

Executive Summary

Sandbag welcomes the Committee on Climate Change's (CCC) advice on the 5th carbon budget, and three of our five recommendations below seek to echo and amplify the Committee's own recommendations. We go beyond the CCC's advice in two key respects.

First, we recommend that the accounting of the carbon budgets should be overhauled to be more intuitive, transparent and honest. The UK's carbon budgets under the Climate Change Act embody a simple promise: to keep national emissions beneath the level proposed by the Secretary of State and agreed in parliament. The current byzantine carbon accounting rules are full of loopholes which allow the government to wriggle out of that promise by outsourcing responsibility to the EU Emissions Trading Scheme (ETS) and to the companies covered by that policy.

Secondly, we recommend that the Committee's advice should be updated in light of the progress made at Paris. The UK's long term target and 5th carbon budget are now inadequate in light of a new global climate objective to "[hold] the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels". This was not reflected in the CCC's letter to Secretary of State Amber Rudd.

Sandbag makes the following recommendations bearing on the 5th carbon budget:

- 1. From the 5th carbon budget onwards, prevent the transfer of units under the EU Emissions Trading Scheme from counting towards the UK carbon account.** The government is currently only responsible for meeting the residual parts of the carbon budget that are not covered by the EU carbon market. This change in accounting, would oblige government to put adequate policies in place to ensure emissions from power stations and factories also stayed within the carbon budget.
- 2. For Budgets 2 to 4, accept the Climate Change Committee's advice to fix the UK's ETS sector budget at originally estimated levels.** This will prevent uncertainties about European legislation from diluting ambition in the UK's non-ETS sectors. The CCC currently expects that 319 million additional carbon units will become available in the non-ETS sectors as a result of updated estimates of the UK's ETS budget. If all of these are banked forward to the 5th carbon budget, these unexpected carbon units would weaken the proposed non-ETS budget by as much as 28%. As a general rule, we strongly discourage banking of spare allowances between carbon budgets.

About Sandbag

Sandbag is a UK-based not-for-profit think tank conducting research and campaigning for environmentally effective climate policies.

Our research focus includes the phase-out of old coal in Europe; deep decarbonisation of industry through technologies including Carbon Capture Utilisation & Storage; reform of the EU Emissions Trading Scheme; and increasing ambition in the EU 2020 and 2030 climate & energy packages.

For more information visit www.sandbag.org.uk or email us at info@sandbag.org.uk

3. **Accept the Committee’s advice to include international shipping from the 5th carbon budget, and to account for aviation emissions when setting the budget level.** The Committee has always assumed international shipping and aviation are captured under the 80% target in 2050. Emissions from these sectors therefore need to be included in the carbon budgets, or accounted for when setting the budgets, to ensure they are aligned with a cost-effective trajectory to our 2050 target.
4. **The UK’s long-term goal should be strengthened to reflect the stronger climate objectives in the Paris agreement, and the 5th carbon budget should be adjusted accordingly.** On social media, Climate Change Committee staff have provisionally indicated that a 1.5°C global target implies a new 2050 target for the UK of 90% or more below 1990 levels.
5. **Above all, a realistic and coherent Low Carbon Plan needs to be implemented by Autumn this year, which convincingly delivers emissions reductions consistent with the CCC’s advice.** This plan should include appropriate measures to ensure the continued deployment of renewables, the rapid implementation of the coal phase-out, and ongoing measures to ensure CCS is deployed in a timely fashion.

We explore these recommendations in more detail in the rest of our submission. We will be focussing the bulk of our attention on the first two accounting recommendations. This submission builds upon recommendations previously made by Sandbag in our open letter to the Committee on Climate Change on the international context for the 5th carbon budget¹, our initial press reaction to the CCC’s 5th carbon budget report², and our briefing to MPs on carbon budget reforms under debate in the current Energy Bill.³

Recommendation 1: Honest accounting of the 5th carbon budget

From the 5th carbon budget onwards, prevent the transfer of units under the EU Emissions Trading Scheme from counting towards the UK carbon account.

An amendment to the current Energy Bill (clause 80)⁴ that was recently passed in the House of Lords seeks to bring this about by changing the way emissions are accounted under the Climate Change Act. The amendment seeks to make the government accountable for ensuring all of the UK’s greenhouse gas emissions stay within any new carbon budgets adopted.

¹<https://sandbag.org.uk/reports/letter-climate-change-committee-international-context-5th-carbon-budget/>

²https://sandbag.org.uk/site_media/pdfs/press_releases/5th_carbon_budget_should_do_what_it_says_on_the_tin.pdf

³ <https://sandbag.org.uk/reports/carbon-budget-reforms-energy-bill/>

⁴ Section 6, clause 80 of the Energy Bill states:

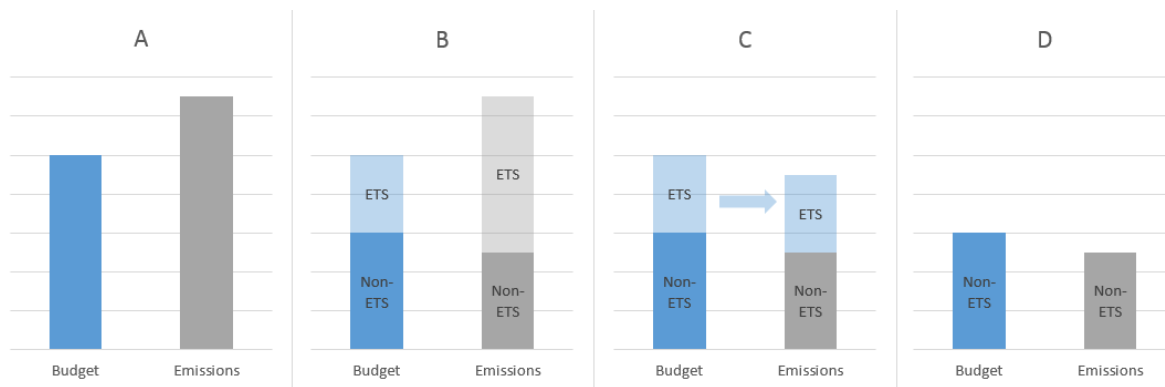
In section 27 (net UK carbon account) of the Climate Change Act 2008, after subsection (2) insert—

“(2A) No carbon units deriving from the operation of the EU Emissions Trading System may be credited to or debited from the net United Kingdom carbon account for any period commencing after 31 December 2027.”

Currently, the government is only responsible for meeting half of the UK carbon budgets. It is only accountable for reducing emissions from sectors like buildings, transport and agriculture. Meeting the other half of the carbon budget is outsourced to companies in the EU Emissions Trading scheme (ETS), and is treated as being met automatically, irrespective of whether actual emissions from these sectors are higher or lower than the UK's ETS budget.

The UK carbon budgets currently place no obligation on the government to reduce emissions from the electricity and manufacturing sectors. Even if emissions were to grow in these parts of the UK economy, the government would still legally meet its carbon budgets. The current accounting allows the government to indefinitely ignore the Climate Change Committee's advice regarding the level of power sector decarbonisation required to meet our long term goals. The carbon budgets do nothing to prevent government from embarking on an all-out dash-for-gas or pursuing other high carbon strategies in the power and manufacturing sectors. By extension the carbon budgets provide no investor confidence for the UK electricity sector.

The current, counter-intuitive accounting of the UK carbon budgets is explained in the chart below. Sandbag is promoting emissions accounting that is more intuitive and transparent, as displayed in Chart A.



The UK's confusing Carbon Accounting rules:

- **Chart A** shows national emissions exceeding the allotted carbon budget, seemingly putting the government in breach of its carbon budget.
- **Chart B** shows how the same carbon budget is divided between ETS units and Non-ETS units, with emissions also divided by ETS and Non-ETS sectors. In this example, the ETS budget turns out to be quite small, while ETS emissions are relatively large. We have faded out the ETS budget and the ETS emissions because these are essentially irrelevant, as we shall see.
- **Chart C** shows how carbon budgets are currently accounted. ETS emissions are ignored and assumed to fall at the same level as ETS allowances. To illustrate this we have transplanted the ETS budget (in blue) on to the Emissions column.
- **Chart D** shows the Non-ETS sector budget compared with Non-ETS emissions. Because ETS carbon units and ETS emissions are the same, they cancel out. Effectively the government is only held accountable for the non-ETS sectors. In this example, where the government initially appears to be in clear breach of its carbon budget, it actually falls comfortably within it because all of the emissions overshoot was in ETS sectors, which are ignored.
- Sandbag would like to see the accounting rules simplified so that the carbon budgets do what they say on the tin, and keep all national emissions below a pre-agreed level.

If the carbon accounting rules were changed as we propose, the Climate Change Committee would be obliged to issue a new 5th carbon budget fully aligned with its recommended emissions level: 1,585 million tonnes (61% below 1990 emissions) instead of 1,725 million tonnes (57% below 1990 emissions) currently.⁵ This is why it is important to change the accounting rules before the 5th carbon budget is adopted by government. The following table from the CCC's 5th carbon budget report makes the 140 million tonne difference between the proposed budget and the desired level of emissions painfully clear.

Table 6.1: Budget recommendation

MtCO ₂ e	2030	The fifth budget period (2028-2032)
Non-traded sector	227	1,135
Traded sector (gross emissions)	87	450
Adjustment for the UK share of the EU ETS cap	+31	+140
Traded sector portion of net carbon account	118	590
Recommended budget		1,725

Notes: Adjustment for the UK share of the EU ETS cap is the difference between gross UK emissions and the UK share of the EU ETS cap. This adjustment essentially reflects net trading in the EU ETS, with the positive number reflecting net sales of allowances given that the share of the ETS cap is above our assessment of the traded sector cost-effective path. However, this difference could also reflect differences in the time profile of emissions within the EU ETS (e.g. companies holding onto allowances to use for future periods, use of previously retained allowances or the operation of the Market Stability Reserve). The 2030 level of gross traded sector emissions is not equal to the average emissions over 2028-32, due to the shape of the emissions trajectory in our Central scenario.

DECC's latest greenhouse gas projections estimate that emissions over the 5th carbon budget could reach 2,112 million tonnes (Mt) if no new policies are implemented, a third higher than if this proposal were adopted. If left unchanged, the current accounting rules would place no obligation on the government to reduce any of those excess emissions that arose from the ETS sectors.⁶ This underlines the fact that this proposal is an important driver of change, ensuring that the Government continues to support decarbonisation policies beyond 2020. Such policies should include implementing the announced coal power phase out by 2025, investing in CCS on gas and continuing to support the most cost-competitive renewables, nuclear and demand management policies.

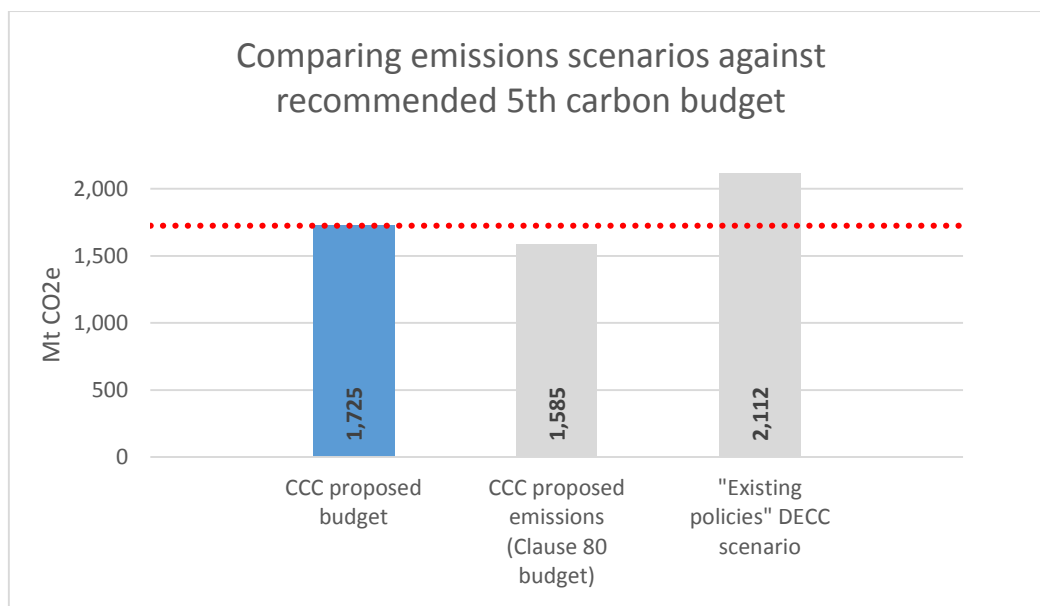
It is interesting to highlight that the latest emissions projections from DECC for the "Reference Scenario", in which all planned policies are implemented, put the UK safely on track to deliver the CCC's proposed emissions reductions for the ETS sectors in the 5th carbon budget. The power sector is decarbonised to 103g/KWhr in 2030,⁷ broadly compatible with the Climate Change Committee's recommended decarbonisation target⁸, and ETS emissions fall to 453 million tonnes over 2028-2032, broadly in line with the Climate Change Committee's target path of 450Mt.

⁵ For the moment, we are discussing the budget under the current scope, with maritime emissions excluded.

⁶ See "Existing Policies" scenario in Annex A: Greenhouse Gas Emissions by Source <https://www.gov.uk/government/publications/updated-energy-and-emissions-projections-2015> DECC does not show the ETS vs non-ETS emissions in this forecast. Clause 80 would provide an additional constraint only on the ETS emissions.

⁷ Figure 5.2 DECC 2015 energy and emissions projections. Web Figures (not yet published)

⁸ "average emissions should be around 100 g/kWh in 2030" (<https://www.theccc.org.uk/publication/letter-ccc-advice-on-the-approach-to-investment-in-fossil-fuel-power-generation/>)

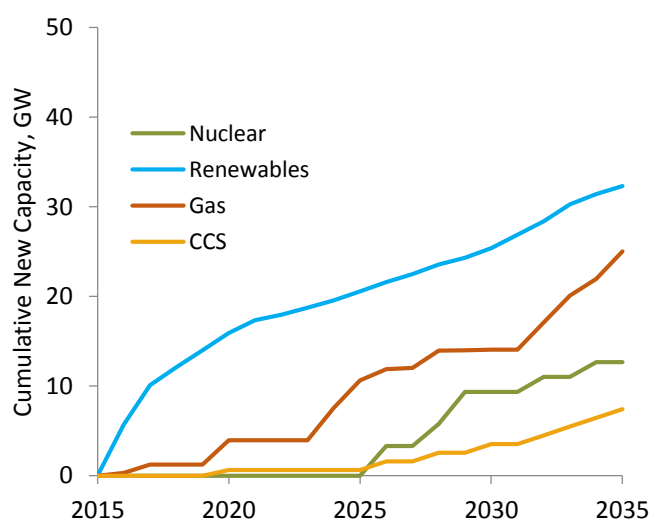


If the government is confident it can achieve the emissions reductions shown in the DECC Reference Scenario, it should have no issue accepting a change in accounting rules which holds them accountable for delivering this. **What is more, it would be in the government's interests to adopt this change.** The DECC projections see ETS emissions landing at 137 Mt under budget, while the non-ETS sectors will be 311 Mt over budget. Over-achievement in the ETS part of the budget, could help alleviate nearly half of the projected policy gap in the non-ETS sectors, where emissions reductions tend to be more difficult and expensive. Changing the accounting rules, through clause 80, or something like it, would both keep the government honest, and also reward it for that honesty.

Big questions already hang over whether the Reference Scenario is a plausible indication of the direction of current government policy. The Reference Scenario assumes 9GW of nuclear power, 27GW of renewables, 14GW of gas and 4GW of CCS plant will be introduced between now and 2030 (see chart below).

Recent government announcements cancelling £1 billion funding for Carbon Capture and Storage and withdrawing support for onshore wind, throw this scenario into question. Moreover, the Climate Change Committee recommends that 7GW of power capacity be fitted with CCS by 2030, with a further 3MtCO₂e per year stored from industry. Without an urgent increase in funding for first stage projects, this roll-out will be in jeopardy, given the long lead time for storage site appraisal and construction of transport and storage networks.⁹

DECC 2015 Reference Scenario: Cumulative new capacity of MPP Nuclear, Renewables and Gas (Figure 6.2)



⁹ Implications of the Paris Agreement – The CCC (Jan 2016) <https://documents.theccc.org.uk/wp-content/uploads/2016/01/Paris-Agreement-and-fifth-carbon-budget-CCC-letter-to-Rt-Hon-Amber-Rudd.pdf>

Finally, the DECC forecast also appears to depend on EU carbon prices rising to nearly £50 by 2030, which Sandbag considers unrealistic against the current Commission proposal for the ETS revision. Last but not least, the Reference Scenario also appears to anticipate that the cap on the Carbon Price Support will end in 2020 and that the escalator will resume to originally planned levels, providing a Carbon Price Floor of £78.50 in 2030 (see table below).¹⁰ This seems highly unlikely given the governments repeated moves to freeze the carbon price escalator to date.

DECC 2015 Reference Scenario: Carbon prices (Table 7.5)

£2015/tonne CO2	2014	2015	2016	2017	2018	2019	2020	2025	2030	2035
Industry and Services	4.9	5.9	5.9	5.9	6.1	6.3	6.6	22.6	47.1	47.1
Electricity supply sector	8.4	21.9	23.6	23.3	23.2	23.1	28.6	56.0	78.5	78.5

Preventing ETS allowances from counting toward the net carbon account is therefore key to ensuring the government adopts a strong 5th carbon budget and implements policies in line with the Climate Change Committee’s advice. It is also pivotal for providing investor confidence in the UK electricity sector. We therefore encourage lawmakers to reject the use of ETS allowances in the UK’s net carbon account, starting from the 5th carbon budget.

Recommendation 2: Prevent excess artificial carbon units from weakening the UK’s climate efforts

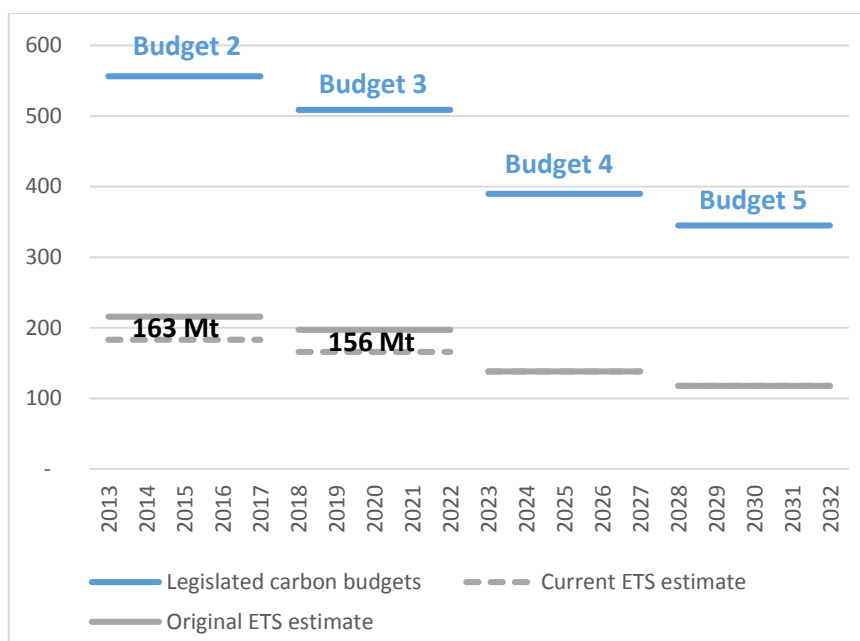
For Budgets 2 to 4, accept the Committee’s advice to fix the UK’s ETS budget at originally estimated levels, and avoid banking of spare allowances between carbon budgets.

As explained within our first recommendation, the current carbon budgets are divided into ETS and non-ETS units, with the government only strictly obliged to keep emissions from the non-ETS sectors within the non-ETS budget. The non-ETS budget is the residual budget after ETS allowances are subtracted.

There is another complication introduced by this accounting regime: because the government sets carbon budgets roughly 12 years in advance, the share of ETS allowances they can expect in each budget is essentially unknown. In the case of the 5th carbon budget, which spans the period 2028-2032 the corresponding ETS legislation is only just being debated in Brussels for the period 2021-2030. In this context, the Climate Change Committee is obliged to make an educated guess at the level of ETS allowances it thinks the UK will receive in a given period. Currently, their estimate for the 5th carbon budget is that 590 Mt will be needed for the ETS, but the Committee acknowledge a significant error margin in this estimate.¹¹ The chart below demonstrates how the Committee’s estimate of the UK share of ETS allowances has shifted from when the carbon budgets were first set compared with today.

¹⁰ Table 7.5 DECC 2015 energy and emissions projections. Web Tables (not yet published)

¹¹ E.g. They state that UK free allocations could be 25% higher or lower than they have estimated



Source: Climate Change Committee, Sandbag Calculations

With the overall level of the carbon budgets fixed, this reduction in the ETS part of the budget leads to a corresponding increase in the non-ETS budget, thereby alleviating pressure on the government to reduce emissions. The Committee’s latest estimates for the ETS are 163 Mt lower in Budget 2, and 156 Mt lower in Budget 3. This means 319 million more carbon units have become available to the government in the non-ETS sectors. Because the ETS budget is treated as being met automatically, this specific recalculation of the UK’s ETS cap does not imply any increase in environmental ambition in the UK’s ETS sectors. However it does lead to a weakening of environmental ambition in the UK’s non-ETS sectors.

In the case of Budgets 2 and 3, the Committee overestimated the level of the Phase 3 ETS cap (spanning 2013-2020), and this has given the government more room to manoeuvre than they would have anticipated when they first agreed these carbon budgets. The opposite may happen in future, however: if the Climate Change Committee has underestimated ETS allocations in Phase 4 or Phase 5, the government might find itself in a tight corner with less carbon units in the non-ETS budget than it had counted on.

To rectify this situation of moving goalposts and create more certainty for government, the Committee has recommended that the ETS vs. non-ETS split of each carbon budget be fixed at the original level estimated rather than being updated over time. This will have no effect on the ETS sectors, but will ensure that the non-ETS budgets are static and predictable.

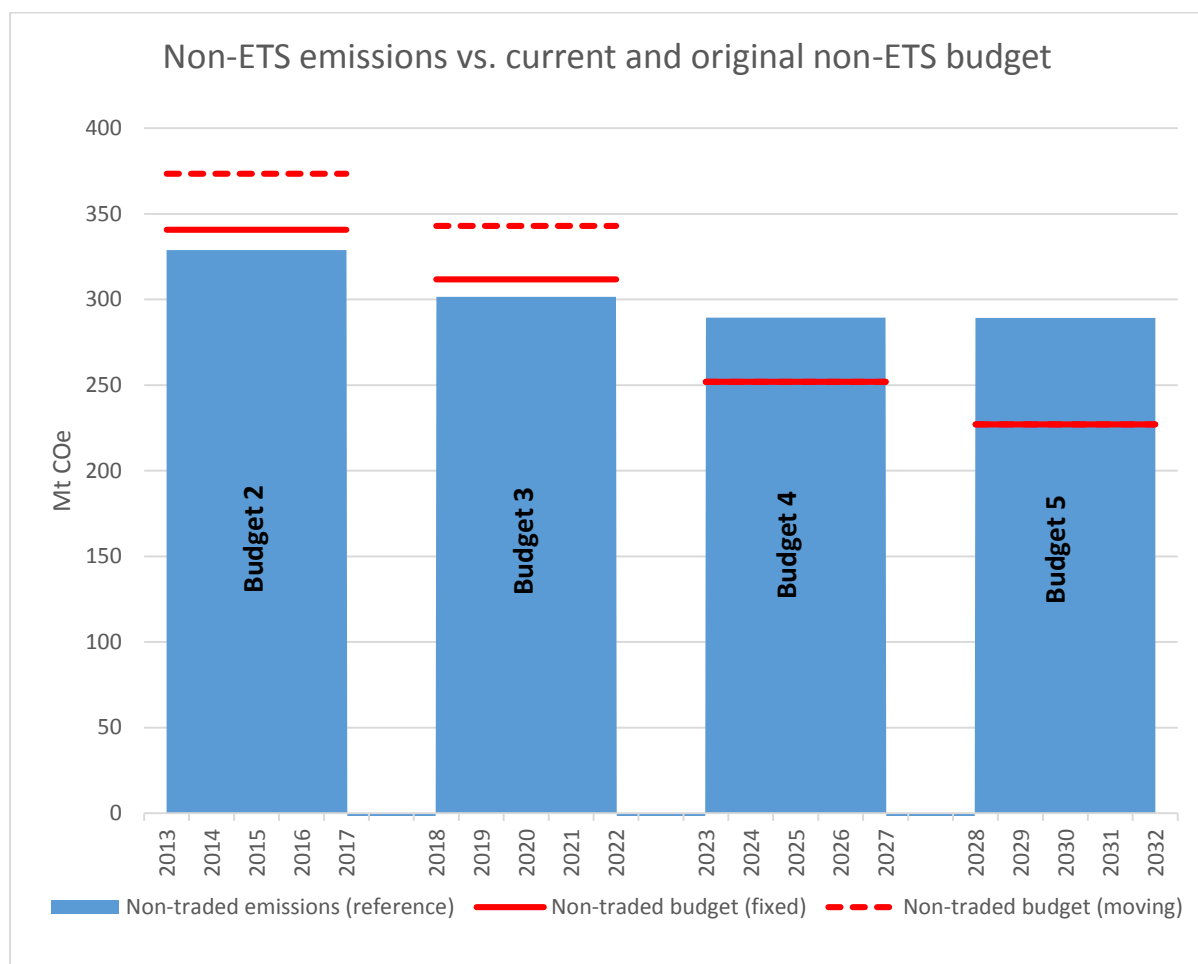
This Climate Change Committee recommendation seeks to solve two problems:

- 1) To address the unpredictability about the policy gap for the non-ETS sectors when setting future carbon budgets,
- 2) To prevent excess allowances from accumulating in the non-ETS budget and discouraging the government from taking appropriate and timely measures.

As noted in [Recommendation 1](#), Sandbag has an alternative recommendation to the CCC on how to create more certainty for carbon budgets going forward. Our solution is to essentially dissolve the artificial split between the ETS and non-ETS parts of the budget and oblige the government to manage all territorial emissions to keep them within budget.¹²

We do, however, support the Committee in its second intention, to prevent excess allowances accumulating in the non-ETS part of the budget, and to prevent these being banked for use in later budgets. We are especially concerned about excess allowances being generated as a result of accounting anomalies in the Carbon Accounting legislation.

In the chart below we show how the current, moving carbon budgets and the original, fixed carbon budgets compare against non-ETS emissions in the DECC Reference Scenario. We can plainly see that the current, “moving goalposts” system exacerbates the spare carbon units that are already expected to accumulate in budget 2 and 3. It remains unclear what the final non-ETS budget will be in budgets 4 and 5.



¹² We acknowledge that the government might, under special circumstances, seek to purchase or surrender emissions rights, but we do not support the government counting emissions trading from private entities towards or against its national efforts.

If planned policies under the Reference Scenario are implemented, and all spare carbon units are banked between periods, the current rules would require no additional effort to meet the 4th carbon budget, and would allow for some 243 million units to be banked into the 5th carbon budget, weakening the ambition of that budget by 21%.

Non-ETS emissions vs. Non-ETS budget (current budget split)				
Year	(2013-17)	(2018-22)	(2023-27)	(2028-32)
Budget period	2	3	4	5
Non-traded budget (current/moving)	1,867	1,715	1,260	1,135
Reference scenario (non-traded)	1,644	1,508	1,447	1,446
* Annual balance of carbon units	223	207	-187	-311
* Cumulative balance of carbon units	223	430	243	-68

By contrast, if the non-ETS budgets are fixed at their original estimated levels, as the Climate Change Committee has proposed, the government will be required to introduce new policies to meet a residual 76 million tonne policy gap in the 4th carbon budget, and no carbon units will remain to be banked into the 5th carbon budget period, leaving a 311 Mt policy gap to meet.

Non-ETS emissions vs. Non-ETS budget (original budget split)				
Year	(2013-17)	(2018-22)	(2023-27)	(2028-32)
Budget period	2	3	4	5
Non-traded budget (original/fixed)	1,704	1,559	1,260	1,135
Reference scenario (non-traded)	1,644	1,508	1,447	1,446
* Annual balance of carbon units	60	51	-187	-311
* Cumulative balance of carbon units	60	111	-76	-387

Even under the Climate Change Committee’s proposed accounting change, we see large volumes of spare carbon units accumulating in the carbon budgets in Budget 2 (60 Mt) and Budget 3 (51 Mt), which, if banked, risk diluting the UK’s efforts to meet our 4th carbon budget. In this conjunction, we note that the Committee offers its advice on the expectation that government will seek to bridge the policy gap in the non-ETS sectors for each individual carbon budget without recourse to any banked allowances. We therefore urge government to abstain from banking any spare carbon units between budgets that arise in the non-ETS sectors¹³

In summary, Sandbag strongly endorses the CCC’s recommendation to fix the split between the ETS and non-ETS parts of the budget at their original estimated levels. We also urge the government to avoid banking carbon units between budgets. From the 5th carbon budget, we urge lawmakers to dissolve the split between the ETS and non-ETS budgets altogether and make the government accountable for meeting the whole carbon budget.

¹³ The operation of the new Market Stability Reserve in the ETS might require some banking of carbon units from the ETS sectors.

Recommendation 3: Account for appropriate sectors when setting the budget

Accept the Climate Change Committee’s advice to include international shipping from the 5th carbon budget, and to account for aviation emissions when setting the budget level.

As the CCC clearly notes:

“Regardless of whether the IAS sectors are included in carbon budgets, the Act requires those emissions are “taken into account” because the ultimate 2050 objective must incorporate those emissions to be consistent with international goals supported by the UK and the latest scientific understanding.”¹⁴

Even more tellingly, the Committee’s advice on the level of the carbon budgets has always been made on the assumption that aviation and shipping emissions are included in that goal. This is evident as early as October 2008 when Lord Turner was advising then Secretary of State, Ed Miliband, on the 80% target for 2050. In that letter he clearly states:

“The 80% target should apply to the sum of all sectors of the UK economy, including international aviation and shipping.”¹⁵

Given that all previous carbon budgets have been adopted with a particular scope of the 2050 target in mind (i.e. one which includes both international aviation and shipping), the government would be acting in bad faith if it did not adopt a 5th carbon budget in keeping with that goal.

With a view to reaching that long term target, it is important that the government move to accommodate emissions from international aviation and shipping within the scope of the carbon budgets as soon as possible. While accounting challenges remain for including the aviation sector, maritime emissions are more tractable and should be included as soon as possible as per the Committee’s advice (see inset below).

MtCO ₂ e	The fifth budget period (2028-2032)
Non-traded sector	1,135
Traded sector portion of net carbon account	590
International shipping	40
Recommended budget including international shipping	1,765

Recommendation 4: Strengthen the budget in light of the Paris agreement

The UK’s long-term goal should be strengthened to reflect the stronger climate objectives in the Paris agreement, and the 5th carbon budget should be adjusted accordingly.

¹⁴ p.25 <https://www.theccc.org.uk/publication/the-fifth-carbon-budget-the-next-step-towards-a-low-carbon-economy/>

¹⁵ p.1 <https://d2kx2p8nxa8ft.cloudfront.net/wp-content/uploads/2013/03/Interim-report-letter-to-DECC-SofS-071008.pdf>

While the Committee has been hesitant to propose a stronger carbon budget in light of the Paris agreement in its official letter to Secretary of State Amber Rudd¹⁶, staff from the Committee's secretariat have indicated on social media that a global target of 1.5°C would imply a much more ambitious 2050 goal for the UK, which by extension would imply a much more ambitious 5th carbon budget as a staging post to that goal.



Steve Smith
@stv_smth



Follow

1.5°C consistency for UK wld mean 2050 target of >90% or more (given limited data out there) rather than >80% #COP21

Limiting warming in 2100 (allowing for overshoot)					
1.5°C (>50% in 2100) Pathways limiting warming to below 1.5°C by 2100 with >50% chance Limited action until 2020 and least-cost mitigation afterwards					
Number of available scenarios: 6; Number of contributing modelling frameworks: 2					
Year of global annual emissions becoming net zero* for:					
Kyoto-GHGs: (2060-2080); total CO ₂ (including LULUCF): (2045-2050); CO ₂ from energy and industry: (2045-2055)					
	Annual emissions of global total greenhouse gases [GtCO ₂ e/yr]				
Year	2020	2025	2030	2050	2100
median*	56	47	39	8	-5
range and spread**	53(-)/56	46(-)/48	37(-)/40	4(-)/14	-5(-)/-3
2°C (>66%) Pathways limiting warming to below 2°C during the 21 st century with >66% chance Limited action until 2020 and least-cost mitigation afterwards					
Number of available scenarios: 6; Number of contributing modelling frameworks: 3					
Year of global annual emissions becoming net zero* for:					
Kyoto-GHGs: (2080-2090); total CO ₂ (including LULUCF): (2055-2075); CO ₂ from energy and industry: (2055-2080)					
	Annual emissions of global total greenhouse gases [GtCO ₂ e/yr]				
Year	2020	2025	2030	2050	2100
median*	52	48	37	23	-5
range and spread**	49(-)/55	44(-)/51	29(-)/44	17(-)/29	-11(-)/-0

Source: UNEP (2015) The Emissions Gap Report, Annex A

As a signatory of the Paris agreement, the UK has committed to:

"[h]olding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels".¹⁷

While global emissions are not yet on track for 2 degrees, and different effort sharing methodologies suggest a range of different obligations for the UK within that commitment, the 2050 goal in the act has been set with a view that per capita emissions in the UK should, by 2050, be equivalent to the required global average. The Paris agreement implies a strengthening of that goal, and a strengthening of carbon budgets along the road to meeting that goal.

By extension, the UK carbon budgets do not allow for the government to adopt carbon budgets based simply on the commitments we have negotiated in Europe, under the EU ETS and the EU effort sharing decision.¹⁸ The Climate Change Act commits us to going further and faster than Europe if necessary, and taking them with us where we can.¹⁹

¹⁶ <https://www.theccc.org.uk/publication/implications-of-the-paris-agreement-for-the-fifth-carbon-budget/>

¹⁷ Article 2: <http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>

¹⁸ The CCC estimates that this is equivalent to 52% below 1990 levels, compared with the -57% target they propose. The 4th carbon budget is already set 52% below 1990 levels following inventory changes.

¹⁹ E.g. through over-delivery against our EU targets and cancellation of excess EU carbon units, and through progressive negotiations.

Recommendation 5: Implement robust policies to meet the carbon budgets

Above all, a realistic and coherent Low Carbon Plan needs to be implemented by autumn this year, which convincingly delivers emissions reductions consistent with the CCC's advice. This plan should include appropriate measures to ensure the continued deployment of renewables, the rapid implementation of the coal phase-out, and ongoing measures to ensure CCS is deployed in a timely fashion.

As discussed under Recommendations 1 and 2, there are worrying indications that the Reference Scenario might be an overly optimistic reading of the level of emissions reductions that we can expect under planned government policies, and even under the Reference Scenario, we can see a huge policy gap opening up in the non-ETS sectors.

In this submission we have highlighted changes to the accounting rules which would strengthen the obligations on government to introduce policies and measures that deliver the required emissions reductions, but these are no substitute for those measures. A clear plan is needed for delivering the emissions reductions required for the 5th carbon budget, and also for the 4th carbon budget before it.

About this submission

Author: Damien Morris, Head of Policy.

For more information email damien@sandbag.org.uk or call +44 (0) 791 466 9569

The logo for Sandbag, featuring the word "sandbag" in a bold, lowercase, blue sans-serif font.