HOT AIR
A critique of the UK’s Climate Change Committee
Who regulates the regulators? Paper 3
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Summary

- The Climate Change Committee was established by the Climate Change Act 2008 to advise government on climate policies, in particular with respect to carbon budgets and emissions targets for the period up to 2050.

- It has successfully delivered the required advice and reports and become widely respected. Governments have generally followed its advice on emissions targets and budgets, but adaptation activity has lagged behind. The UK's contribution to global emissions is not material, so substantive success in mitigation was always reliant on international action. This has not been forthcoming despite the UK’s claimed leadership.

- The quality of the CCC’s advice is questionable, in particular with respect to the ‘net zero’ target for 2050. It advised that this target was feasible but refused to disclose the calculations on which its costs figures were based, and it became clear that the scale of the challenge of net zero was not well understood when the target was passed into law.

- The Committee has faced several allegations of conflicts of interest and its governance arrangements with sponsoring departments are out of date. It has expanded its remit and adopted an active public profile, which undermines its independence and indicates that it has become a political actor, rather than delivering balanced advice.

- If elected leaders wish to pursue policies that will bring immense costs and disruption, even if those costs will be outweighed by benefits over time, they need to accept responsibility and accountability for them. Government departments should be capable of obtaining and evaluating evidence that pertains to their areas of responsibility and drawing on the necessary expertise without intermediation by an activist committee.
Regulatory profile: the Climate Change Committee

The Climate Change Committee was established as an independent advisory body, so is not formally a regulator, but it has evolved a role in holding government to account as well as advising it, and as a pressure group with an active media profile.

Although the Climate Change Act established it as the Committee on Climate Change, the Committee changed its operational name (and rebranded1) in late 2020 to the Climate Change Committee. In this paper, references to the Committee and the CCC refer to both the main committee, focused on mitigation, and the Adaptation Sub-committee, which focuses on preparing for the impacts of climate change, unless otherwise specified. This paper considers the CCC’s objectives as set out in statute, the associated impact assessment and its own business plan, and whether it has met them. It examines the governance and accountability of this body, in light of the important influence that it has in policymaking in the UK.

1 At a cost of £20,000, confirmed by the CCC in response to a freedom of information request.
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| The Climate Change Committee (CCC) is a body corporate (an executive non-departmental public body). It was originally known as the Committee on Climate Change but changed its name to the Climate Change Committee in October 2020.

The Chairman is Lord Deben and the Chief Executive is Chris Stark.

There are six further members of the main Committee, and an Adaptation Sub-Committee with five members. Committee members are required to have a balance of skills appropriate to the business of the committees, including by reference to a number of specialisms set out in Schedule 1 of the Climate Change Act (CCA). All committee members are appointed by the relevant authorities of the UK and the devolved administrations (known as ‘national authorities’).

The Department for Business, Energy and Industrial Strategy (BEIS) is the sponsor of the CCC and the Department for the Environment, Food and Rural Affairs (DEFRA) is the sponsor of the Adaptation Sub-committee, in both cases jointly with the devolved administrations.

The CCC is supported by a secretariat staff of around 30.
| Purpose/establishing legislation | The CCC was established by the Climate Change Act 2008. The Act established a target for reduction of carbon emissions in the UK by 2050, as against a baseline of the net emissions in 1990. It also provided for the responsible Secretary of State to set ‘budgets’ of carbon emissions to apply in successive budget periods up to 2050.  

The statutory functions of the CCC are:  

- advising the Secretary of State on the carbon budgets up to 2050, and how they should be met, assessments of climate change risks to the UK, the operation of emissions trading schemes, the treatment of emissions from international aviation and international shipping;  

- publishing reports on progress towards annual budgets and the 2050 target, and the progress of adaptation programmes.  

The Secretary of State is obliged to consult the CCC on any proposed change to the 2050 target.  

It may also do anything that appears to it necessary or appropriate for the purpose of, or in connection with, the carrying out of its functions.  

The CCC and the Secretary of State are required to take various scientific, technological, social and economic matters into account when determining or advising on carbon budgets.²  

Under the Infrastructure Act 2015, the Secretary of State is also required to obtain the advice of the CCC on the likely impact of onshore petroleum on the carbon budget. Notwithstanding the moratorium on fracking, this obligation remains. |

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² Section 10 Climate Change Act.
| **Accountability** | The Secretaries of State for Business, Energy and Industrial Strategy and for Environment, Food and Rural Affairs are accountable to Parliament for the work of the CCC. Relevant ministers in Wales, Scotland and Northern Ireland are accountable to their Parliaments or Assemblies for CCC-relevant business.

A Framework Document agreed in 2010 sets out working arrangements between the Committee and its sponsoring departments and devolved governments. |
| **Rulemaking power** | None, advisory only. |
| **Price-setting power** | None, advisory only. |
| **Enforcement powers** | No formal powers. |
| **Funding** | DEFRA and BEIS and each devolved administration issue a grant-in-aid to the CCC and the ASC. In 2019/20 the CCC reported drawing on funding of £5,354,002. |
| **EU element** | The CCC formerly advised on UK participation in the EU Emissions Trading Scheme. It is required to take account of circumstances at a European level in carrying out its functions. |
What are the CCC’s objectives?

The CCC reports on two key performance indicators:

- fulfilling its statutory duties as set out in the Climate Change Act 2008, including reporting on progress made on meeting carbon budgets, and reporting on preparedness to adapt to climate change; and
- ensuring that the Committee’s governance arrangements are fit for purpose, meeting statutory and other requirements, and that it continues to operate as a responsible and effective non-departmental public body. (Committee on Climate Change 2020a).

In addition to the specific statutory objectives set out above, the CCC has adopted further objectives of

Engaging with a wide range of organisations and individuals to promote understanding, and inform evidence-based debate on climate change and its impacts, in order to support robust decision-making ... Raising awareness of our advice with government and a wider audience, with a view to informing the public debate and a national conversation; and reaffirming the science and countering misinformation about climate change action and policy rapidly and accurately.’ (ibid.)

While arguably this is in accordance with its power to carry out activities ‘necessary or appropriate for the purpose of or in connection with’ its core functions, the media profile of the CCC is an extension of the role envisaged by Parliament when it was established, and, as discussed below, this raises questions about its accountability and legitimacy.
The impact assessment (IA) published in support of the Climate Change Act was produced after the Act had been passed and the 2050 target set in law (Department for Energy and Climate Change 2008). The CCC had, in fact, already been set up in ‘shadow’ form and issued interim advice (which was reflected in amendments to the Climate Change Bill in Parliament) before the Act was passed, placing it on a statutory footing.

The IA did not cover the costs and benefits of the CCC in detail. In particular the benefit of having an ‘independent’ advisory body involved in setting and achieving targets was asserted, not demonstrated. The IA noted that there were numerous potential pathways to the proposed statutory targets in 2020 and 2050 and that

the choice between these pathways is likely to impact on the overall costs of mitigation and the achievement of a range of other economic, social and policy objectives, as well as the UK’s ability to show international leadership in climate change mitigation.

Balancing these considerations was considered to be ‘a complex and technical task’ requiring highly specialised skills, for which the Government needs

- evidence from a range of sources on the potential costs and benefits of action, factoring in the impacts on wider policy objectives such as maintaining secure energy supplies and promoting economic prosperity.

The CCC was therefore set up to ‘advise Government on the level of the carbon budgets and thus the shape of the optimal trajectory towards the achievement of the 2020 and 2050 targets, based on detailed analysis of
the dynamic costs and benefits of abatement’. It was envisaged that the broad range of factors that the CCC is obliged to take into consideration would ‘ensure that the Committee’s advice is comprehensive and does not seek to achieve emissions reductions at the expense of economic growth or other objectives’.

The Impact Assessment accepted that the UK’s contribution to global emissions is negligible and that the actions taken pursuant to the Climate Change Act could only substantively contribute to climate change mitigation by way of demonstrating the UK’s commitment, leadership and influence in the international climate change negotiating process:

Where the UK acts alone, though there would be a net benefit for the world as a whole, the UK would bear all the cost of the action and would not experience any benefit from reciprocal reductions elsewhere. The economic case for the UK continuing to act alone where global action cannot be achieved would be weak.
The case for an independent committee

Non-majoritarian institutions, operating independently from control by elected representatives, are considered to be especially valuable in fields such as climate change because they enable decision making that is not subject to short term electoral considerations (McGregor et al. 2012). The narrow role of the CCC, as set out in the Climate Change Act, is to provide advice to central and devolved governments and assist them to balance a range of scientific, economic and social considerations.

In addition to the value of being able to draw on the expertise of the committee and the contributors to its specialist reports, the independence of the committee was intended to address the 'time inconsistency' problem in climate policy. Investment in low carbon and renewable energy has a long lifecycle and may not see a return for several decades. To have confidence that the policy environment will still support such investments over this lifecycle, it is argued that investors need to have assurance that political leaders will not reverse relevant policies for shorter term electoral gain.

As noted in the Impact Assessment:

It is desirable that the Government’s framework should establish credible, flexible and predictable mitigation objectives. Credible policy frameworks are needed to drive sufficient low carbon investment which is essential for the transition to a low carbon economy.

This was the justification for legally binding targets for decades ahead, supported by independent advice.
It is more usual that regulators set up to give long term credibility to particular policies have direct powers of rulemaking or enforcement. The Monetary Policy Committee (whose remit has been compared to the CCC) does not simply advise government on what interest rates should be, it sets them. The CCC does not have such formal powers, instead it ‘relies on the political embarrassment that its assessments may cause and the threat of a judicial review’ (Averchenkova et al. 2018).

Proponents of independent regulators distinguish between ‘efficient’ and ‘redistributive’ action:

Only the commitment to the maximization of aggregate welfare can justify the political independence of regulators. By the same token, decisions to redistribute resources from one group of individuals, regions, or countries to another group, cannot be taken by independent experts, but only by elected politicians (Majone 1996).

This distinction between welfare maximisation and redistribution does not apply cleanly to the work of the CCC\(^3\) as the scope of policy-making affected by the Committee’s recommendations covers matters that are markedly redistributive. This is most obvious between generations, as current generations may be bearing costs that might be much more affordable to future generations. But energy prices, the changed cost of goods and services, altered employment opportunities and other policy-induced changes are also redistributive today. Moreover the CCC does not make policy or regulation; politicians do, after consideration of its advice. This is an important reason for its legal structure, which is different from similar bodies that have direct powers. But if CCC advice is expected to be implemented and not given due scrutiny and critical analysis, then this safeguard, intended to give democratic legitimacy to climate policy measures, is nugatory.

Given that Committee is funded by government and its members are appointed by government, it is questionable whether it is truly independent to an extent that could give investors confidence that it would not be steered by political pressure if government policy shifted from the current commitment to Net Zero. It seems more likely that committee appointments reflect the policy preferences of the government in this area, and rather

\(^3\) Or indeed, it could be argued, anywhere, as successful maximisation of aggregate welfare cannot be assumed, and even successful welfare-maximising policies will likely have redistributive effects.
than giving confidence to investors (who surely know that a government could repeal or amend the Climate Change Act at any time) this arrangement excuses politicians from seeking democratic legitimacy for climate policies.

The academic and professional backgrounds of committee members, and the public statements of staff members, as described below, also undermine the objective of the advice of the CCC to reflect a consideration of the costs and benefits of climate action across a range of policy areas.
Has the CCC met its objectives?

The narrow objectives of the Climate Change Committee have been met. It delivers advice and reports on schedule, and in general the government and devolved administrations follow its advice. Carbon budgets have been set and broadly met, although adaptation measures seem to be behind (as discussed further below). The 2018 ‘Tailored Review’ of the Committee by the Department of Business, Energy and Industrial Strategy found that ‘there is strong evidence of its effectiveness’, with an increase in the ‘breadth and detail of its advice’ over time. The contributions of the CCC were found to be ‘well respected and highly valued by UK and international stakeholders, including international governments’ (BEIS 2018).

The Tailored Review considered that ‘the key overarching aim of helping the UK to reduce its greenhouse gas emissions has been achieved while the UK’s economy has grown’. It did not, however, appear to take into account that UK greenhouse gas emissions were on a long term downwards trend before the Committee was established (BEIS 2021), or what the counterfactual would have been without its advice.

According to the Office for Budget Responsibility, ‘there is considerable uncertainty around the overall effect of policy measures on economy-wide emissions to date’ and while the stringency of policy measures has increased significantly in the UK over the lifetime of the CCC, this does not closely track the reduction in emissions (Office for Budget Responsibility 2021). Moreover, all of the institutional architecture of the Climate Change Act is in pursuit of its overriding objective of, as the name suggests, countering climate change. So has the production and implementation of the CCC’s advice mitigated or reversed climate change?

It was acknowledged at the time of the Committee’s formation that unless global action, in particular by large emitters, followed as a result of UK
leadership, that the case for unilateral action was weak (Department for
Energy and Climate Change 2008). As, in practice, the UK has met its
carbon budgets, reduced energy consumption and transitioned to renewable
energy sources, while global emissions have continued to grow, it seems
reasonable to ask if the costs borne by British taxpayers, consumers and
businesses have yielded proportionate benefits. Rather than ask such
questions, though, the CCC has redoubled its calls for the UK government
to show yet more global leadership. In 2021 the CCC advised ‘UK action
must continue to provide an attractive model of success to maintain our
climate leadership in support of a global response that meets the global
challenge’ (Climate Change Committee 2021).

It will be interesting to review the position of the CCC on the outcome of
COP26 if, as seems likely at time of writing, no transformational commitments
from countries such as China and India are forthcoming4.

The advice provided by the CCC is often acted upon, but its quality is
questionable. On request by the Government, it advised in 2019 that the
target for 2050 should be amended to ‘net zero’ carbon emissions, which
it considered to be ‘necessary, feasible and cost-effective’ (Committee on
Climate Change 2019). Net zero by 2050 was assessed by the Committee
as ‘achievable with known technologies, alongside improvements in
people’s lives, and within the expected economic cost that Parliament
accepted when it legislated the existing 2050 target for an 80% reduction
from 1990’. By 2020 though, it was already reporting that there was a lack
of policy detail about how the UK intends to carry out low-carbon transitions
in the 2020s to meet applicable targets. In June 2020, it reported that not
nearly enough progress had been made a year on from the net zero target
being adopted (Committee on Climate Change 2020b). The Institute for
Government found that ‘there is still little evidence that the government,
and the politicians who waved the new target through with little debate,
have confronted the enormous scale of the task ahead’ (Sasse et al. 2020).

While certainly a failure of politics, of ministers concerned and elected
representatives who failed to scrutinise the Net Zero policy and the
associated secondary legislation, this is also a failure by the Climate
Change Committee to communicate the scale of the task to them effectively.

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4 China’s plan to build more coal-fired plants deals blow to UK’s Cop26 ambitions
The Guardian 12 October 2021 (https://tinyurl.com/4vpcekj4)
The economic analysis in the CCC’s 2019 Net Zero Report (NZR), which underpinned the advice that net zero would be not just achievable, but economically beneficial, has been criticised for its lack of rigour and transparency (Montford 2020). There are multiple grounds for this criticism. The NZR itself did not include detailed economic analysis on Net Zero pathways but concluded the cost of achieving net zero by 2050 would be 1-2% of GDP. Its underlying calculations were not published until long after the legally binding target of net zero by 2050 had been legislated, and the CCC resisted requests for their disclosure under the Environment Information Regulations on the grounds that publication would cause public confusion, that it would be unreasonable for the CCC to prepare versions suitable for disclosure, and that key spreadsheets were drafts and internal working documents, some of which had not been saved.

The Information Tribunal ultimately ordered disclosure of the spreadsheets containing the calculations. The Tribunal found that ‘there has been no independent scrutiny at this level of granularity – nobody apart from the analysts at the CCC has interrogated the spreadsheets’.

Analysis carried out so far on the spreadsheets that have now been disclosed has called into question the validity of assumptions on the declining cost of electric vehicles, which had been a key factor in the overall conclusion that the cost of net zero would be manageable. The CCC defends its assumption and still expects prices for electric vehicles to fall considerably between now and 2050.

The lack of transparency and poor management of the underlying data that this revealed is troubling, as CCC projections are widely relied on. The Department for Business, Energy and Industrial Strategy, HM Treasury and others across the public and private sectors use the CCC figures for their reporting and analysis. The Office for Budget Responsibility cited the CCC’s projections from the 2020 Sixth Carbon Budget in its report on fiscal risks in the UK economy, as the government’s own analysis in its impact assessment for the latest carbon budget was not granular enough.

5 Committee on Climate Change v ICO (Dismissed) [2021] UKFTT 2020_0231 (GRC) (3 August 2021)
6 Analysis by Net Zero Watch found that ‘the CCC’s model assumes that EV costs will fall by 36–59% between 2010 and 2050, depending on category. The price of small EVs is assumed to fall from £26,000 to £11,000. Actual 2021 small EV prices … are typically around double the figures used by the CCC in the Net Zero Report’. ‘Climate Change Committee misled Parliament about the cost of Net Zero’, Net Zero Watch, 27 September 2021 (https://tinyurl.com/3drkkctc).
(Office for Budget Responsibility 2021). When the 2050 target was under consideration, however, BEIS had produced cost estimates that were higher than those of the CCC. HM Treasury elected to suppress the higher figures (even though officials considered them to be more realistic) and proceeded on the basis of the lower costs estimated by the CCC; we now know they had not interrogated the Committee’s calculations.\(^7\)

Such scrutiny is vitally important. The choice of economic tools and assumptions should not be placed beyond question in informing policy making for generations, as new information comes to light, the state of scientific knowledge develops and competing economic models are available.

The issue goes back to the formation of the CCC, which was established following the Stern Review on the Economics of Climate Change (Stern 2006). Although Stern’s methodology is no longer strictly adhered to (as currently set out in the Green Book), the Government still cites its findings in support of climate policies\(^8\) (HM Treasury 2020). But the Stern Review was widely criticised at the time (albeit also praised and welcomed, as summarised by Jensen and Webster (2007)). For example, the discount rate that economic modellers apply can drive widely differing results, even when based on the same underlying assumptions of climate effects and economic growth, and the Stern Review depended decisively on the very low discount rate that the author chose to apply (Nordhaus 2007). This is an ethical and political matter, as well as economic, and it is not something that politicians should leave to experts and advisers\(^9\).

Similarly, the precautionary principle has been applied in this context to indicate that the risks from climate change are such that policy makers should not wait for scientific certainty to intervene to counter them, but there is an argument that the risks from actions to combat carbon emissions are also so high (in terms of human welfare and prosperity) that a precautionary approach should be taken to their adoption. The CCC has not done a good job of accounting for the full range of costs and benefits

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7. HM Treasury only disclosed its calculations after being ordered to do so by the Information Commissioner after resisting a Freedom of Information request by the Global Warming Policy Foundation for two years.
8. Net zero is a ‘pro-growth strategy for the longer term, and it can be done in a way that does not cap the aspirations for growth’ (HM Treasury 2020, quoting Stern 2006).
9. The summary of economic models published by the IPCC indicates that the headline findings of Stern are extreme. It has been argued that policies based on this economic assessment do not pass a cost-benefit test using the figures and assumptions that the IPCC (in AR5) and its selected economic models use (Murphy 2019).
of its advice. The absence of challenge to the orthodoxy of the CCC (either within the Committee by dissenting committee members or from an equivalent Committee on (say) Economic Growth), has unbalanced policy making over the past decades since its formation. Full transparency and open debate on these questions is necessary, not only for democratic legitimacy but also to ensure the best possible quality analysis and advice.

There are also some troubling tendencies in how the CCC and its representatives express their advice and views. While its own technical reports are worded in terms of risk and uncertainty (‘the future cannot be predicted with high confidence’ (Betts et al. 2021)), its advice tends to present risks as certainties. The CCC has a section on its website called ‘climate emergency’ which is surely unsubstantiated hyperbole that they should be challenging, not endorsing, as it is not a term that is used in the technical reports. Committee staffers also used the ‘emergency’ rhetoric in a speech to a citizens’ jury on fairness in climate policy organised by the IPPR (Institute for Public Policy Research 2021). The outcomes of such events are used to advocate for policies and measures. They are described as ‘deliberative democracy’ to give an impression of public support for such measures, after education by experts. But although they claim to be balanced and neutral, the terms of reference and speaker selection often show a clear bias, steering citizen jury-members in a pre-determined direction from the outset.

For example, the question deliberated by the IPPR Thurrock Climate and Fairness panel was ‘What practical steps should we take together in Thurrock to address the climate crisis and restore nature in a way that is fair for everyone?’ which clearly primes participants towards endorsing ‘bold policies’ based on the scientifically unsupported assumption that we are in a crisis. Uncritical participation in such activity by Committee representatives is indicative of the CCC as a political actor itself, rather than an independent expert providing balanced and credible advice to government.

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10 The term ‘climate emergency’ is a heading on the CCC’s website (https://www.theccc.org.uk/tag/climate-emergency/). Similar use of rhetoric that is unsubstantiated by the underlying scientific materials has been commented on in respect of IPCC Assessment Reports ‘How to understand the new IPCC report’ Roger Pielke, 10 August 2021 (https://rogerpielkejr.substack.com/p/how-to-understand-the-new-ipcc-report).

11 CCC analyst Bianca Letti’s speech was entitled ‘How do we fairly share the costs of action on the climate and nature emergencies?’. Committee analyst Indra Thillainathan also participated in the citizens’ assembly.

Adaptation

On adaptation, according to the CCC, the UK is ‘leading in diagnosis but lagging in policy and action’. (Climate Change Committee 2021). It has warned that, after 2050,

the extent of further climate change will depend on future global emissions of greenhouse gases. If the world cuts emissions rapidly to Net Zero, there is a good chance of limiting global temperature increase below 2ºC. If not, we will see higher levels of warming and much more extreme impacts.

Given that there seems to be little chance of ‘the world’ reaching net zero rapidly\(^{13}\), and that the UK accounts for such a small proportion of emissions, and therefore can only have a marginal, if any, impact on the progression of anthropogenic climate change, a greater focus on adaptation in this country may have been expected. Intuitively, adaptation steps may often seem more politically and technically feasible than mitigation (reducing emissions), especially as we are now at a point where decarbonisation measures will be more costly and more directly felt by individuals: building infrastructure against flood risk, adapting building codes and taking out insurance must be more realistic objectives than agreeing and implementing global agreements that will limit temperature increases.

\(^{13}\) The International Energy Agency reported in 2021 that it considers that there is a feasible pathway to net zero emissions but that ‘Commitments made to date fall far short of what is required by that pathway’ – even if such commitments are met. The IEA’s pathway envisages major behavioural and lifestyle changes across the globe, no investment in new fossil fuel supply projects, and no further final investment decisions for new unabated coal plants. By 2035, there would have to be an end to sales of new internal combustion engine passenger cars, and by 2040, the global electricity sector would have to have already reached net zero emissions (International Energy Agency 2021). These measures may be theoretically achievable, but in practice seem unlikely to be delivered.
On the contrary, though. ‘On the mitigation side, carbon budgets have largely been met and associated recommendations accepted, while adaptation activity has lagged behind’ (Climate Change Committee 2021). According to the CCC itself, ‘A significantly larger fraction of the CCC secretariat works on emissions reductions compared to adapting to climate change’. This ‘reflects the level of funding provided from the sponsoring UK Government departments for emissions reduction (Business, Energy and Industrial Strategy) and climate adaptation (Department for Environment, Food and Rural Affairs)’ (Climate Change Committee 2020c).

The Adaptation Committee’s 2021 progress report records that in most areas there has not been action, both from Government and other stakeholders like business and the third sector. There are various barriers preventing adaptation in these sectors such as gaps in awareness about the risks, the presence of externalities and missing markets, financial constraints and various behavioural barriers (Climate Change Committee 2021).

The CCC’s greater success in having its recommendation and advice accepted in respect of mitigation (such as carbon emissions targets and budgets, and associated measures) than adaptation could be because the costs of adaptation works are tangible and direct, responsibilities are dispersed between local, national and cross-border authorities, and there is more debate around the best approaches between public and private, social and technical, anticipatory or reactive approaches. In addition, NGOs and campaigners may prefer to focus on mitigation and overseas development over local and domestic adaptation (Gawek et al. 2018). More fundamentally though, it suggests a lack of strategic thinking (including at a political level in the way the committee and sub-committee were set up) on the inherent trade-offs between mitigation and adaptation.

In principle adaptation and mitigation offer alternative routes to sustainable lifestyles for future generations, but an optimal policy response must surely involve a combination of the two. While the mitigation and adaptation committees have now produced joint reporting and recommendations, there is no doubt that the policy focus has been on decarbonisation in an effort to limit temperature rises. Investing less on adaptation is rational if there is high confidence that global decarbonisation will both be achieved and positively affect climate change. However, a more joined-up view
balancing all of the costs and risks of mitigation and adaptation may have seen more investment and policy directed at adaptation.

It seems possible that adaptation has been deprioritised because of fears that focusing on it would undermine public acceptability of mitigation measures by suggesting that they might not be successful, or even necessary at all if we can work around the impacts of climate change. Such a political calculation, even if not explicit, would certainly distort advice and policy making and prevent reaching an optimal balance between alternatives.

Given the material risk that the UK’s leadership and influence will not be enough to bring about reductions in global emissions and limit temperature rises to the levels considered necessary to avert damaging climate change\(^\text{14}\), the CCC’s allocation of resource between mitigation and adaptation seems questionable, and may itself be viewed as a failure. However, notwithstanding its more limited resources, the adaptation committee has produced extensive reporting and recommendations. The 2021 Progress Report included recommendations that covered virtually every policy area of government from infrastructure to ‘food access inequality’, taking in planning, infrastructure, agriculture, education, health, foreign policy, international trade and development spending. While this reflects the pervasive influence of the climate on our way of life, it calls into question the usefulness and legitimacy of the recommendations of a single committee of five members, however expert in their respective fields, that will be used for political and legal leverage by activists and vested interests who wish to advocate particular policies. The question of legitimacy is important not only in the sense of the abstract benefits of self-rule and democratic accountability, but also because costly and disruptive policies, whether for adaptation or mitigation, need to command public support if they are to be sustainable.

There is also a prevailing assumption in the recommendations of both parts of the CCC that measures must all be government-led, even in areas that seem amenable to private action. In just one example, the Adaptation Committee calls for more government intervention and subsidies for farmers adapting to the potential for cultivating new crops, or to the threats from new pests and pathogens without explaining why farmers and others in the food supply chain could not be expected to undertake such adaptations themselves.

\(^{14}\) And indeed the risk that net zero carbon emissions may not be necessary to limit temperature increases, or that the targeted 2° rise may not in fact turn out to be optimal.
Governance

There is a ‘general presumption’ in the Framework Document that sets out the governance and working practices between the Committee and its governmental sponsor bodies, that the Committee’s advice will not include ‘detailed recommendations or proposals on specific policies, which could be required to meet the carbon budgets, except when requested’ (HM Government et al. 2010). Government departments and devolved governments do make such requests on occasion but it is clear that the CCC does not always keep to the general presumption. In response to a freedom of information request it could give only four examples of requests for specific policy advice in the past three years:

- A request from the UK, Scottish and Welsh Governments in 2019 for advice on various aspects of the design and operation of a UK emissions trading scheme;
- A request from the Scottish Government in 2020 on how to deliver a green recovery from the impacts of COVID-19.
- Two requests from the Northern Ireland Executive (in 2018 and 2021) on policies that could help to deliver to the necessary emissions reductions in Northern Ireland.

The Committee’s reports and advice over that period include many pages of detailed and specific policy recommendations. The Committee considers that this is in line with its statutory duties. In response to a freedom of information request, it stated that consideration of ‘issues related to policy delivery’ is ‘essential to the Committee’s monitoring of progress towards meeting current and future carbon budgets and the Net Zero target in its progress reports [to national authorities]’. The Committee is of the view that ‘consideration of policy options and delivery timescales helped to
inform the feasible timings of emissions reductions, and helped the Committee to make its statutory considerations required under the Climate Change Act when recommending carbon budgets’ in particular in relation to economic, fiscal and social aspects ‘which cannot be properly considered without considering which policies may be used to deliver them’.

While of course the CCC is required to take such matters into account, consideration of policy variables and implications does not necessarily entail making proposals and recommendations. As a result of this expansive interpretation, there is literally no limit to the domains on which the CCC pronounces. Most recently, it has recommended ensuring that ‘all policy decisions, and procurement decisions, are consistent with the Net Zero goal and reflect the latest understanding of climate risks’ and ‘[considering] options for introducing a Net Zero Test to ensure that all policies and decisions are compliant with Net Zero’ (Climate Change Committee 2021).

The CCC even saw fit to join in the debate on the UK’s aid budget:

The Government has said the cut to [Overseas Development Assistance] is temporary; now that the UK’s economic recovery is underway, the Government should provide a firm timeline for reinstating its previous commitment’ (ibid.).

The 2013 Cabinet Office Triennial Review of the CCC (Department for Energy and Climate Change 2014) and the Tailored Review recommended that the Framework Document should be updated. The Tailored Review set a ‘milestone’ for this to be completed by Summer 2018, to accommodate the views of the incoming Chief Executive, who took office in April 2018. This has not yet been done, and the original framework from 2010 remains in place.

The Institute for Government praised the CCC as ‘a powerful agenda-setter’ but regretted that ‘it has had less impact through its evaluation of government performance’ (Sasse et al. 2020). It is questionable, though, whether ‘agenda-setting’ is consistent with the statutory role of the CCC. The Tailored Review focused on the CCC’s ‘holding to account role’. The Triennial Review was also concerned with the CCC’s independence and expertise for holding government accountable. Neither report seemed concerned with the accountability of the Committee itself, and they did not interrogate the development of this ‘holding to account’ role against the strict statutory responsibilities of the CCC. The Tailored Review found
that the CCC should continue as an independent body, rather than be merged into BEIS, in order to preserve its ‘political impartiality’ but it is arguable that the CCC has itself become a political actor and can no longer be seen as politically impartial.

The Committee chides the government that ‘A pattern has emerged of Government strategies that are later than planned and, when they do emerge, short of the required policy ambition’ (Climate Change Committee 2020), without seeming to acknowledge the intensely difficult choices that government is faced with, in which climate change is only one of many concerns, or that the policies and measures already put in place have imposed huge costs on the people of this country. It proudly noted that its 2020 progress report included ‘more than 200 policy recommendations, covering every part of Government’ (ibid.). It is seriously concerning that this technocratic body, of dubious democratic accountability, that has been subject to accusations of conflicts of interest (discussed below), is in a position to influence government policy so comprehensively. This is especially so now that the decarbonisation of electricity generation has largely been delivered and the government is moving on to ever more intrusive measures concerning home heating, transportation and even food.
Conflicts of interest

In recent years the Climate Change Committee has been subject to a number of allegations of conflicts of interest amongst committee members. Committee chair Lord Deben’s family firm, Sancroft International, describes itself as ‘an international sustainability consultancy’ that ‘helps some of the world’s leading companies improve their environmental, ethical and social impact’. It was alleged that clients of the firm, who had paid hundreds of thousands of pounds in fees, stood to benefit directly from the recommendations of the CCC on topics such as electric vehicles and food recycling. Deben was cleared by the Parliamentary Commissioner for Standards of breaking the applicable Code of Conduct in relation to declaring his private interests in respect of House of Lords business, and the CCC did not consider that he had breached its conflict of interest policy.

On his appointment to the role of chair, Deben assured the Commons Committee on Energy and Climate Change that ‘almost everything that [Sancroft] does has no connection with the Committee on Climate Change’ and that it had disengaged from business in the one area where he considered it necessary (Committee on Energy and Climate Change 2012). In response to the standards investigation, Deben stated that ‘Sancroft does not advise on any matters related to the remit of the Climate Change Committee in order that there should be no conflict with my position as Chairman of the CCC’ (Commissioner for Standards 2019). However, given that the remit of the CCC has extended into almost every conceivable area of policy in recent years, this assertion seems questionable.

15 ‘Lord Deben’s climate report helps firms that gave his business £500,000’ The Times 4 May 2019 (https://tinyurl.com/ca75spn5).
Committee member Rosalyn Schofield also declares an interest in Sancroft, as it is an adviser to her employer, Associated British Foods Plc, a large company with direct interests in climate policy. Committee member Baroness Brown has a number of declared interests, including chairing the government-funded Carbon Trust. She stood down from the main committee in February 2021, though retained a position on the Adaptation Committee, and was promptly appointed to directorships at energy companies Orsted and Ceres.

In 2021 Dr Rebecca Heaton stood down from the CCC after four years in the wake of allegations of conflicts of interest concerning her role as Head of Sustainability at energy company Drax. Drax receives billions of pounds in subsidies for its biomass power station and is involved in the heavily subsidised development of bioenergy with carbon capture and storage (BECCS) technology. The CCC has advised that BECCS will be required for the UK to achieve net zero by 2050 and Drax has called for investment from the government to support it. Heaton, and the Committee, maintained that she had not participated in work in which Drax was directly involved, but it seems undeniable that her employer had a very clear interest in the advice of the CCC. Remarkably, Heaton was also on the CCC’s audit committee, which oversees governance matters, including conflicts of interests, and is a council member of the Natural Environment Research Council (NERC) the leading investor of public money in UK environmental science, including research into carbon capture technologies. On standing down from the Committee she also left Drax to take up a position at a green energy company, but remains a member of the NERC.

An economist on the Adaptation Committee, Ece Özdemiroğlu, is founder and director of an environmental economics consultancy, eftec (Economics For the Environment Consultancy). Once again, there may be no direct conflict of interest as set out in the formal conflicts of interest policy, but given the breadth of policy areas and sectors covered by the Adaptation Committee’s reports, it is impossible that they have no connection to her private interests. It also seems inevitable that consultants and other professionals in the fields of sustainability and the environment are

16 ‘Drax executive quits UK climate committee after conflict questions raised’ Financial Times 2 July 2021 (https://www.ft.com/content/d3b94876-7900-4e6b-a900-75d682f2f7f0)
17 Watchdog asked to examine potential Drax conflict on climate advisory arm’ Financial Times, 4 March 2021 (https://www.ft.com/content/36c582e9-24af-425b-8952-054153ac5609)
18 https://nerc.ukri.org/about/organisation/boards/council/membership/
incentivised to seek more interventions and subsidies that would drive businesses to require their services.

All of the interests specifically referred to above have been duly declared according to the CCC’s conflicts of interest policy, except for Baroness Brown’s directorship at Ceres, which does not yet appear on the published register. In the wake of criticism, in particular concerning Dr. Heaton’s roles, the policy was updated in March 2021, but this formal amendment seems unlikely to address the underlying issues with the private interests of members.

Members also overwhelmingly come from academic and public sector backgrounds that are deeply involved in climate policy and have contributed to the current establishment view on the issue. This might indicate that the membership does not bring balance to the scientific, social and economic questions that they advise on, and further undermines the independence of the Committee.

This is not to suggest that members of the Committee are corrupt or self-serving. It should, however, be borne in mind when evaluating the CCC’s output and holding it to account that its members are subject to competing incentives. Public choice theory suggests that

bureaucrats at international agencies have an incentive to encourage the collection and dissemination of evidence which supports the claim that action to combat climate change is required, since this is likely to result in an increase in the extent of their responsibilities and, hence, their budgets and non-pecuniary benefits (Bate 1996).

This must apply equally to domestic agencies, and to shared-policy objectives other than the expansion of budgets and the like.
Conclusion and recommendations

The Climate Change Committee has met its formal statutory objectives of providing advice and reports to Parliament and ministers, both in the required cycles and on request. The advice is generally followed on mitigation measures (with respect to the 2050 target and carbon budgets) but it has been less successful on adaptation.

The Committee commands high levels of public and political confidence. Its role has expanded, both autonomously and at the request of sponsor departments, to cover a vast range of policy areas. It has also expanded from an advisory function to include advocacy of policy positions and holding government to account.

However the economic analysis carried out by the Committee lacks transparency and its quality has been called into question.

The advice of the Committee has been credited with the UK’s success to date in reducing carbon emissions. But it seems equally possible that its unbalanced approach led to the government focusing on incentives in particular sectors and technologies (in particular renewables in electricity generation) that have been very costly, while neglecting others. This has led to the current rush to impose policies on home heating and transport, while action on adaptation lags behind.

Furthermore, unless other countries act to limit their emissions to similar levels, and such action has a material impact on climate change, without disproportionately affecting economic output, the institutional architecture of the Climate Change Act and the CCC’s role in it, cannot be considered to be a success.
If concerted international action does not occur, the UK, whose contribution to global emissions is negligible, will have incurred all of the costs of decarbonisation with no benefits. The Committee’s emphasis on mitigation over adaptation and on the need for the UK to show global leadership, could prove to have been misplaced and very costly.

The Impact Assessment on its establishment posited that the UK’s demonstration of leadership ‘may increase the chances that a multilateral agreement can be reached that is consistent with the long term aim of avoiding dangerous climate change’. But multinational agreements so far have fallen short of delivering emissions reductions that the IPCC considers necessary to avert dangerous climate change and, aside from the ethics of lobbying poorer countries to retard their industrialisation, it seems hubristic to have expected that British influence in this field would yield such ambitious results. The strategy has, however, increased the prestige and career prospects of British politicians, academics and bureaucrats in bodies such as the Climate Change Committee.

As well as holding back growth and prosperity in this country, with no more than conjectural benefits, the UK’s emphasis on its global leadership in this field risks making the country look both sanctimonious and impotent if global emissions reductions are not achieved and followed by beneficial climate effects. Even proponents of independent regulatory authorities would surely concede that this is not a field for aggregate welfare enhancing, technocratic decision making where independent experts should properly be deferred to.

Arguably, the Climate Change Act went too far in taking climate policy out of electoral politics. The wide range of policy areas now covered by the CCC should not be beyond the sphere of political debate. Even accepting that carbon emissions lead to climate change and need to be curtailed, the policy choices that flow from this are contestable and entail economic, moral and political judgments that should not be a matter of technocratic consensus.

For example, it is not obvious that the present generation should bear so much of the costs of mitigating climate change, when future generations will, by most mainstream economic projections, and in the face of the modelled climate change, be far wealthier and enjoy longer life expectancy.
The success of the CCC pressuring and embarrassing the government means that politicians have been incentivised to impose measures that will be very costly well beyond the time in which they are in power, in order to avoid embarrassment and elicit praise and support during their term. The adoption by Theresa May’s government of the Net Zero 2050 target, by way of a statutory instrument, with no parliamentary debate or publication of the assessment of the economic costs, allowing her to earn respect as a champion of climate policy, is an example of this.

Given that none of this has been meaningfully debated by parties in general or other election campaigns, and yet almost all parties subscribe to the net zero agenda, there is a lack of democratic legitimacy for the policies that the CCC recommends. The absence of genuine challenge in the output of the CCC to prevailing elite political views on the need for net zero is striking. This does not entail ‘denial’ or even scepticism of climate change or anthropogenic influences on the climate. Many economists accept those phenomena but have rational and reasonable concerns about current policy responses and associated costs. That such views appear absent from the output of the CCC is concerning.

Even if the scientific credentials and governance of the CCC were irreproachable, it must be at least conceivable that some of its calculations and recommendations could be misplaced or wrong. Given the complexity and diversity of the subject matter it advises on, which takes in not just the dynamic and contested field of climate science but vast swathes of social, economic and industrial policy, far from being treated as an irreproachable source of truth, the CCC should be challenged and scrutinised more than any other regulator or advisory body.

The Committee should revert to its core task of advising ministers and Parliament, instead of engaging in politics itself under the guise of countering misinformation and participating in deliberative democracy. It should improve the way its reports are communicated to MPs, peers and ministers, to remedy the current situation of ambitious legal targets and political commitments that are not grounded in a firm understanding and honest appraisal of the actions required to achieve them and their costs. It should ensure that its calculations are prepared on the assumption that they will be published and subjected to interrogation by outside experts, without intermediation and framing by the Committee itself. This might be achieved by incorporating it into the Department of Business, Energy and industrial Strategy.
There is an argument that a separate, expert committee, even one that is broadly committed to the Net Zero agenda, provides a safeguard against government taking even more extreme measures in response to intensive lobbying and direct action by groups such as Extinction Rebellion. As it stands, though, the CCC’s advice seems to be politicised in some respects and could be seen to be affected by vested interests. It lacks transparency and due consideration of all of the wider factors that ought to be taken into account. The argument that it gives credibility to long term objectives and policies is not persuasive: governments since 2008 have been committed to climate change mitigation and investors must know that a government that was not so committed could change the applicable laws if it wished.

The lack of public support for the steps necessary to decarbonise by 2050 in, for example, home heating, transport and agriculture, given that all main parties at the last General Election supported Net Zero without qualification, point to real concerns about the reliance placed on CCC advice on the matter. If elected leaders wish to pursue policies that will bring immense costs and disruption, even if they consider that those costs will be outweighed by benefits over time, they need to accept responsibility and accountability for them. Departments such as BEIS, DEFRA and HM Treasury, and bodies like the Office for Budget Responsibility, should be capable of obtaining and evaluating evidence that pertains to their areas of responsibility and can draw on the necessary expertise without intermediation by a committee.

The Committee has seen several allegations of conflicts of interest. Its conflicts of interest policy is inadequate to deal with the perceived conflicts of its members, who often have private interests in consulting practices or industries associated with the subject matter of the Committee’s work.

The conflict of interest policy and Framework Document should therefore be addressed as a matter of urgency. Appointments to the Committee should reflect greater plurality of policy approaches, in particular to challenge assumptions that government actions, rather than market solutions, should be the default.

Whatever the outcome of COP26, the government should institute a strategic review of its climate policy priorities, and consider whether a rebalancing towards adaptation measures is called for.
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