

Corporate and Business Plan 2017 - 2020

Committee on Climate Change

Section One: Introduction

The Committee on Climate Change is an independent, statutory non-departmental public body established under the UK Climate Change Act 2008 (the Climate Change Act). Our purpose is to advise the UK Government, Parliament and the devolved administrations on cutting emissions and preparing for climate change.

This Corporate and Business Plan sets out our key achievements in 2016-17, our business plan for 2017-18, and our corporate objectives with a high level delivery plan up to 2019-20.

Statutory remit and structure of the Committee

The Committee comprises a Chairman and a maximum of eight independent members. The main Committee is sponsored by the Department for Business, Energy and Industrial Strategy (BEIS), the Northern Ireland Executive, the Scottish Government and the Welsh Government.

The Adaptation Sub-Committee (ASC), also established under the Climate Change Act, advises the UK Government and devolved administrations on their assessment of the risks and opportunities from climate change. It also reports to the UK Parliament on progress in adaptation, particularly in relation to the UK Government's National Adaptation Programme.

The ASC comprises a Chairman, who also sits on the main Committee, and a minimum of five independent members.

The ASC is jointly sponsored by the Department for Environment, Food and Rural Affairs (Defra), the Northern Ireland Executive, the Scottish Government and the Welsh Government.

Section 2: Strategic Objectives and Outputs

Strategic Objectives

The Committee's overarching strategic objective is to provide independent, evidence-based advice to the UK Government, Parliament and the devolved administrations in the area of climate change. Our independence is central to the effective delivery of our responsibilities.

In particular, the Committee advises on the UK's transition to a low-carbon economy and preparing for increased climate risk.

The Committee achieves this objective by fulfilling specific duties under the Climate Change Act 2008 and the Infrastructure Act 2015 including:

- Advising on the appropriate level of the UK's carbon budgets and steps required to meet them. The budgets define the maximum level of CO₂ and other greenhouse gases which the UK can emit in each five-year year budget period, beginning with 2008-12.
- Monitoring progress towards meeting UK carbon budgets and recommending actions to keep budgets on track.
- Advising on the impact of the exploitation of onshore petroleum on UK carbon budgets and the 2050 target.
- Advising on the preparation of UK Climate Change Risk Assessments and progress towards implementation of the UK Government's National Adaptation Programme.
- Responding to requests for advice from the UK Government and the devolved administrations including advice on emissions targets and progress in reducing emissions and adaptation.
- Conducting independent analysis into climate change science, economics and policy; and
- 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.

Milestones in 2016-17

Milestones in 2016-17				
Date	Milestone			
30 June 2016	Publication of 2016 Annual Progress Report detailing the UK's progress in reducing greenhouse emissions and meeting carbon budgets			
7 July 2016	Publication of a report on the compatibility of UK onshore petroleum production with meeting the UK's Carbon Budgets			
12 July 2016	Publication of final evidence report and advice to the UK and devolved administrations on the second UK Climate Change Risk Assessment			

Milestones in 2016-17				
Date	Milestone			
14 July 2016	Annual report & accounts for 2015-16 laid in the UK and Scottish Parliaments, the Northern Ireland Assembly, and the National Assembly for Wales			
13 September 2016	Reducing Emissions in Scotland - 2016 progress report published			
27 September 2016	Scottish Climate Change Adaptation Programme: An Independent Assessment			
13 October 2016	Publication of report on the Implications of Brexit for UK Climate Policy and Meeting UK Carbon Budgets			
13 October 2016	Report on UK Climate Action following the Paris Agreement			
13 October 2016	Next Steps for UK Heat Policy Report Publication			
21 October 2016	Corporate Plan for 2016 – 2019 published			
8 November 2016	Publication of Report on Scottish Unconventional Oil & Gas: compatibility with Scottish Emission Targets			
16 March 2017	Publication of report on the impact of UK Carbon Budgets on Energy Prices and Bills			
22 March 2017	Publication of advice report to the Scottish Government on the new Scottish Climate Change Bill			
29 March 2017	Publication of briefing note on the Infrastructure Needs of a Low-Carbon Economy Prepared for Climate Change			
31 March 2017	Publication of a report presenting the findings of a review by the Adaptation Sub- Committee of the second round of the Adaptation Reporting Power			

Achievements in 2016-17

The key achievements in 2016-17 included:

The Committee's eighth **Annual Progress Report** to Parliament detailing the UK's progress in reducing greenhouse gas emissions and meeting carbon budgets. The report shows that UK emissions have fallen rapidly in the power sector, but that progress has stalled in other sectors, such as heating in buildings, transport, industry and agriculture.

The publication of the first report on the **compatibility of UK onshore petroleum with meeting the UK's carbon budgets** following the introduction of a new duty under the Infrastructure Act 2015. Our report identified the significant uncertainties in the implications of UK shale gas exploitation for greenhouse gas emissions, which include the size of any future industry and the potential emissions footprint of shale gas production. Our report also found that exploitation of shale gas on a significant scale is not compatible with UK carbon targets unless three key tests are satisfied (relating to limitation of production emissions; the overall level of gas consumption; and further actions to offset production emissions).

The publication of the **UK Climate Change Risk Assessment**, a 2,000 page report which provides the most up-to-date and comprehensive analysis of the risks and opportunities posed by climate change to the UK. The report focuses on the following areas:

- Natural environment and natural assets
- Infrastructure
- People and the built environment
- Business and industry
- International dimensions

The **Next Steps for Heat Policy** report considered the challenges of reducing greenhouse gas emissions from heating and hot water, which make up 40% of our energy consumption and 20% of our greenhouse gas emissions. It will be necessary to largely eliminate these emissions by around 2050 to meet the targets in the Climate Change Act and to maintain the UK contribution to international action under the Paris Agreement.

The report found that progress to date has stalled and highlights the need for the Government to develop a credible new strategy and a much stronger policy framework for buildings decarbonisation over the next three decades.

The **implications of Brexit for UK climate policy and carbon budgets** were considered in our briefing note published in October 2016. UK policy has developed over time in an EU context. The Government has stated its intention to initially convert existing EU laws into UK legislation when the UK leaves the EU. Many aspects of EU-level policy will need to be preserved or replicated at the UK level in the longer term. In some areas the Government should take opportunities to improve on EU-level approaches.

The **Paris COP 21 Agreement** marks a significant positive step in global action to tackle climate change. In October 2016 we published a report which considers the domestic actions the UK Government should take as part of a fair contribution to the aims of the Agreement.

The **Energy Prices and Bills** report is the fourth independent assessment of UK carbon budgets on household and business energy bills. The report found that improvements in energy efficiency have saved the typical UK household around £290 per year since 2008. Low carbon

policies were identified to make up around 9% of an annual 'dual fuel' household energy bill of around £1,160 in 2016. The impact of low-carbon policies on total production costs is limited for most businesses. It is substantially higher for some energy-intensive manufacturing sectors but the report found that those most 'at risk' are largely compensated for those additional costs. The report also identified the wide range of opportunities for UK business arising from the transition to a low-carbon economy.

The Committee published a briefing note on the **infrastructure needs of a low carbon economy prepared for climate change** on 27th March 2017. The note identified six key areas where investment in infrastructure is critical to meeting the objectives set out in the Climate Change Act. These are:

- Smart low carbon power
- Electric vehicle charging networks;
- Heating;
- Carbon capture and storage;
- Flood risk management and drainage; and
- Water resource management and supply.

The briefing note also recognized the twin challenges of deeply reducing the UK's greenhouse gas emissions and of preparing the UK for climate change in a successful National Infrastructure Assessment.

The report on the **Adaptation Reporting Power** presented the findings of a review by the Adaptation Sub-Committee of the second round of the Adaptation Reporting Power (ARP), following a request by Defra to carry out a review.

The second round review recognised the value of the ARP to ensure the nation prepares for climate change and recommended the next ARP should be completed by December 2019 and should be mandatory to ensure that all relevant organisations take part. The ASC also recommended that improved guidance should be issued in order to elicit more uniform, meaningful and quantified information from organisations. Finally, the ASC recommended that Defra should consider widening the scope of ARP reporting to encourage those sectors that have yet to report to provide evidence of their approach to climate change risk management.

During 2016-17 the Committee has also published a number of key reports to the **Scottish Government** including:

The fifth **Progress Report** on Scotland's progress towards meeting emission reduction targets. The Climate Change (Scotland) Act 2009 sets a long-term target to reduce emissions of greenhouse gases (GHGs) by at least 80% in 2050 relative to 1990, with an interim target to reduce emissions by 42% in 2020. The report reveals that Scotland's annual emissions reduction target for 2014 was met, with gross Scottish greenhouse gas emissions, including international aviation and shipping, falling by 8.6% in 2014.

An interim evaluation of the progress being made to prepare for climate change, two years after the Scottish Government published its inaugural **Scottish Climate Change Adaptation Programme (SCCAP)** in 2014.

Publication of a report on **Scottish Unconventional Oil & Gas**: compatibility with Scottish Emission Targets The Committee's report finds that the implications for greenhouse gas emissions of Scottish UOG exploitation are subject to considerable uncertainties, both regarding the size of any future industry and the emissions footprint of production.

It also finds that exploiting unconventional oil and gas by fracking on a significant scale is not compatible with Scottish climate targets unless three tests are satisfied.

In March 2017 a report to advise the **Scottish Government** on options for the new **Climate Change Bill** was published. The potential level of ambition for new Scottish climate targets was reported on with two corresponding options of either an 80% or 90% reduction in emissions on 1990 levels by 2050 suggested. Potential changes to the accounting framework used to measure emissions were also considered.

The CCC and ASC have provided advice in a number of key letters and technical notes as shown below:

Key Letters, Advisory and Technical Notes issued by the CCC and the ASC			
Date	Subject		
6 July 2016	A letter from Lord Deben, Chairman of the CCC, to the Right Honourable Amber Rudd, Secretary of State for Energy and Climate Change, outlining a new strategic approach to Carbon Capture and Storage (CCS) in the UK in the wake of the cancellation of the CCS Commercialisation Programme in November 2015		
6 July 2016	A letter from Matthew Bell, CCC Chief Executive, to Roseanna Cunningham MSP, Cabinet Secretary for Environment, Climate Change and Land Reform, in response to a request for updated advice pursuant to the Climate Change (Scotland) Act		
3 November 2016	A letter from Lord Krebs, Chair of the ASC, to Defra's Chief Scientific Adviser, Professor Ian Boyd, to provide ongoing advice on the next set of UK climate projections in terms of the extent to which they will meet the needs of the user		
22 November 2016	A letter from Matthew Bell, CCC Chief Executive, to the Right Honourable Greg Clark, Secretary of State for Business, Energy and Industrial Strategy, concerning the Government's case for expanding aviation capacity at Heathrow		
24 January 2017	A letter from the Chair of the Adaptation Sub-Committee (ASC), Lord Krebs, to the Rt Hon Andrea Leadsom as he comes to the end of his eight-year term at the head of the committee. Lord Krebs highlights that more action is required in five of the CCRA's six priority risk areas if the UK is to manage its vulnerability to climate change.		

Key Letters, Advisory and Technical Notes issued by the CCC and the ASC			
Date	Subject		
27 March 2017	A letter from Lord Deben (Chair, Committee on Climate Change) and The Baroness Brown of Cambridge (Chair, Adaptation Sub-Committee) to Lord Adonis (Chair, National Infrastructure Commission) to accompany the briefing note on the infrastructure needs of a low carbon economy prepared for climate change.		
31 March 2017	An advice letter to Defra setting out the Adaptation Sub-Committee's recommendations to Defra about the third round of reports under the Adaptation Reporting Power.		

Section 3: Corporate and Activity Business Plan

Business Activity Plan 2017-18

Two key business objectives will guide the work of the Committee during 2017-18:

Business objective 1: Fulfilling our statutory duties as set out under the Climate Change Act 2008, including reporting on progress made in meeting UK carbon budgets, advising on future UK carbon budgets and reporting on progress in adapting to climate change

We will achieve this by:

- Publishing statutory reports/advice;
- Responding to ad hoc requests for advice from the UK Government and devolved administrations;
- 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.

Business objective 2: Ensuring 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 NDPB

We will achieve this by:

- Ensuring adequate financial reporting and accounting arrangements are in place;
- Maintaining an appropriate internal control and governance framework;
- Implementing corporate and human resources policies which facilitate the hiring, retention and development of a skilled and motivated workforce;
- Operating sustainable and effective environmental policies;
- Maintaining a security policy, business continuity plan and risk management plan;
- Being transparent about the way we work and how we spend public funds by publishing a transparent Annual Report and Accounts.

The key milestones for the Committee during 2017-18, with further detail provided in Annex A, are shown below.

In addition to the deliverables below, the Committee will provide an assessment of the Government's plan for meeting the fifth carbon budget shortly after it is published. Under the Climate Change Act 2008 it must be published as soon as possible following the passage of a new carbon budget. It is expected during the 2017-18 year.

2017-18 Work Programme				
Period	Category	Deliverable		
April – June	Mitigation	Advice to the Welsh Government on the design of a carbon budgets framework		
	Mitigation	Report on the quantification of greenhouse gases		
	Mitigation and Adaptation	2 nd Joint Statutory Progress Report		
July - September	Corporate	Annual Report and Accounts for 2016-17		
	Mitigation	Scottish Progress Report on reducing carbon emissions		
October - December	Mitigation	Advice to the Welsh Government on setting carbon budgets		
	Mitigation and Adaptation	Report on Land Use		
January - March	Mitigation	Report on Aviation Emissions		

The impact of Brexit on the work programme for 2017 - 2020

Whilst the UK's climate targets have not changed as a result of Brexit, new UK policies will be needed to reduce emissions where policies previously agreed through the EU no longer apply or are weakened. Consequently, there will be additional work for the CCC to review the new policies and to assess their adequacy to meet the UK's carbon budgets.

As it is not currently possible to determine the timing or extent of this work with sufficient accuracy, Brexit related work has not been included in the annual work programmes for the period 2017 – 2020. However, once the timing and scale becomes clearer the Committee will agree the scope of our work planned in response to Brexit with our Sponsor organisations.

Corporate Plan: 2018-19 through to 2019-20

The Committee expects to agree additional key deliverables during 2018-2019 and 2019-2020 as discussions with our stakeholders' progress. This proposed work programme is dependent on budget allocations for 2018-19 and 2019-20 being agreed and finalised with our Sponsor Departments. Reports will be prepared on a UK basis unless otherwise specified.

Annex B provides details of the work programme underpinning the key deliverables.

2018-19 thro	2018-19 through to 2019-20 work programme					
Period	Category	2018-19	Period	Category	2019-20	
April - September	Mitigation	UK Progress Report	April - September	Mitigation and Adaptation	3 rd Statutory Joint UK Progress Report including the Committee's views on the 2 nd Carbon Budget period (2013-2017)	
	Mitigation	Scottish Progress Report on reducing emissions		Mitigation and Adaptation	Business and Climate Change	
	Adaptation	In-depth adaptation policy studies		Mitigation	Innovation and carbon budgets	
	Mitigation	Bio-Energy		Adaptation	Scottish Adaptation Report (to be confirmed)	
	Mitigation	Hydrogen		Mitigation	Scottish Progress Report on reducing emissions	
				Mitigation	Advice to the Welsh Government on the 3 rd Carbon Budget	
October - March	Mitigation and Adaptation	Local government: reducing emissions and improving resilience	October - March	Mitigation	Review of International Carbon Markets	
	Mitigation	Agriculture abatement potential				

2018-19 through to 2019-20 work programme					
Period	Category	2018-19	Period	Category	2019-20
	Mitigation and Adaptation	Prices and bills report			
	Mitigation and Adaptation	Built environment and climate change			

Section 4: Resource Management

Finances

The Committee is financed via Grant-in-aid from BEIS, Defra, the Northern Ireland Executive, the Scottish Government and the Welsh Government.

The Committee on Climate Change and Adaptation sub-Committee have already undertaken significant measures to reduce costs during the course of 2016-17, including reducing our office space by half. The CCC will continue to implement cost savings during the current Spending Review Period, which extends to 2019-20.

The Committee and its ASC for the year 2016-17 incurred the following expenditure which was funded as shown in the table below:

2016-17 Funding					
	CCC (£)	ASC (£)	Total (£)		
Income					
BEIS	2,152,959	-	2,152,959		
Defra	-	743,899	743,899		
Scotland	278,704	65,998	344,702		
Wales	134,474	19,832	154,306		
Northern Ireland	73,668	11,737	85,405		
Total	2,639,805	841,466	3,481,271		

2016-17 Expenditure					
	CCC (£)	ASC (£)	Total (£)		
Expenditure					
Pay	1,749,998	488,229	2,238,227		
Research	449,184	194,960	644,144		
Operating costs	431,588	158,277	589,865		
Capital expenditure	9,035	-	9,035		
Total	2,639,805	841,466	3,481,271		

The amounts stated in the table above reflect actual expenditure incurred by the CCC during 2016-17; the amounts invoiced and paid may differ slightly due to the timing of invoices issued.

The proposed 2017-18 core funding for the Committee and ASC is shown in the table below. The Committee and the ASC also receive specific funds for additional research (i.e. requests beyond that covered by our core funding). Actual funding will be finalised during 2017-18 and reported in the 2018 Corporate Plan.

2017-18 Funding and expenditure					
	ссс	ASC	Total		
Income					
BEIS	2,188,353	-	2188,353		
Defra	-	750,000	750,000		
Scotland	219,358	34,276	253,634		
Wales	127,958	19,994	147,952		
Northern Ireland	75,731	11,834	87,565		
Total	2,611,400	816,104	3,427,504		
Expenditure					
Pay	1,827,800	516,858	2,344,658		
Research	335,000	147,865	482,865		
Operating costs	448,600	151,381	599,981		
Capital expenditure	-	-	-		
Total	2,611,400	816,104	3,427,504		

Staff

The Committee employs a Chief Executive and a Secretariat of approximately 30 staff, on a full time equivalent basis. This comprises 23 analytical full time equivalent staff, six of whom are working to support the ASC, and six of whom are providing corporate support including specialists in communication and finance.

The challenging nature of our work means we need to attract and retain people who are at the forefront of their field. We place high importance on supporting our people, including investing in development opportunities to enhance their knowledge and skills.

Annex A - 2017-18 Work Programme

The Committee's analytical work programme for **2017-18** is outlined below. This is subject to final agreement of funding and may be revised if circumstances change.

The **Combined Progress Report to Parliament** will be published in June 2017. This will comprise an assessment of the UK Government's progress to meet the UK's fourth and fifth carbon budgets. As the publication of the Government's Clean Growth Plan has been delayed the Committee will publish a separate report with our assessment of the impact of the Clean Growth Plan once it has been published.

The 2017 progress report will also provide the Adaptation Sub-Committee's second statutory assessment of the National Adaptation Programme. Both assessments will review the latest emissions data, together with evidence on underlying emissions drivers including weather, economic activity and implementation of abatement measures.

The ASC plans a number of detailed studies considering climate change risks and policy options relevant to **land use** and the **built environment**. The existing suite of indicators used for monitoring and evaluating the NAP will be updated and extended, and as far as possible combined with more locally-relevant datasets that provide examples of how current policy is addressing climate vulnerabilities in practice. An updated National Adaptation Programme is expected in 2018. The ASC may provide further advice to the UK Government in advance about its contents, and once published, consider what effect it will have on long-term vulnerabilities.

We are expecting significant new evidence to be developed in a number of important areas for UK carbon budgets in the period to 2018. Below are areas that the Committee feels will need to be updated as that new evidence is produced in order to provide reliable advice to Government and Parliament. The timing of analysis will depend on precisely when new information becomes available. We will update this list with the Sponsor Group, which comprises BEIS, Defra and the devolved administrations, over time.

Report on Measurement issues – the profile of issues attached to measurement of energy use and emissions has increased significantly in recent months. There have, for example, been significant changes to inventory estimates; there are known issues about differences between test cycle and real-world emissions for new vehicles, which affect transport emissions estimates by mode and there are questions about achievement of building standards. The Committee intends to look at reliability, robustness and uncertainty in the existing greenhouse gas emissions inventory, with a view to considering implications for the setting and monitoring of progress of UK carbon budgets.

Report on Aviation emissions – the International Civil Aviation Organisation (ICAO) has been negotiating a global market-based measure for international aviation emissions. Following on from this, the Committee will assess the implications for UK carbon budgets, including whether it is practical to include international aviation emissions in UK carbon budgets, and for UK measures to limit aviation emissions.

Assessment of plan to meet the fifth carbon budget—the Government has a legal obligation to produce a plan to meet the fifth carbon budget. The precise timing of its publication is not known but it is expected in 2017/18. The Committee will assess the plan shortly after its publication.

Advice to the Devolved Administrations

Report to the Scottish Government on progress in reducing emissions towards targets, by

September 2017.

Advice reports to the Welsh Government on the setting of Carbon budgets in the context of Environment (Wales) Act by November 2017.

Annex B - 2018-19 - 2019-20 Work Programme

The Committee's analytical work programme for **2018-19** and **2019-20** is outlined below. This is subject to final agreement of funding and may be revised if circumstances change.

Progress Reports

Progress reports to Parliament to be published in June 2018 and June 2019. The Progress Report to be published in June 2019 will be the 3rd Statutory Joint Progress Report and will include the Committee's views on the way in which the budget for the 2nd Carbon Budget period (2013 – 2017) were or were not met, and action taken during the period to reduce net UK emissions of targeted greenhouse gases.

The Committee will also issue an annual **Scottish Progress Report.** The **Welsh Progress Report** will be due by December 2020.

A second assessment of the Scottish Climate Change Adaptation Programme may also be required by Scottish Ministers.

Other Reports

Report on Local Government: reducing emissions and improving resilience – there is substantial potential for local government to take action in relation to both mitigation and adaptation. As further policy and funding is devolved, the Committee intends to look further at the scale of these opportunities and actions required.

Report on the potential for **Agriculture Abatement** - following completion (by Defra) of the Smart inventory for agriculture (the first comprehensive assessment of greenhouse gas emissions from agriculture), an assessment of the implications this has for UK carbon budgets. The Committee will consider whether the new inventory estimates imply any changes required to the legislated UK carbon budgets and whether the new evidence gives a better understanding of the opportunities for reducing emissions from agriculture and how these can be unlocked and monitored. Timing will be dependent on completion of the new inventory.

Report on Innovation and UK Carbon Budgets – progress in reducing emissions, across sectors, will be helped by multiple innovations. In 2010, the Committee published an assessment of the effectiveness of policy measures and institutional arrangements to deliver technologies required to meet UK carbon budgets. The Committee believes it will be useful to update that assessment and consider the policy mix to promote innovation and build on innovations from elsewhere.

Report on the impact of UK Carbon Budgets on Energy Prices and Bills - The Committee will update its assessment, in line with a two year cycle.

Report on the UK Built Environment and Climate Change – a high proportion of emissions are accounted for by urban areas, and people will be impacted by climate change as result of whether, and to what extent, buildings and urban landscapes are fit for the future climate. This work will complement the Committee's work already underway on the implications of climate change for agriculture and for rural land use.

Bioenergy – the Committee believes that it will be useful to update its assessment, in the 2011 Review, which has continued to be the main foundation of CCC scenarios for bioenergy. This will

cover estimates of sustainable supply – UK and UK share of international – and the best use of bioenergy, including BECCS. It will include consideration of the implications of the Paris Agreement.

Hydrogen – this report will consider potential roles for hydrogen across the energy system and low-carbon production, and how they fit together. This review will need to be joined-up with that on bioenergy. We will also look to build on and usefully supplement BEIS supply-chain and heat projects.

Business and Climate Change – aviation and agriculture as "hard to reduce" sectors are the subjects of separate planned work prior to provision of advice on the sixth carbon budget. Opportunities to abate from "hard to reduce" industry would be the subject of this further assessment. But the intention would also be to draw together work on the readiness of business for the impacts of climate change, and readiness and opportunities for new markets.

Review of International Carbon Markets – the Committee considers that it will be useful to take stock of the development of carbon markets, their coverage, strength, and additionality, and consider future prospects. What is their role in meeting international and UK targets?

There is no requirement for a progress report on the National Adaptation Programme in 2018. Therefore, the ASC plans to conduct a range of in-depth adaptation policy studies leading to the production of a report in summer 2018. The focus of the policy studies will be decided by the committee early in 2017-18.