2011 (SI 2011/1603) and the fifth by The Carbon Budget Order 2016 (SI 2016/785). Whilst carbon budgets have been set as required by the Act, it is noted that there was a minor breach of the legal timeframes in that The Carbon Budget Order 2016 (which set the fifth carbon budget) was made on 20 July 2016, whereas the Act technically required the budget to be set by 30 June 2016: section 4(2)(b).

¹³² Kennedy, 2011, p.6.

¹³³ Macrory, 2014, p.273.

competitiveness).¹³⁴ Ultimately, and following intervention of the Prime Minister,¹³⁵ the government announced to Parliament in May 2011 that it would accept the budget recommended by the CCC. Macrory identifies that whilst “[o]n the surface, this looked like a clear victory for the Committee’s approach...there were two potentially significant qualifications in the government response, which clearly reflect the outcome of complex political compromise”.¹³⁶ The government rejected the CCC’s advice that the reductions should be wholly achieved by domestic action, and also said it would review the UK’s carbon budget in 2014 and potentially increase it if the UK domestic commitments put the UK on a different trajectory than the EU.¹³⁷

In December 2013 the CCC concluded its review of the fourth carbon budget and advised that “there has been no significant change in circumstances as specified in the Climate Change Act and therefore the budget should not and cannot be changed under the terms of the Act.”¹³⁸ The government announced in July 2014 that it had decided to leave the fourth carbon budget unchanged, noting that the decision was consistent with the advice of the CCC and also reflected the views of the vast majority of businesses, investors and environmental groups.¹³⁹

Policy gap for meeting fourth and fifth budgets

The Act’s track record so far is very positive, with the first carbon budget met and the UK looking set to meet the second and third budgets (to 2022) too. In the early years of implementation, the UK government has however had the benefit of ‘low hanging fruit’ to help meet the initial budgets. As highlighted by the CCC, a “step change” is needed if subsequent budgets and the 2050 target are to be met. There is an acknowledged ‘policy gap’ in that the proposals and policies in the 2011 Carbon Plan would deliver insufficient emission reductions to meet the fourth carbon budget (2023-2027).¹⁴⁰

The position is usefully summarised in the Government’s response to the CCC’s 2016 progress report, which states:

We met the first carbon budget (2008-2012) and our projections show that we are on track to meet the second and third (2013-2017 and 2018-2022). However, we recognise that our emissions over the fourth carbon budget (2023-2027) are currently projected to be 10% greater than the budget level. In short, we have a ‘gap’ to meet the 51% reduction (on 1990 levels) needed over this period.

We have set a fifth carbon budget to challenge us even further than this. It requires reducing the UK’s net carbon account over 2028-2032 to 1,725MtCO_{2e}, equivalent to an average 57% reduction on 1990 levels. As expected given we have just set a new stretching target, we also have a ‘gap’ to meet this budget – our emissions are currently projected to be 18% greater than the fifth carbon budget level.¹⁴¹

The CCC’s 2017 report to Parliament (entitled “Meeting Carbon Budgets: Closing the policy gap”) explains the crux of the problem:

UK emissions have fallen while the economy has grown, but progress will not continue without new policies. It would be wrong to assume that the UK has permanently shifted to a path of falling emissions. Three-quarters of the decline in emissions from 2012 to 2016 has come from the reduction in the use of coal for power generation, which is now at low levels. Eliminating the remaining coal-fired generation would deliver less than two years’ worth of the required progress to 2030. In stark contrast, emissions from transport (which make up 26% of total emissions) were higher in 2016 than in any year since 2009.¹⁴²

¹³⁴ Macrory, 2014, p.273; Kennedy, 2011, p.6.

¹³⁵ Macrory, 2014, p.273. Grimwood, 2016, pp.14-15.

¹³⁶ Macrory, 2014, p.273.

¹³⁷ Macrory, 2014, p.273.

¹³⁸ CCC, 2013, Fourth Carbon Budget Review - Part 2.

¹³⁹ Davey, 2014.

¹⁴⁰ The acknowledged policy gap is arguably in breach of the Act, in particular section 13(1) which requires the Secretary of State to prepare “such proposals and policies as the Secretary of State considers will enable the carbon budgets that have been set under this Act to be met”, and section 14 requires the Secretary of State to report to Parliament on “proposals and policies for meeting the carbon budgets for the current and future budgetary periods...”. NGO ClientEarth takes the view that the projected shortfalls to meet the fourth carbon budget “evidence a continuing failure on the part of government to discharge its legal duty under section 13(1)”: Church, 2016, *Mind the Gap*, p.28.

¹⁴¹ HM Government, 2016, Government response to the Committee on Climate Change, p.8.

¹⁴² Committee on Climate Change, 2017, *Meeting Carbon Budgets - Closing the Policy Gap*, p.8.

The CCC accordingly warns that “recent reductions in emissions should not detract from the urgent need for new policies to bring confidence to investors and to enable future targets to be met.”¹⁴³

Closing the policy gap with the Clean Growth Plan?

The existing policy gap means the Government faces a challenge in preparing its new plan of policies and proposals for meeting carbon budgets up to and including the fifth budget.

The fifth carbon budget was set in June 2016, but the Government’s latest plan (to be called the Clean Growth Plan) is still awaited. Despite having been originally due for release in 2016 and then promised in early 2017, the timeframe has kept slipping. The Government has recently signalled that the plan will now be published after Parliament returns from the summer recess in September.¹⁴⁴

There has been mounting criticism of the delay, with concerns raised that the Government is now arguably in breach of the Act’s requirement to table the plan “as soon as is reasonably practicable” after each carbon budget is set. The CCC is among those calling for urgent release of the Government’s plan, stating that it is “no longer justified or wise to delay the publication of the emissions reduction plan required by law” and that the plan “must address the gap between Parliament’s agreed targets and the impact of existing policies.”¹⁴⁵ Legal action over the delay has been threatened by NGO ClientEarth.¹⁴⁶

The timing for release of the Clean Growth Plan has been affected by political events such as Brexit and the June 2017 snap election, but Minister of State for Climate Change and Industry, Claire Perry, also recently told Parliament that:¹⁴⁷

I want the carbon growth plan to be as ambitious, robust and clear a blueprint as it can be, so that we can continue to deliver on this hugely vital piece of domestic and international policy. I am therefore taking the time to ensure that the draft could be extended to become more ambitious...

In light of the existing policy gap for meeting carbon budgets in the 2020s and beyond, the forthcoming Clean Growth Plan will be a useful barometer of the current Conservative Government’s commitment to the Act.¹⁴⁸

The UK’s future path to reducing emissions will also be complicated by Brexit. Importantly, the Act itself is domestic legislation and therefore “stands irrespective of the UK’s membership of the EU.”¹⁴⁹ Nonetheless, EU policies play a significant role in both recent and projected UK emission reductions. The UK’s withdrawal from the EU therefore creates policy uncertainty and may also require the UK government to “reassess the most cost-effective means of reaching the UK’s climate change targets post-Brexit.”¹⁵⁰

Future moves to a net-zero target?

Notwithstanding that a ‘step change’ is needed to reach the existing 2050 target, the adequacy of the long term target has been questioned in light of the international Paris Agreement. That is, should the Act contain a net-zero target?

¹⁴³ Committee on Climate Change, 2017, Meeting Carbon Budgets - Closing the Policy Gap, p.8.

¹⁴⁴ Statement by Minister of State Claire Perry on 27 June 2017, see <https://hansard.parliament.uk/Commons/2017-06-27/debates/A599A27B-B95E-473D-A218-2E7721C5ECB9/CarbonReductionPlan>

¹⁴⁵ See CCC news release “New plans for a new Parliament are urgently needed to address climate change risks” (29 June 2017). <https://www.theccc.org.uk/2017/06/29/new-plans-for-a-new-parliament-are-urgently-needed-to-address-climate-change-risks/>.

¹⁴⁶ Johnston, 2017.

¹⁴⁷ House of Commons (UK), 2017, Oral answers to questions: Carbon Reduction Plan.

¹⁴⁸ Secretary of State, Greg Clark, has acknowledged that the plan “will be an important statement of our seriousness to reduce carbon emissions.”: see 2016, Speech at the UK energy conference.

¹⁴⁹ Committee on Climate Change, 2016, Meeting Carbon Budgets - Implications of Brexit for UK climate policy, p.5. It is noted that, should the UK leave the EU Emissions Trading Scheme, this would require a change in accounting rules for carbon budgets, and potentially an adjustment of carbon budgets themselves (because currently the part of the budget covered by sectors in the EU ETS is set by the UK share of the EU ETS cap rather than actual emissions from those sectors): see p.6.

¹⁵⁰ House of Lords European Union Committee, 2017, Brexit: environment and climate change, p.40.

In 2016, former Labour leader Ed Miliband proposed an amendment (put forward as a proposed new clause in the Energy Bill 2016) that would enshrine a net zero target in the Act.¹⁵¹ The proposal was to make achieving a net-zero target a legal duty, but to give the Government a window of time before needing to set the target year. The amendment proposed a new section 3A 'Net UK carbon emissions target: zero emissions year' that included the following provisions:

-
- (1) The Secretary of State shall set a date by which net UK emissions must be zero or lower ("the zero emissions year") by order no later than 12 months from the date on which the Energy Act 2016 comes into force.
 - (2) It is the duty of the Secretary of State to ensure that the net UK emissions for the zero emissions year and each year thereafter is zero or less.
-

The amendment failed, but the Government accepted that the Paris commitment to net zero emissions should be enshrined in UK law, and that the question was "not whether, but how we do it."¹⁵² The CCC has subsequently advised on the implications of the Paris Agreement for UK emissions targets, recommending that the Government does not alter the existing carbon budgets and 2050 target now, but setting a target that reflects the global need to reach net zero emissions should be kept under review.¹⁵³

4.3 How politically durable is the Act?

Continued support for the Act

To date, the Act has shown strong political durability and has continued to enjoy cross-party support. Successive governments have reaffirmed their commitment to the Act, and continued cross-party support was evidenced for example in the February 2015 declaration on climate change signed by the Conservatives, Labour and Liberal Democrats, which included a pledge to "work together, across party lines, to agree carbon budgets in accordance with the Climate Change Act."¹⁵⁴ After the fourth carbon budget was set in 2016, Lord Deben of the CCC observed that:¹⁵⁵

The current Government's agreement with my Committee's recommendation about the fifth carbon budget (to reduce UK emissions by 57% by 2030) means that first Labour, then Conservative-Liberal Democrat, and now Conservative Governments have backed the framework created by the Climate Change Act 2008.

More recently, the Government's response to the CCC's 2016 progress report noted that, following the June 2016 referendum, the Government was now preparing for Brexit but expressly stated that "[w]e remain fully committed to the UK's Climate Change Act and the targets under it."¹⁵⁶

It is also testament to the Act's political durability that, to date, there have been remarkably few amendments to the core provisions of the Act (despite the various changes in government since 2008).

But increasing dissensus

Despite ongoing high-level political support for the Act, the cross-party consensus that existed when the legislation was first enacted has weakened, leading some commentators to raise doubts about the long term political durability of the Act.¹⁵⁷ Benson and Lorenzoni for example identify that "cracks

¹⁵¹ Another amendment to the Act was proposed in the House of Lords via the Energy Bill 2016 (which did not ultimately succeed) that would have prevented the trading of credits by sectors in the EU ETS from being counted in the net UK carbon account and therefore requiring emissions from those sectors to be measured using actual UK emissions only: see Grimwood, 2016, UK Fifth Carbon Budget Briefing Paper, p.10.

¹⁵² Leadsom, A, 2016, House of Commons (UK) Debate on Energy Bill [Lords] (vol 607, col 725).

¹⁵³ Committee on Climate Change, 2016, UK climate action following the Paris Agreement.

¹⁵⁴ The declaration also included a pledge to "accelerate the transition to a competitive, energy efficient low carbon economy and to end the use of unabated coal for power generation." A copy of the declaration is available at http://www.green-alliance.org.uk/resources/Leaders_Joint_Climate_Change_Agreement.pdf.

¹⁵⁵ <https://www.theccc.org.uk/2016/07/19/the-uks-approach-to-tackling-climate-change/>

¹⁵⁶ HM Government, 2016, Government response to the CCC, p.6.

¹⁵⁷ Lockwood, 2013; Carter, 2014; Gillard, 2016; Rollinson, 2010; Benson & Lorenzoni, 2014.

appear to be emerging as the challenge of mitigation looms nearer and is couched as a potential threat to UK economic growth.”¹⁵⁸

Between 2006 and 2010 there was a very strong political consensus on climate change, but “contrary to the image of UK climate politics as safely institutionalised by cross-party agreement and flagship legislation, the 2010-2015 period was marked by an increasing dissensus.”¹⁵⁹ As discussed above, internal government divisions were evident with the 2011 debate about the fourth carbon budget. Shifts in policy also started to occur, with a number of climate change related policies being dropped.¹⁶⁰ The global financial crisis led to increasing focus on climate policy costs, but with some of the policy shifts “obscured under the general banner of austerity”.¹⁶¹ Inconsistent policy has prevented the Act from fully delivering on its goal of providing greater clarity and certainty:

The Act provided some certainty on high-level targets and budgets, but particular investments depend on the details of policies, and heightened uncertainty at this level since 2011 has had a corrosive effect.¹⁶²

High-level rhetoric in support of the Act has therefore not been matched by commitment to specific climate policy solutions,¹⁶³ as evidenced by the current ‘policy gap’ for meeting the fourth and fifth carbon budgets. The strength of political commitment to the Act will be increasingly put to the test as tougher decisions are required in order to meet carbon budgets and the long-term target. In light of the Paris Agreement, and the UK government’s recent confirmation of its commitment to the Agreement, it is however difficult to envisage the Act being abandoned altogether.

¹⁵⁸ Benson & Lorenzoni, 2014, p.206.

¹⁵⁹ Gillard, 2016, p.35.

¹⁶⁰ For example, changes since the May 2015 general election led to the UK dropping down the league table of attractiveness for renewables investment and in November 2015 the Government unexpectedly announced the closure of a £1bn carbon capture and storage competition: Grimwood, 2016, p.8.

¹⁶¹ Gillard, 2016, p.35.

¹⁶² Lockwood, 2013, p.1344.

¹⁶³ Gillard, 2016, p.32.

5 Lessons for New Zealand?

Lessons can be drawn from the UK's experience with the Act that may be relevant in considering whether to adopt similar legislation in New Zealand. Care must however be taken before importing legal models from other jurisdictions to ensure that any proposed legislation is fit for purpose in New Zealand's particular context.

Ambitious climate change legislation is possible...with the right preconditions

Tackling climate change presents particular challenges, as it requires long term sustained commitment that does not typically align with short term political priorities. The UK experience in passing (and, to date, retaining) the Act demonstrates that the challenges in enacting ambitious domestic climate change legislation can, in the right circumstances, be overcome. Benson and Lorenzoni identify that:

perhaps the greatest lesson for other countries that can be drawn from the UK is that ambitious emissions reduction legislation is achievable where appropriate political will and multiactor consensus are cultivated, secured and ultimately maintained during implementation.¹⁶⁴

The UK experience highlights the importance of cross-party support and political leadership in securing ambitious climate change legislation. It also shows how a combination of factors coming together can create a window of opportunity to enact ambitious framework legislation.¹⁶⁵ In light of how quickly the idea of a climate change bill gained traction and the change in political climate following subsequent events like the global financial crisis, the UK example suggests that timing matters; seizing the right moment may be crucial in getting ambitious legislation on the statute books. The background to the UK Act also illustrates the importance of factors external to government in creating the right preconditions for such legislation to be passed:

What the story of the Climate Change Act does show is the vital role outside bodies and the opposition can play in creating an environment conducive to policy change – by raising the salience of issues – and how parliament can put pressure on government to act and, thereby, change the internal power balance within government.¹⁶⁶

The UK legislation has valuable design features

The Act appears to have real value as a tool for helping to achieve long term climate change goals. Fundamentally, the framework provided by the Act ensures climate change stays on the political agenda, with the Act's procedures and reporting obligations driving ongoing action, and improving transparency and accountability. More specifically:

- Enshrining a long term target, coupled with carbon budgeting, in primary legislation has value in helping to institutionalise climate change objectives across government. The legal duties to meet targets and budgets elevate the importance of emission reduction goals, making them less vulnerable to policy 'u-turns.'
- The Act is rich in procedural and reporting obligations, such as requirements to set budgets, report on proposals and policies to meet budgets, and report on annual emissions. The processes mandated by the Act, coupled with the obligations to directly report to Parliament, keep up regular momentum for, and scrutiny of, government action on climate change.
- The Act sets a clear framework but provides sufficient flexibility to help make the legislation politically palatable and to allow decision makers to respond to changing circumstances. For example:
 - five yearly carbon budgets provide a clear pathway to the longer term 2050 target but with more flexibility than the original proposed annual targets;
 - expert independent advice is provided by the CCC, but the government is the ultimate decision maker and retains the discretion to reject the CCC's advice;

¹⁶⁴ Benson & Lorenzoni, 2014, p.208.

¹⁶⁵ Carter, 2014.

¹⁶⁶ Institute for Government, n.d., p.123.

- the Act allows targets and budgets to be amended, albeit subject to both substantive and procedural constraints; and
 - the Act does not prescribe specific policies to meet budgets and targets (instead leaving the government to prepare appropriate proposals and policies).
- An independent expert advisory body can play a valuable role, both by providing high-quality advice to assist governments achieve climate change goals, but also by holding the government to account and assisting Parliament (and society) to ‘expand the debate’ on climate change. Two design features of the CCC appear to be particularly important: its independence from government and (for constitutional reasons) its role as an advisor rather than decision maker.

A carbon budgeting system that provides a clear pathway to meeting long-term emissions reduction targets also has potential environmental and economic benefits. From an environmental perspective, carbon budgets that set a declining trajectory of emissions based on quantitative limits may result in lower cumulative stocks of greenhouse gases in the atmosphere (for example, compared with making late, large emission cuts to meet long term point-in-time percentage reduction targets). Carbon budgeting may also help to provide a lower cost pathway to meet long-term targets, with clear signals given to the economy about the pace of emission reduction.

The legislation only provides the framework; it is not a substitute for ongoing political commitment to a low emissions economy

The UK legislation sets a clear framework for climate change action but governments must still put the flesh on the bones of the Act by setting and implementing policies to achieve emission reduction goals. It is therefore important not to overstate the role of the Act in ultimately achieving climate change objectives:

The Climate Change Act may be said to provide legal leadership in this field, and contains mechanisms and principles that may well provide a model for climate change legislation in other jurisdictions despite different cultural and national traditions. But it will be no substitute for the political leadership that will be key in the years to come.¹⁶⁷

The existing policy gap for meeting the UK’s fourth and fifth carbon budgets illustrates how high level commitment to the Act is not enough; it must be accompanied by ongoing political commitment at the detailed policy level. A recent report by NGO ClientEarth highlights the issue as follows:

For all of the Climate Change Act’s strengths, it ultimately depends for its success on the governments that implement it...Even though the Act enjoys firm and broad political support; even though targets are set and deadlines are met; nonetheless successive governments have persistently failed to plan to meet future targets and to put in place the policies needed to drive underlying emissions reductions.¹⁶⁸

There is accordingly a risk that “target setting and rhetorical commitments may provide political cover for inadequate policy action on the ground.”¹⁶⁹ The UK experience is also that implementation of the Act becomes more challenging over time as ambition ‘ramps up’ to meet the long term target. Early implementation success therefore does not guarantee ultimate success in meeting the Act’s long term goals, with political commitment to the legislation likely to be increasingly put to the test.

Tailoring the UK model for New Zealand

Should New Zealand enact framework climate change legislation, the UK Act offers one model (with valuable lessons that can be drawn from the UK’s experience) but care must be taken when importing design features from other jurisdictions. It would be necessary to carefully consider how the UK approach might translate in the New Zealand context, including taking account of New Zealand’s political and legal environment. Tailoring legislation to suit the New Zealand context would require consideration of a range of issues (some of which are noted in the recent Parliamentary Commissioner

¹⁶⁷ Macrory, 2014, p.274.

¹⁶⁸ Church, 2016, Mind the Gap, p.8.

¹⁶⁹ Gillard, 2016, p.35.

for the Environment's report¹⁷⁰) including for example:

- designing a coherent legal framework, bearing in mind that New Zealand would not be starting from a 'clean slate' (given in particular the existing Climate Change Response Act 2002);
- ensuring the legislation appropriately reflects New Zealand's unique circumstances (such as considering which matters should be taken into account when setting carbon budgets); and
- considering the implications of the Paris Agreement for domestic legislation (including, but not limited to, the nature and timing of long term targets).

The design of any framework climate change legislation should also draw on relevant New Zealand experience with laws and institutions in other contexts (for example, considering any useful parallels in aspects of monetary and fiscal policy/legislation in relation to matters such as target setting, independent institutions and transparency mechanisms).

¹⁷⁰ PCE, 2017.

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