

Net Zero, Energy and Transport Committee
17 September 2024
26th Meeting, 2024 (Session 6)

Climate Change (Emissions Reduction Targets) (Scotland) Bill

Introduction

1. The [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Bill](#) was introduced on 5 September 2024 with these accompanying documents:
 - [Explanatory notes](#)
 - [Policy memorandum](#)
 - [Financial memorandum](#)
 - [Delegated powers memorandum](#)
 - [Legislative competence statements](#)
2. The Bill changes interim greenhouse gas emissions targets in the main climate change legislation in Scotland: [Climate Change \(Scotland\) Act 2009](#), introducing a new “carbon budgeting” process- details on this and the reasons for the change discussed further below. It does not amend the ultimate target in the 2009 Act of achieving “net zero” in emissions in Scotland by 2045.
3. Following pre-legislative scrutiny, the Committee is now taking evidence on the Bill at meetings in September. The Parliament has yet to agree a timetable but the Scottish Government wishes it to be agreed under an expedited timetable.

Current legislative framework

4. The 2009 Act established a statutory framework of greenhouse gas emission reduction targets in Scotland, all measured from a 1990 baseline. These were—
 - at least 42% reduction by 2020; and
 - at least 80% reduction by 2050
5. The Act also required Scottish Ministers to set annual targets for reductions via secondary legislation at least 12 years in advance and to report on each target. It also required Ministers to publish a report setting out the policies and proposals (RPP) that would achieve those targets, including specific comment on the contribution of energy efficiency, energy generation, land use and transport. Draft reports had to be laid in Parliament at least 60 days prior to publication of a final report. Reports were published in [2011](#), [2013](#) and [2018](#).
6. The [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Act 2019](#) then amended the 2009 Act, mainly by introducing more ambitious targets. Again, expressed as a reduction against a 1990 baseline, these were—

- at least 56% reduction by 2020 (later [changed to 48.5%](#));
 - at least 75% reduction by 2030;
 - at least 90% reduction by 2040; and
 - Net zero emissions by 2045.
7. It also introduced annual targets, expressed as equal reductions each year between the interim targets. Annual reporting on these remained a requirement.
8. RPPs were renamed Climate Change Plans (CCPs) and the Parliament was given 120 days to consider a draft CCP. A CCP now had to include statements on how the plans accounted for climate justice and just transition principles, and other details, with chapters specifically on—
- energy supply;
 - transport (including international aviation and shipping);
 - business and industrial process;
 - residential and public (in relation to buildings in those sectors);
 - waste management;
 - land use, land use change and forestry; and
 - agriculture.

The next Climate Change Plan

9. Following the 2019 Act, an [update to the 2018 Climate Change Plan](#) was published. As it was an “update”, it did not set out all the detail required by the 2019 Act. The next full CCP was expected to be laid in draft by November 2023, in line with the SNP and Scottish Greens’ [Bute House agreement](#). However, in [November 2023](#) the Scottish Government announced a delay.
10. In its [2023 Report to the Scottish Parliament on progress towards Scotland’s emissions reductions targets](#) (delayed to March 2024 because of issues associated with non-publication of a draft CCP), the Climate Change Committee, the statutory advisor to governments in the UK, concluded that—
- **“Scotland’s annual target was missed again.** Scottish emissions in 2021 increased by 2.4% from 2020 as the economy rebounded from the pandemic and were 49.2% below 1990 levels. Scotland missed its 2021 annual legal target. This is the eighth target in the past 12 years that has been missed.
 - **The acceleration required in emissions reduction to meet the 2030 target is now beyond what is credible.** The recent rate of emissions reduction outside the electricity supply, aviation and shipping sectors needs to increase by a factor of nine in the nine years from 2021 to 2030, compared to the preceding nine years, if Scotland is to achieve its 2030 target of a 75% reduction compared to 1990 levels. This rate of reduction is nearly two times higher than that in the CCC’s ambitious pathway for Scotland, which we updated in 2022. Given the pace at which supply chains and investment would need to develop, this rate of reduction is not credible..”

- “Scotland is therefore lacking a comprehensive strategy that outlines the actions and policies required to achieve the 2030 target.”

The new Bill

11. A [Ministerial Statement to Parliament on 18 April](#) followed the CCC’s 2023 Report. In it, the Scottish Government, accepted ‘the CCC’s recent rearticulation that this Parliament’s interim 2030 target is out of reach’ and announced forthcoming ‘expedited legislation’ for a revised timetable for achieving net zero by 2045, with a revised approach based on five-yearly carbon budgeting. A package of 19 [climate change policies](#) were also announced. In [evidence to the Committee on 28 May](#), the Scottish Government also clarified that the new Bill would push back the date for the next CCP, to align with the new approach.
12. The Bill establishes a carbon budget approach to target setting, with budgets set through secondary legislation using advice from the CCC. The proposed system will replace annual and interim targets and it will also make provision for a new CCP to be published that reflects the new approach.
13. Section 1 of the Bill defines a carbon budget. Staying within a carbon budget prescribed for any 5-year period is to be known as the “Scottish carbon budget target”. The Scottish Ministers must ensure this is met.
14. Section 2 makes various changes to the text of the 2009 Act but the most significant is to remove all remaining targets in the Act, based on annual percentages. This is except for the final target of achieving net zero by 2045. Other changes in section 2 include textual changes to the 2009 Act to ensure alignment of current provisions with the new carbon budgeting process.
15. Section 3 requires the next CCP to be published “as soon as practicable after the first regulations setting a Scottish carbon budget come into force”.
16. Section 4 requires that the regulations to set carbon budgets should do so by inserting text into the 2009 Act so that the target always appears on the face of the Act. It also requires advice to be sought on the budget-setting regulations.

Net Zero, Energy and Transport Committee consideration

17. The Committee held a pre-legislative call for views on the likely content of the Bill from 5 July to 16 August.
 - [Responses to the Net Zero, Energy and Transport Committee’s pre-legislative call for views on an approach to setting carbon budgets](#)
 - [SPICe analysis of the call for views](#)
18. On 2 August, the Scottish Government published a [position paper](#) on the intended content of the Bill. The Convener then wrote to the Acting Cabinet Secretary for Net Zero and Energy on [23 August](#) seeking further information on the Bill. [She replied on 28 August](#).

19. At its [meeting on 10 September](#), the Committee took evidence from—

- Dr Emily Nurse of the Climate Change Committee;
- Professor Graeme Roy and Professor David Ulph of the Scottish Fiscal Commission;
- David Hawkey of the Institute for Public Policy Research (IPPR) Scotland;
- Rt Hon Philip Dunne, former MP (2005-2024) and former Chair of the House of Commons Environmental Audit Committee (2020-24).

Evidence on 17 September and next steps

20. At its meeting on 17 September, the Committee will hear from—

- Dr Thomas Muinzer, University of Aberdeen School of Law;
- Catherine Higham and Dr Alina Averchenkova, Grantham Research Institute of Climate Change and the Environment at the London School of Economics and Political Science;
- Neil Langhorn; Environmental Standards Scotland;
- Mike Robinson; Stop Climate Chaos Scotland;

and the from

- Gillian Martin MSP, Acting Cabinet Secretary for Net Zero, Energy and Transport and Scottish Government officials.

21. Written submissions (see **Annexe**) were received from:

- [Grantham Research Institute of Climate Change and the Environment](#)
- [Environmental Standards Scotland](#)
- [Stop Climate Chaos Scotland](#)
- [Dr Thomas Muinzer](#)

22. The Committee will discuss next steps on the Bill after hearing the evidence.

**Clerks to the Committee
September 2024**

Annexe

Submission from Grantham Research Institute on Climate Change and the Environment at LSE

Information about your organisation

The Grantham Research Institute on Climate Change and the Environment was established in 2008 at the London School of Economics and Political Science. The Institute brings together international expertise on economics, as well as finance, geography, the environment, international development and political economy to establish a world-leading centre for policy-relevant research, teaching and training in climate change and the environment. It is funded by the Grantham Foundation for the Protection of the Environment, which also funds the Grantham Institute – Climate Change and Environment at Imperial College London. www.lse.ac.uk/grantham

This submission draws on research and policy analysis conducted by Grantham Research Institute on Climate Change and the Environment at the London School of Economic and Political Science. Reference is made to a body of research that aims to understand the key features of the existing stock of climate change framework laws around the world, and how these features contribute to positive and negative impacts arising from the laws. This research in turn draws on the Climate Change Laws of the World Database, available at <https://climate-laws.org>.

The analysis below is primarily based on the following publications (see relevant citations throughout):

- Averchenkova A, Fankhauser S and Finnegan J (2021a) The impact of strategic climate legislation: evidence from expert interviews on the UK Climate Change Act, *Climate Policy*, 21(2), pp. 251–263. doi: 10.1080/14693062.2020.1819190 available at <https://www.tandfonline.com/doi/full/10.1080/14693062.2020.1819190>
- Averchenkova A, Fankhauser S and Finnegan J (2021b) The influence of climate change advisory bodies on political debates: evidence from the UK Committee on Climate Change. *Climate Policy*, 21(9), pp. 1218–1233. doi: 10.1080/14693062.2021.1878008 available at <https://www.tandfonline.com/doi/full/10.1080/14693062.2021.1878008>
- Averchenkova A, Higham C, Chan T and Keuschnigg I (2024a) Impacts of Climate Framework Laws: lessons from Germany, Ireland and New Zealand. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science available at <https://www.lse.ac.uk/granthaminstitute/publication/impacts-of-climate-framework-laws/>
- Averchenkova A, Higham C, Chan T and Keuschnigg I (2024b) Supplemental evidence on the impacts of climate framework laws. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and

Political Science available at
<https://www.lse.ac.uk/granthaminstitute/publication/impacts-of-climate-framework-laws/>

Part One – Carbon budgets

1. Do you agree or disagree with the proposed shift to 5-yearly carbon budgets (in place of current system of annual targets)?

Our research confirms that setting short-term economy-wide emissions reduction targets in addition to long term net zero, carbon or climate neutrality targets in legislation has significant positive impacts for climate governance. Countries have adopted a range of different approaches to developing short term targets including: annual emissions limits, five-yearly carbon budgets or ceilings, and medium term targets every ten years.

Advantages of the five-yearly carbon budgets are set out below:

- Recent research suggests that five-yearly carbon budgets in combination with a long-term net zero, carbon or climate neutrality target provide a sense of direction both for the longer and shorter term. Five-yearly carbon budgets offer greater flexibility and time to adopt and implement the necessary emissions reduction measures (Averchenkova et al, 2021a; and Averchenkova et al, 2024a).
- When combined with regular progress reporting (such as an annual reporting system), there is an opportunity for course correction to meet the targets, without creating a ‘culture of failure’ around targets that lowers public trust and weakens accountability for climate action (Averchenkova et al, 2024a; see the response below on annual target systems for further detail).
- A carbon budget system may help to smooth out changes in a country’s annual emissions that can be attributed to ‘outlier’ or unusual events, such as a particularly cold winter or the Covid-19 pandemic, which can create challenges for assessing how much progress towards emissions reductions can be attributed to policy interventions. This can help provide a more accurate picture of the progress of overall emissions reduction efforts.
- Evidence from New Zealand, where the Climate Change Response Act of 2002 was amended to include a five yearly carbon budget system by the Zero Carbon Amendment Act of 2019, and Ireland, where a system of five-year emissions budgets was introduced in 2021, suggests that in both countries the budgets have created positive impacts on accountability for climate action (Averchenkova et al, 2024a). However, our research suggests that the accountability created by short term targets and policy cycles relies on ensuring that bodies with an oversight role, such as parliamentary committees and independent advisory bodies, have sufficient expertise and capacity to provide a detailed and authoritative assessments of progress. It is possible that a five-year cycle may make it more likely that these bodies will have the capacity and motivation to rigorously engage with the process while shorter cycles may stretch the capacity of these bodies, and lead to less public and media attention in review processes.

However, there are disadvantages to carbon budgets. Experts have voiced concerns

around the degree to which carbon budget cycles obscure the need for longer term action. For example, in New Zealand, experts have raised concerns that the focus on five-year planning cycles means that the country's policy debate is overly focused on the five-year period, with little to incentivize policymakers to achieve more rapid emissions reductions even where such reductions might be feasible. This problem may however be compounded in systems based around annual targets (Averchenkova et al, 2021a). To mitigate the risk that five-yearly carbon budgets create a focus on short-term actions, carbon budgets should be required to be set well in advance, as is currently done in the UK. Switching to a five-yearly carbon budget must also be accompanied by retaining annual reporting requirements, as is currently planned, to avoid reducing the ability to scrutinise progress towards meeting targets.

Most of the potential advantages of an annual target system relate to how it may strengthen accountability for climate action.

Annual targets and corresponding requirements to report progress offer an opportunity for regular 'check ins' on progress. This allows policymakers to evaluate year over year fluctuations of emissions and can offer an opportunity to respond quickly when emission levels surpass the set threshold. In research examining Germany's climate framework law, we found that accountability was perceived to have increased due to the annual target system (Averchenkova et al, 2024b); this also echoes the sense that annual reporting in fiscal budgeting processes increases accountability and scope for scrutiny.

However, there are also some disadvantages to an annual target system:

- Firstly, challenges may be posed by the transaction costs associated with more frequent reporting. There is evidence to suggest that the processes around setting carbon budgets and negotiating corresponding sectoral emissions ceilings are perceived as overly-time consuming and resource intensive by some experts (Averchenkova et al, 2024a at p.7). Such drawbacks may be exacerbated when responsibility for meeting annual targets set in primary legislation needs to be apportioned between sectors and actors on a short-term basis.
- Secondly, repeatedly missing an annual target may create a 'culture of failure', which may engender disillusionment and backlash from citizens, increase the risk of litigation over government failure to comply with legislated targets, and weaken the likelihood that actors view the target as being credible and take action to comply with it (Averchenkova et al, 2024b at p.14). We see this clearly from the recent experience in Germany. The German Climate Protection Act includes a set of annual sectoral emissions budgets up until 2030. Until this year, if a sectoral budget was missed, the line ministry responsible was required to propose an "immediate action programme" to address the shortfall. However, after targets were missed by some sectors and programmes to address the shortfall were deemed insufficient, this system was amended to adopt a new approach. While the sectoral targets remain in place, immediate action programmes now need to be introduced to address a shortfall only if it is projected that annual targets will be missed two years in a row in the future. Responsibility for correcting the shortfall will then rest not only with the responsible ministry but also with the broader government, which may allow for more

cross-sectoral coordination on solutions. This amendment has been criticized as watering down the law by civil society groups, but some experts believe this approach is more workable in the long run due to increased flexibility and increased potential for cross sectoral measures (see Flaschland et al, 2024 for further discussion).

It is important to note that there are conditions that can contribute to the effectiveness of the legislation regardless of whether a carbon budget or annual target system is adopted. For both annual targets and carbon budgets, the approach should ensure that the country is on an emissions reduction pathway consistent with the Paris Agreement and should take into account the latest developments in scientific knowledge and national circumstances. It is also important to include clear mechanisms for defining sectoral emissions reduction targets and/or pathways within the context of economy-wide targets or budgets to increase clarity on the minimum emission reductions required from each sector and to create shared accountability across government. However, sectoral approaches must not be introduced without also ensuring that there is ongoing coordination, negotiation and collaboration between sectors (see Averchenkova et al, 2024b).

3. The Climate Change Committee (CCC) suggested that the Scottish Government should consider aligning the proposed 5 yearly carbon budgets with the periods that are used for UK carbon budgets (i.e. 2023-27, 2028 – 32, 2033-2037 and 2038-42). What are the advantages and disadvantages of alignment with UK carbon budget periods?

There are significant advantages to aligning the Scottish carbon budget periods with the UK carbon budget periods, primarily the potential for facilitating public awareness and understanding of the relevant climate governance architecture:

- Our recent studies on the impact of framework laws in the UK, Ireland, Germany and New Zealand respectively (Averchenkova et al, 2021a; and Averchenkova et al, 2024a) show that regular reporting on progress creates key information points for the media and other stakeholders to engage with the climate change debate. However they also suggest that stakeholders often find it difficult to grasp the relevance of media reporting on progress towards climate targets when this is too technical and difficult to understand (Averchenkova et al, 2024a at p.23). Misalignment between the UK timelines and the Scottish timelines is likely to exacerbate this problem in the UK context.
- Our research also supports the broader case for alignment between levels of government wherever possible. For example, in New Zealand, the climate law does not contain provisions creating a framework for subnational action. There was a sense that the lack of explicit provisions to support vertical integration was a missed opportunity to simplify a complex landscape of competing policy processes (Averchenkova et al, 2024b at p. 7). While the UK's climate governance architecture already contains some provisions to support such integration between the UK government and devolved administrations, aligning the timelines for not only carbon budgets but also the associated action plans would likely increase their effectiveness. In the context of Ireland, for example, alignment between climate action plans produced by local authorities and national level plans created through

the national climate law were perceived to have led to improvements in coordination between local authorities and between the local and national levels (ibid, at p.6).

While this is not a direct parallel given the different levels of government involved, it may be indicative that there would also be benefits to alignment in the UK context.

- A further significant advantage would also be to streamline the role of the Climate Change Committee in assessing progress and advising both the UK and the Scottish government, as indicated by the Committee itself (Committee on Climate Change, 2024).

One disadvantage to alignment would be the fact that in setting budgets in 2025 the government would be starting halfway through the 2023-2027 budget period. It would be deeply detrimental to both progress and the perception of progress if the first carbon budget introduced in Scotland was only at the start of the 2027-2032 budget period and no legally-binding emissions reductions were required over the period from 2025 to 2027. However, there are precedents internationally for an initial budget period to be shorter than subsequent period, as we see in the context of France. We would recommend that a shorter budget is therefore adopted for this period.

4. At the end of a carbon budget period, there can be a surplus or deficit of emissions reductions. What do you think the legislation should say about how future surplus or deficits in emission reductions are dealt with?

One of the key functions of legislated emissions reduction targets is to introduce policy certainty, which sends important signals to actors within and beyond government (Averchenkova et al, 2021a; and Averchenkova et al, 2024a). Nonetheless, some climate legislation in Europe establishes “borrowing” provisions that allow emissions reductions to be borrowed from future periods if a deficit is anticipated. This can reduce the levels of certainty provided by carbon budgets, which is potentially highly damaging to this signalling function in the legislation, and to the credibility of government climate action. We do not recommend the inclusion of borrowing provisions within Scotland’s legislation.

In relation to ‘banking’ surplus of emissions reductions, previous analysis, including by the Irish Climate Change Advisory Committee [CACC] has suggested that it is possible that an approach that allows for a surplus to be carried over (i.e. “banking”) may have benefits in incentivizing early emissions reductions and preventing carbon budgets from effectively constraining the ambition of near-term policy actions (CCAC, 2019). Several European countries have adopted carbon budgets that allow for this kind of banking. However, there is a significant risk that carrying over a surplus where this was not achieved through policy intervention (but rather through an external event as we saw in the context of the financial crisis or COVID-19) may prevent policy action being taken at the time when it would be most effective resulting in the need for more rapid and more expensive emission reductions in the future. We do not recommend the inclusion of banking provisions in Scotland’s legislation.

As we discuss further below, in the event of a failure to comply with a carbon budget and achieve the requisite emissions reductions, it is vital that the legislation provides

a clear mechanism for holding the government to account and specifies the process to address the deficit.

5. Should the Scottish Government wait for the planned advice on the UK's seventh carbon budget from the CCC, before setting their carbon budgets?

This paragraph responds to the first three parts of question five together. As discussed above, we believe that alignment between the UK and Scottish budgets has significant advantages. As the CCC is due to produce its advice regarding the seventh carbon budget for the years 2038 to 2042 in early 2025, it is advisable for the Scottish Government to wait until such time as the UK's seventh carbon budget advice is published by the CCC to set the carbon budget for the same period. This would also reduce the likelihood that a carbon budget is set based on out-of-date information and advice, particularly around the relative costs of low carbon technologies. This weighs in favour of the Scottish Government proposing multiple budgets for between 2025 and 2042 in 2025 as soon as practicable after the advice from the CCC is provided. A firm deadline should be set in the legislation for the budgets to be produced. A further deadline should be set in the legislation for the introduction of the final carbon budget for 2042 to 2045, ideally one that aligns with the UK's timeline for the introduction of the 8th carbon budget.

Parliamentary oversight is one of the key accountability mechanisms that can and should be integrated into climate change legislation (Higham et al, 2021; Averchenkova et al, 2024a and Averchenkova et al, 2024b). There is some evidence from our research to suggest that allocating responsibility for such scrutiny to committees with relevant expertise can prompt more rigorous engagement than laying policies and plans before parliament as a whole (Averchenkova et al, 2024b). It may therefore be important to specify both the specific parliamentary committee responsible for reviewing the proposed carbon budgets and the timeframe within which such review must be conducted. Provision should also be made for the government to provide reasons to parliament regarding the degree to which the Climate Change Committee's advice has been considered in the setting of budgets.

A separate process for parliamentary scrutiny of climate change action plans is also vital. Such a process should contain the same elements described above. In addition, information should be provided to parliament on the distributional impacts of any plan, and the measures to be taken to address these and incorporate the principles of a just transition, as required in the current Scottish legislation.

The legislation should specify clear deadlines for the government to produce plans on how they intend to meet the carbon budgets after their adoption. Ambiguity and the lack of such a clear timeframe is a weakness in the UK Climate Change Act that leads to the delays in implementation when political commitment weakens (Averchenkova et al, 2021a). In the existing stock of European climate laws, a plan to meet each carbon budget is often required to be submitted shortly after the budget is set. However, if the new legislation in Scotland requires all or nearly all budgets to be set in 2025, there will likely be benefits to staggering the planning process for later carbon budgets. Our research suggests there are significant benefits for climate governance to be derived from inter-agency cooperation in the iterative development

of climate action plans. This idea is discussed further below.

In addition to requiring parliamentary scrutiny of climate change plans, it is highly desirable to ensure that plans are scrutinised by the Climate Change Committee. We know that CCC analysis has been widely cited by parliamentarians across the political spectrum in UK parliamentary debates (Averchenkova et al, 2021b). The interaction between CCC scrutiny and parliamentary scrutiny could therefore create positive impacts in the Scottish context.

Part Two – Climate Change Plan

6. Do you have views on when and how the Scottish Government should publish their plans for meeting the proposed carbon budgets?

This section responds to the first two parts of question 6. As noted above, our research into the impact of framework laws suggests that climate action planning processes offer important opportunities for inter-agency coordination and policy innovation (Averchenkova et al, 2024a). Given that the current legislative reform already entails a delay to the publication of Scotland's CPP, it is desirable that a plan to deliver the first carbon budget should be introduced as rapidly as possible to avoid further delays to climate action. The plan should set out detailed policies and measures to meet at least the first budget (and possibly the second budget), as well as providing an overview of policies and measures to be adopted to ensure the longer-term trajectory to 2045. The legislation should include a specific deadline (e.g. number of months) within which the plans need to be finalised after carbon budget levels are agreed. Delay to the publication of the plan must not be used as a reason to delay policy actions to contribute to emissions reductions in the short term.

To maximise the benefits that climate action planning processes bring in terms of coordination and accountability, it is also desirable that planning processes are iterative. We would suggest that the revised legislation require that the CPP be updated within a specified period prior to the start of each subsequent carbon budget cycle. Research suggests that processes for upfront clarification of when and how a policy direction may be revised may be good for policy certainty (Averchenkova et al, 2021a).

For each planning cycle, revised plans should include detailed policies and measures to meet the carbon budget immediately following the revision, as well as updates to the long-term strategy. The current requirements in Section 35 (sub-sections 25 and 26) that each plan should assess progress towards implementing policies set out in the immediately preceding plan should also be retained to ensure continuity between planning processes.

This section responds to the second two parts of question 6.

There are at least five aspects of the current legal framework for the creation of Climate Change Plans that we recommend should be updated:

1. The requirements for climate change plans should explicitly include the principle of

non-regression, in line with international environmental law and according to the requirements of the Paris Agreement specifically (see Article 4.3 of the Paris Agreement). Where the government no longer intends to implement measures set out in previous plans, such measures should be replaced with new measures that are at least as ambitious, along with detailed reasons for the change in policy direction.

2. The wording of any requirements to ensure that plans include policies and measures to deliver specific carbon budgets should be developed with regard to the judgment in the case of *R (Friends of the Earth) v BEIS* [2022] EWHC 1841 (Admin). Applying Section 13 of the UK Climate Change Act, Holgate J determined that in order to satisfy the requirements of the UK's regulatory framework, a plan to meet a carbon budget required (a) clear quantitative information regarding the extent to which the planned measures were expected to deliver the required emissions reductions and (b) information on which to base a qualitative judgment that any shortfall in currently planned measures could be compensated for by additional measures or the further development of the existing measures (see Higham and Setzer, 2021 for further analysis of the judgment available at <https://www.lse.ac.uk/granthaminstitute/news/net-zero-full-transparency/>).

3. Our recent analysis suggests that the current body of climate laws may be lacking in mechanisms to ensure effective public participation in and engagement with the development of climate policy (Averchenkova et al, 2024a at p.23, see further Averchenkova et al, 2024b). We recommend that governments integrate public participation into critical stages of decision-making on climate change, including climate action plans. One mechanism for such integration is through the use of deliberative democratic processes such as citizens assemblies. While the current legislation includes provision for a Scottish citizens assembly, provision could be made to more clearly connect the work of the assembly to the climate action planning process. Resources on the benefits of such assemblies are available from the Knowledge Network on Citizens Assemblies, of which the Grantham Research Institute is a founding member (see <https://www.knoea.eu>).

4. Under the current Act, the Climate Change Plan is focused on emissions reduction actions and climate change mitigation with adaptation treated separately elsewhere in the Act. However, there are risks to taking an overly siloed approach between mitigation and adaptation actions. For example, in New Zealand several experts we spoke to for our recent study raised concerns that mitigation action in the forestry sector had actually contributed to reducing climate resilience (Averchenkova et al, 2024b). We recommend that the framework for the CCP should explicitly reference the need to consider the consequences of mitigation actions proposed in the plan for adaptation and resilience.

5. The current legislation does not include a mechanism for ensuring that local authorities adopt climate action plans aligned with the goals of the national plan. However, recent studies on the impact of climate laws in other countries suggest that such requirements can have major positive impacts on subnational climate action and vertical coordination (Averchenkova et al, 2024a at 17). We recommend updating the CCP planning framework to explicitly include a role for local authorities.

The following aspects of the current legal framework for the CCPs should be retained:

- The emphasis on just transition principles and the principle of climate justice in the current legislation should be retained, along with the need for analysis of the implications of proposed policy measures for both climate justice and the just transition.
- Our recent research suggests that mandates requiring public bodies to act in way that is aligned with climate goals when carrying out their functions can have significant positive benefits for climate action (Averchenkova et al, 2024a). We therefore suggest that sections 44 to 46 of the current Act be retained. However, section 44 could be strengthened by making explicit reference to aligning decisions with climate action plans, in addition to aligning decisions with the need to contribute to the delivery of short and long term targets and adaptation programmes.
- As noted above, we strongly recommend retaining the annual system of reporting on progress towards emissions reduction targets. This should include retaining the requirements under section 35B to provide a report on progress towards implementing the proposals and policies set out in each substantive chapter of the plan.
- We recommend retaining a mechanism detailing the process to be followed if carbon budgets are not met that is at least as strong as the mechanism included in Section 36 of the current legislation, which requires the government to lay a report before parliament setting out proposals and policies to compensate for any shortfall in meeting targets. However, this mechanism could be further strengthened. A few examples of mechanisms used in the case of non-compliance in other country contexts are noted below, in addition to the German example cited above:
 - o Nigeria's Climate Change Act specifies that ministries, departments and agencies that fail to meet carbon emission reduction targets will be subjected to a review, and its principal officers, upon being found liable, will be sanctioned and fined as appropriate.
 - o In New Zealand and Ireland, linkages to accountability mechanisms are strong, but impose limits on available forms of judicial intervention. Both laws make judicial scrutiny a possibility in the case of non-compliance, but courts are prevented from imposing financial penalties, damages or compensation. This is different to the French model, where a court has ordered the government to take action to repair damages caused by a failure to meet targets (see the case of *Notre Affaire à Tous and Others v. France*).

In developing any accountability mechanism, regard should be had to the potential damage that can be done if a government failure to comply with targets is not perceived by the public to be met with appropriate sanctions (see Averchenkova et al, 2024a and Averchenkova et al, 2024b). In our recent study, a lack of clear consequences for missing targets was raised by experts as a concern in New Zealand, Ireland and Germany, as it may increase risks of reduced public trust in the law, democratic institutions and the broader policymaking system.

7. What are your views on whether there should be changes to the existing Scottish Government monitoring and reporting framework?

If a five-yearly carbon budget system is adopted, the legislation should continue to require the Scottish Government to submit annual progress reports to the Scottish Parliament to strengthen accountability for remaining within the carbon budget and to

enable course-correction in advance when required. During our recent research experts in Germany noted increased accountability due to the requirement to submit annual progress reports; this was largely echoed in Ireland and New Zealand where frequent reporting on sectoral progress was considered highly beneficial for accountability and coordination (Averchenkova et al, 2024b). In Ireland, experts specifically mentioned positive impacts from regular progress reporting by the Taoiseach's office against the specific actions annexed to each Climate Action Plan. Each action has its own action number and can then be cross-referred to in the progress report (See examples of previous progress reports at <https://www.gov.ie/en/publication/55fde-climate-action-important-publications/>).

As mentioned above, accountability can be strengthened by ensuring that bodies with an oversight role, such as parliamentary committees and independent advisory bodies, have sufficient expertise, resources and capacity to provide a detailed and authoritative assessment of evidence. The transaction costs associated with an annual review of progress by the CCC may mean that it is preferable for CCC involvement to be requested on a less frequent basis, allowing such assessments to be more detailed. We believe that CCC reports should be requested at the end of each carbon budget cycle and we also believe that at least one interim report in each carbon budget cycle may be beneficial, as it may offer timely opportunities for course correction.

Submission from Environmental Standards Scotland

Information about your organisation

Environmental Standards Scotland (ESS) is a non-ministerial office (directly accountable to Scottish Parliament) with a remit to monitor and secure improvements to:

- public bodies' compliance with environmental law
- the effectiveness of environmental law
- the implementation and application of environmental law

<https://environmentalstandards.scot/>

Part One – Carbon budgets

1. Do you agree or disagree with the proposed shift to 5-yearly carbon budgets (in place of current system of annual targets)?

Radio button: Ticked Agree

Environmental Standards Scotland (ESS) agrees with the proposed shift to five-yearly statutory carbon budgets. However, there must not be any delay or reduced commitment to the fundamental need for sustained and meaningful action as early as possible to mitigate climate change. Annual emissions targets are susceptible to short-term fluctuations such as variability in seasonal weather (for example, colder winters). These should not be as prominent in five-yearly budgets, allowing greater focus on longer trends in emissions reductions. However, progress needs to be measured and monitored more frequently than every five years. Both Wales and Northern Ireland use five-yearly budget cycles and progress reports are delivered at least twice within each five-year cycle, which is also recommended by the Climate Change Committee (CCC) for Scotland. ESS recommends a minimum of two progress reports from the CCC within each five-year cycle. This will be key to maintaining accountability and enabling scrutiny, while serving as an indicator of progress.

The five-yearly budgets must be underpinned by robust climate change plans. We discuss the essential characteristics of these plans in response to question 6 below. The national budgets and climate change plans should inform regional and local climate action, monitoring plans and enable businesses to develop appropriate strategies over time.

The disadvantage of the five-yearly approach is the increased risk that any weaknesses in the plans to deliver carbon budgets may only be realised every five years unless there is effective monitoring and review in place. Without this, the longer budget cycle could mask a lack of progress and could set Scotland further back from climate targets than the current system of annual targets. In a letter to the Cabinet Secretary for Net Zero and Energy, the Interim Chair of the CCC recommends that 'a regular cadence of at least two dedicated reports on Scottish progress per budget period, coupled with this more frequent assessment through the

annual UK-wide reports, would provide an appropriate level of scrutiny'. ESS agrees that the dual combination of relatively frequent Scotland-specific progress reports paired with more frequent annual UK-wide reports should help to maintain progress and swiftly address any shortcomings at a Scottish and UK level.

Annual targets enabled regular scrutiny of progress in emissions reductions. However, any short-term fluctuations in emissions are more pronounced due to the shorter timeframe. A further disadvantage is the limited success rate of achieving the targets within the annual timeframe. A shift in the cycle length alone will not deliver the necessary progress against climate change targets required to meet net zero by 2045. Therefore, it must be accompanied by a shift in the approach, planning, and monitoring across governance levels to ensure delivery.

2. What are your views on the advantages and disadvantages of carbon budgets / targets being expressed as a percentage reduction or as absolute levels of emissions?

Whichever approach is taken to expression of carbon budgets and targets, it is important that there is consistency in the baseline data used, and transferability across all UK climate targets. This allows more direct comparisons to be made and progress across a longer timeframe to be assessed. It should be noted that the UK's Nationally Determined Contributions (NDCs) and Scotland's indicative NDCs (iNDCs) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) as part of the Paris Agreement are expressed as a percentage reduction of emissions in communication and reports. To maintain consistency and aid comparability, the continued use of percentages may be beneficial. Absolute values are necessary for reporting purposes and accuracy but may limit accessibility.

3. The Climate Change Committee (CCC) suggested that the Scottish Government should consider aligning the proposed 5 yearly carbon budgets with the periods that are used for UK carbon budgets (i.e. 2023-27, 2028 – 32, 2033-2037 and 2038-42). What are the advantages and disadvantages of alignment with UK carbon budget periods?

An advantage of Scotland aligning with the UK's five-year budget cycles would be the potential for better alignment and comparison of monitoring and progress across the countries within the UK. This should enable more integrated scrutiny across UK countries, and demonstrate the contribution made by individual countries of the UK to the UK goal of reaching net zero by 2050.

However, the primary disadvantage to aligning with the 2028-2032 cycle is the gap it would create between the current budget (ending in 2024) and next carbon budget (2028). This may also affect associated monitoring and potentially progress of emissions reductions between 2025 and 2028. For this reason, if Scotland decides to align with the UK carbon budget's 2028-2032 cycle, ESS strongly recommends that the Scottish Government prepares an interim climate change target and budget for the period 2025-2028, and an associated interim Climate Change Plan. It is essential that there is not a multi-year gap in climate change budgets and plans in Scotland.

While it may be positive to align with the UK five-yearly carbon budget cycles, consideration should be given to how this will interact with other Scottish Government plans and their reporting cycles, such as:

- Climate Change Risk Assessment 2027-2032
- Scottish National Adaptation Plan 2024-2029
- Infrastructure Investment Plan 2021-2026

4. At the end of a carbon budget period, there can be a surplus or deficit of emissions reductions. What do you think the legislation should say about how future surplus or deficits in emission reductions are dealt with?

The current requirements under section 36 of the Climate Change (Scotland) Act 2009, require that where an annual target is missed, a report must be produced setting out proposals and policies to compensate for the excess emissions in future years. A similar mechanism must be maintained and enforced in the new five-year carbon budget cycle and should be triggered if the five-year budget is not met. It is important to deliver section 36 reporting when targets are missed. ESS recently accepted a representation regarding delayed reporting under section 36.

It should be considered whether a report should also be triggered during the five-year period if a CCC progress report indicates a lack of sufficient progress towards meeting the five-year goal. This report could provide clear actions to be taken to attempt to recover the necessary reduction within the five-year period and enable early identification of issues.

5. Should the Scottish Government wait for the planned advice on the UK's seventh carbon budget from the CCC, before setting their carbon budgets?

Yes, the Scottish Government should wait for the planned advice on the UK's seventh carbon budget from the CCC before deciding the next carbon budgets for Scotland. The budgets will include 'updated pathways for each of the devolved administrations, reflecting nation-specific data and assumptions where possible'. This information should enable the best evidence-based advice to be incorporated which should strengthen the carbon budget. However, this should not result in significant further delay once this advice has been issued.

Planning the carbon budgets in line with greenhouse gas projections up to 2042 should ensure that there is sufficient progress during each five-year period to meet cycle targets and Scotland's 2045 net zero target. The period of 2042-2045 may provide some contingency time to deliver final actions to meet Scotland's net zero target. However, it is essential that significant progress is made as soon as possible, as further delays may impact on Scotland's capacity to achieve this target and to reduce emissions sufficiently to mitigate climate change. The five-yearly cycles should include appropriate review and revisions where carbon budgets are not met.

ESS recommends that the Scottish Government proposes their carbon budgets as soon as possible after incorporating the information provided by the CCC. Delaying this action risks a delay in progress and could result in stagnation in reducing

emissions. ESS would welcome a commitment from the Scottish Government regarding the timeframe to respond to the advice for each carbon budget.

It is important that there is appropriate independent scrutiny of carbon budgets and actions detailing how they will be met. This scrutiny should seek to robustly assure the Scottish Parliament of the efficacy of the carbon budgets and plans proposed.

Part Two – Climate Change Plan

6. Do you have views on when and how the Scottish Government should publish their plans for meeting the proposed carbon budgets?

A new Climate Change Plan is needed at the earliest reasonable date. If it is decided that the Climate Change Plan aligns with the cycles of the UK carbon budget, then the Scottish Government should prepare an interim Climate Change Plan to cover the period of 2025-2028, that can sit alongside an interim carbon budget.

The delivery of an interim carbon budget and interim Climate Change Plan will enable the production and implementation of aligned regional and local plans. This will ensure action across all governance levels is working towards emissions reductions.

ESS recommends that the Scottish Government ensures that any delays to interim or full five-yearly plans do not result in decreased time for scrutiny. The next Climate Change Plan must allow sufficient time for scrutiny of the draft and incorporate feedback before finalisation. The previous Climate Change Plan update was released in draft in December 2020 and finalised without amendments in March 2021 due to the limited amount of time until the Scottish Parliament election in May 2021. ESS recommends that the next draft is published with sufficient time for any issues to be resolved before the end of the current Scottish Parliament.

The next Climate Change Plan should cover a period that will sufficiently allow for industry, organisations and businesses to incorporate and deliver actions within this time period. If the next Climate Change Plan is to cover a significant period of time, such as 2025-2040 (or 2028-2043), ESS recommends that plans are adaptable and regularly reviewed. If the Climate Change Plan is to align with 2028-2032 five-year cycle of the carbon budget, then they should cover the period of 2028-2042 for consistency.

Previous work by ESS concluded that the Scottish Government's most recent Climate Change Plan did not meet all of the requirements of section 35(5) of the Climate Change (Scotland) Act 2009, to provide quantified emissions reductions for individual proposals and policies ('Consideration of the effectiveness of the Scottish Government's Climate Change Plan', IESS.23.020).

The CCC's recent report on 'Progress in reducing emissions in Scotland 2023' recommended that increased transparency is necessary regarding the Scottish Government's pathways to net zero and how the 'Climate Change Plan will be achieved by planned policies. This should involve publishing more details on the

assumptions that underpin these pathways and how the abatement set out the upcoming Scottish Climate Change Plan will be achieved by planned policies, setting out the quantified abatement expected by each policy’.

The effectiveness of the Scottish Government’s monitoring and delivery of proposals and policies is also a potential concern to ESS. For the legislation to be effective, it is essential that appropriate focus is given to its implementation and delivery. It is important that a new legal framework is developed and implemented swiftly, with sufficient scrutiny.

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The CCC’s recent report on ‘Progress in reducing emissions in Scotland 2023’ recommended that increased transparency is necessary regarding the Scottish Government’s pathways to net zero and how the ‘Climate Change Plan will be achieved by planned policies. This should involve publishing more details on the assumptions that underpin these pathways and how the abatement set out the upcoming Scottish Climate Change Plan will be achieved by planned policies, setting out the quantified abatement expected by each policy’.

The effectiveness of the Scottish Government’s monitoring and delivery of proposals and policies is also a potential concern to ESS. For the legislation to be effective, it is essential that appropriate focus is given to its implementation and delivery. It is important that a new legal framework is developed and implemented swiftly, with sufficient scrutiny.

Part Three: Monitoring and reporting

7. What are your views on whether there should be changes to the existing Scottish Government monitoring and reporting framework?

It is essential that there is appropriate monitoring, progress and scrutiny across climate change targets and budgets.

As noted in response to earlier questions, the effectiveness of the Scottish Government’s monitoring, reporting and delivery of proposals and policies requires improvement within this next plan. Monitoring should be implemented across governance levels (national to local).

It is important that the required reports are delivered promptly, and that section 36 of the Climate Change (Scotland) Act 2009 is appropriately adapted to ensure a report is produced if targets are (or, are at threat of) being missed.

Please provide your response in the box provided.

Progress needs to be measured and monitored more frequently than every five years. Reporting twice within a five-year cycle would be in line with other UK

countries (Wales, Northern Ireland), so may be sufficient, but should be a minimum. If the first of the two reports finds considerable issues with progress, it should be considered by the CCC/Scottish Government whether more frequent reports are necessary until the end of the five-year cycle.

Part Three: Monitoring and reporting

8. The 2045 target will not be amended. How much do you estimate it would cost to achieve that target?

No response. Not within our remit.

Budget

How can the Scottish Government use this year's Budget to ensure all portfolio areas are focused on achieving the 2045 target?

No response. Not within our remit.

Submission from Stop Climate Chaos Scotland

Introduction

The Scottish Government has announced it will introduce legislation to amend its approach to setting targets for carbon emission reduction. It intends to move to a system of 5-yearly carbon budgets and away from a system of annual targets. The Scottish Government intends to lodge the Bill in the Scottish Parliament “as soon as possible after [Summer] recess”.

The Net Zero, Energy and Transport (NZET) Committee has agreed to carry out prelegislative scrutiny in view of the Scottish Government’s stated intention to “expedite” the Bill through the Parliament, and issued a call for views. This is a submission from Stop Climate Chaos Scotland to help inform this pre-legislative scrutiny process.

Stop Climate Chaos Scotland (SCCS) is a diverse coalition of over 70 civil society organisations campaigning together on climate change in Scotland. We believe that the Scottish Government should take bold action to tackle climate change, with Scotland delivering our fair share of action to limit global temperature rises to 1.5 degrees, championing international climate justice and inspiring others to take action.

In June, SCCS published a briefing on the proposed legislation to revise the framework for emissions reduction targets, on which this submission is based and builds. In particular, this briefing highlighted that any such bill:

- must not amend the 2045 target date for reaching net zero.
- must ensure that carbon budgets are set in accordance with (or are more stretching than) the Climate Change Committee’s (CCC’s) recommended pathway to net zero by 2045.
- should make provision for long-term, sectoral targets/pathways to 2045.
- should retain annual accountability mechanisms such as progress reports and statements to Parliament by Ministers.
- should retain international aviation and shipping within Scotland’s emissions reduction framework.
- should not permit any carry forward mechanism.
- should require periodic reviews, by the CCC, of carbon budget levels.
- should require the next Climate Change Plan (CCP) to be produced as soon as possible after the first carbon budget has been set, and set out fully costed proposals, and that this and subsequent plans should have a section comparing the Scottish carbon budgets and progress towards them against the previous interim targets (2030, 2040).
- should retain the just transition and international climate justice principles, as set out in the current legislation, and ensure they are applied to all climate change policy actions. In so doing, the Scottish Government should reconfirm its commitment to UNFCCC principles and international obligations.
- recognises the key international principle that the “polluter pays”.

These issues are outlined and discussed in further detail within our responses to the specific questions posed by the ‘call for views’ (see below). However, **we also offer some introductory, contextual observations which, we believe, are important for the Committee to consider** and to which we subsequently refer.

In addition, it should be noted that, while the questions posed by the ‘call for views’ address some of the ten points listed above, not all these issues are addressed. The Committee will, therefore, when considering the proposed Bill, in the round, also wish to assess the extent to which the other issues are (or are not) [or should/should not] be addressed by the Bill. Thus, in addition to the contextual observations and the formal answers to the questions as posed, **SCCS would ask that the briefing referenced above is also considered as a formal component of this evidence to the Committee.**

Context

The circumstances giving rise to the need for this legislation are deeply unfortunate and, as SCCS and many others would argue, have arisen due to inadequate delivery by the Scottish Government and others. The latest, 2023, CCC Report to Parliament on Progress in Reducing Emissions in Scotland sets out the current situation very well and highlights that:

- **Current overall policies and plans in Scotland fall far short of what is needed to achieve the legal targets under the Scottish Climate Change Act.** The CCC identifies risks in all devolved policy areas - transport, buildings, agriculture, land use and waste. The CCC did, however, welcome policy actions and proposals related to heating but sought a clearer timeline for the Heat in Buildings Bill.
- **The Scottish Government has delayed its draft Climate Change Plan.** A draft CCP was, previously, expected in November 2023 but has been delayed. Scotland is therefore lacking a comprehensive strategy that outlines the actions and policies required to achieve the 2030 target.
- **Most key indicators of delivery progress are off track**, with tree planting and peatland restoration rates, heat pump installations and community energy, electric van sales and recycling rates significantly so.

It is important, therefore, that the Scottish Government should acknowledge why “we are where we are”. While the recent changes to UK Government policy and the overall fiscal challenges (largely a consequence of UK Government policy) are undoubtedly a part of this explanation, they are not the only reasons. It must therefore be fully recognised that delays to and inadequate delivery of Scottish Government policies have been a major contributory factor. For instance, following the Heat in Buildings strategy, it was three years before the consultation on proposed legislation (which, itself, is yet to be introduced). Similarly, following its announcement three years ago, the route map for a 20% reduction in car-km is yet to be published - and the current commitment is for publication “by autumn 2024”.

Thus, it is vital that – as well as the measures to be addressed by this Bill - parallel **steps are taken to significantly improve delivery** in devolved areas. For instance, it is imperative that the Scottish Government proceeds, as soon as possible, with its

planned Heat in Buildings Bill (as praised by the CCC). In addition, more actions are needed in the areas of transport, buildings, agriculture, land use and waste.

The need for such actions was, in principle, recognised by the Cabinet Secretary in her statement of 18 April 2024, which included a range of policy measures. Unfortunately, analysis of the measures announced indicates that they lack ambition and much additional effort is needed to get anywhere near to delivering the emission reductions needed.

SCCS believes that the **policy context**, briefly set out above, **which has led to the proposed Climate Targets Bill should be considered by the Committee**, both in this pre-legislative scrutiny and at its subsequent stage 1 consideration. Further, **the Committee should, in addition to scrutinising the actual text of the Bill, also make recommendations relating to the delivery of wider climate change objectives.**

The subsequent sections of this submission follow the format of the Committee's online questionnaire and our responses to the questions posed therein.

Part One – Carbon budgets

1. Do you agree or disagree with the proposed shift to 5-yearly carbon budgets (in place of [the] current system of annual targets)?

- Please set out any advantages or disadvantages of a 5 yearly carbon budget approach in Scotland
- Please set out any advantages or disadvantages of retaining the current annual target system.

SCCS does not agree nor disagree with the proposed change. Both 5-yearly carbon budgets and the current annual/interim targets system can provide the necessary framework and/or pathway to meeting the net zero target, as well as the appropriate monitoring, reporting and scrutiny of progress.

Further, SCCS recognises that both 5-yearly carbon budgets and the annual/interim targets system have advantages and disadvantages – and that, while one or the other is necessary, neither is perfect. The key advantage of a 5-yearly carbon budget system will be the 'smoothing' of year-to-year variabilities caused by, for example, milder or harsher winters, and it can thus provide a more long-term perspective as well as a focus on strategic/systemic changes. The main disadvantage of a 5-yearly carbon budget system is the potential for a lack of regular monitoring, reporting and scrutiny – and thus for the pressure for action on delivery to be 'relaxed' in the first 2 or 3 years of each 5-year period.

Conversely, it is the regular monitoring, reporting and scrutiny provided by the annual targets system that is the key advantage of that system. On the other hand, it is clear that the annual monitoring, reporting and scrutiny under the current annual targets system has not resulted in adequate delivery; thus, indicating that either the scrutiny has been insufficient or that governments (both UK and Scottish) have been able to resist any pressure for action arising from that scrutiny.

Therefore, while SCCS has no firm view on which system is 'better', we recognise (subject to the contextual issues, discussed above, including the need for those to be addressed) that "we are where we are" and that the changes proposed are a realistic means to address the legislative dilemma in which the Scottish Government has found itself.

Thus, without expressing any view on which system is 'better', SCCS believes that whichever system is adopted, it must:

- **Establish and ensure the necessary framework and/or pathway to meeting the net zero target by 2045 at the latest;**
- **Recognise that early action is especially important in order to address significant and systemic challenges; and**
- **Provide for regular monitoring, reporting and scrutiny of progress (ideally, at least annually) to assess the effectiveness of actions taken and develop recommendations to address any lack of progress.**

If the change to 5-yearly carbon budgets is made, but a means is found to retain annual monitoring, reporting and scrutiny it may be possible to create a system that combines the advantages of both systems. That said, it will be important to review/improve the systems for monitoring, reporting and scrutiny – so that the recent lack of delivery (discussed above) does not re-occur.

2. What are your views on the advantages and disadvantages of carbon budgets / targets being expressed as a percentage reduction or as absolute levels of emissions?

There are few advantages/disadvantages of either approach. In practice, absolute levels of emissions and percentage reduction from the baseline are simply alternatives, with one converted to the other by simple arithmetic (given the known/historic basis of the 1990 baseline), and often presented together. For instance, the most recent publication of Scottish emissions statistics presented data in both absolute numbers and as percentages.

In theory, it is most likely that, if 5-yearly budgets are adopted, these will be based around a "total tonnage" figure for emissions of CO₂-equivalents, as in the case for the UK and Welsh carbon budgets. However, given the known/historic basis of the 1990 baseline, it will be simple arithmetic to convert such a figure into percentage reduction – either for the 5-year period as a whole or for an "annual equivalent" for each of the five years in the budget period (either on an average basis or on the basis of 'progressive' reduction during the five year period).

Accordingly, SCCS has no views on the advantages or disadvantages of these two approaches as, in practice, they are interchangeable and this is an unnecessary debate.

3. The Climate Change Committee (CCC) suggested that the Scottish Government should consider aligning the proposed 5 yearly carbon budgets with the periods that are used for UK carbon budgets (i.e. 2023-27, 2028 – 32,

2033-2037 and 2038-42). What are the advantages and disadvantages of alignment with UK carbon budget periods?

Aligning any 5-yearly carbon budget periods with those used by the UK (and Wales) would make sense especially given the responsibility of the two governments for reserved and devolved matters, which both influence the success or otherwise emissions reduction policies.

The advantages of alignment would mean that, subject to appropriate reporting with sufficient disaggregation of sectoral data, the scrutiny of both the UK and Scottish Governments in terms of delivery against the budgets adopted would be better informed. Non-alignment would, by contrast, mean that UK and Scottish reporting and scrutiny would be “out-of-sync” and both governments would be able to continue to claim (whether with or without foundation) that any failure to deliver reductions were the responsibility of the other.

4. At the end of a carbon budget period, there can be a surplus or deficit of emissions reductions. What do you think the legislation should say about how future surplus or deficits in emission reductions are dealt with?

The Bill should not permit any mechanism to carry forward any ‘surplus’ reductions. A carry forward mechanism (by which over-performance in one budget can be ‘carried forward’ to count towards the next) must not form part of Scotland’s new legislation. While such a mechanism does exist within the UK carbon budget system, the UK Government has recently decided not to use it – and the CCC has advised that such mechanisms are unnecessary. Moreover, given that the Scottish Government’s ambition should be to reach net zero by 2045 **at the latest**, any ‘surplus’ should be a welcome step to hastening the net zero end-point - rather than being used to reduce effort in the subsequent budget period.

However, if budgets are not met and there is a ‘deficit’, while there should not be a carry forward mechanism, the Bill should set out a requirement for the Scottish Ministers to set out how they will make up that deficit – on top of whatever reduction would, be then, already have been set for the subsequent 5-year period. Such a provision should be an amended form of the current section 36 of the 2009 Act, as amended.

5. In early 2025, the Climate Change Committee (CCC) will advise the UK on the level of its Seventh Carbon Budget. This is the legal limit for UK net emissions of greenhouse gases over the years 2038 to 2042. The CCC have suggested that could be used as the basis for advice on appropriate levels for carbon budgets in Scotland. The Cabinet Secretary told the Committee that this ‘might be the point at which we are able to have clarity on the targets, and I would want a plan to be produced very quickly thereafter’.

- **Should the Scottish Government wait for the planned advice on the UK’s seventh carbon budget from the CCC, before setting their carbon budgets?**

Yes, if 5-yearly budget periods are to be aligned (see question 3), this would make sense. However, in the meantime, there remains the need for continued delivery of actions, including those in the existing CCP/CCPu, the forthcoming action plan on a 20% reduction in car-km, the Heat in Buildings Bill, as well as new actions to improve delivery. While aligning UK and Scottish carbon budgets makes sense, using this to delay actions that are necessary (especially early actions that would ease later challenges) makes no sense. The Committee should, therefore, as part of any recommendations, emerging from this prelegislative scrutiny, undertake or recommend actions to improve the scrutiny of current and short-term actions relating to the delivery of wider climate change objectives.

• Should the Scottish Government propose multiple 5-year carbon budgets in 2025 up to the year 2042?

Yes, if possible. However, this should be dependent on the availability of CCC advice for all such periods. Thus, the Bill might require the Scottish Ministers to seek such advice and subsequently to set those budgets.

In addition, the bill will need to set out how the ‘transitional years’ (before the first full 5-year budget) of 2025-27 will be addressed. Finally, some thought should be given to how 2043-45 will be addressed.

• How soon after the Scottish Government has received advice from the CCC should it propose their carbon budgets?

As soon as possible, albeit that time will be needed to assess and decide. If the Scottish Government decides to adopt the CCC’s recommendation, this should be relatively speedy (within 2 months?). However, were the Scottish Government decide to set budgets that differ from the CCC advice (either above or below?), this may need more time in order to prepare sufficient explanation – but it should not be too long (especially as government officials would, no doubt, be aware of the likely CCC recommendations ahead of publication).

The Bill might, therefore, set a maximum time limit on this phase – perhaps a requirement for the Scottish Ministers to lay the Order setting budgets within three months of the publication of the CCC advice.

• What should the process of parliamentary scrutiny look like for the laying of carbon budgets and plans for meeting budgets?

Without prior sight of the Bill itself, SCCS is unaware of the proposed mechanism for the ‘laying of carbon budgets’ but, based on our understanding of proposals, this is likely to be in the form of secondary legislation.

Whatever the formal mechanisms may be, SCCS’ priority would be for Parliament to be able to adequately scrutinise the proposed budgets, to take evidence from relevant experts and stakeholders, and make

recommendations. In addition to making a recommendation to approve (or otherwise), there might be value in a mechanism to permit Parliament to recommend amendments or conditions for approval (although we are aware that this is unusual for secondary legislation).

Part Two – Climate Change Plan

6. Under the current statutory regime, the legal deadline for laying a draft of the Climate Change Plan (CCP) is November 2024. This Plan was due to apply to the period of 2025-2040. The Scottish Government intends to use the Bill to change the timing for the production of the CCP.

- **Do you have views on when and how the Scottish Government should publish their plans for meeting the proposed carbon budgets?**
- **What period should the next Climate Change Plan cover?**
- **Do you think the current requirements for Climate Change Plans within the existing legislation provide an effective regulatory framework?**
- **Are there any other aspects of the current legal framework for the creation of Climate Change Plans that you think should be updated?**

Any change from interim/annual targets to carbon budgets will inevitably lead to consequential changes related to the timing of CCP publication and in relation to the requirement for the CCP to set out “how targets are to be met” (that is, an alteration to “setting out how budgets will be met”).

Beyond these narrow and consequential matters, SCCS believes that the Bill should not alter any other provisions in the 2009 Act, as amended, in relation to the production of and content of the CCP.

In relation to timing, if it is accepted (as above – see question 3) that the proposed 5-yearly carbon budgets are aligned with the cycle of 5-yearly carbon budgets used by the UK as a whole, it would be logical for CCPs to be developed/reviewed/updated on the same 5 year cycle (albeit that each CCP will need to set out policies to be developed/introduced before the 5 year budget period, as well as have a view on those to continue beyond that period - and set the foundations for the pathway to net zero by 2045. Thus, a CCP would cover a longer period – but the approach should be to produce an updated CCP as soon as possible after (and perhaps no later than six months following) the adoption of any 5-year carbon budget.

Section 35(2) of the 2009 Act, as amended, currently requires a CCP to set out policies and proposals “for meeting the emissions reduction targets”. The intention of this provision must be retained under any new framework, with the future CCPs required to set out the policies and proposals for securing emissions levels that are consistent with the budgets that are adopted. The revised Scottish legislation must be, at least, as robust as section 13 of the Climate Change Act 2008, which requires the Secretary of State to adopt policies and proposals which they consider will enable the legally binding carbon reduction targets to be met. Such a provision would permit, were an inadequate plan to be produced, for that plan to be challenged - as was the case when the UK Government sought to adopt an inadequate Net Zero

Strategy. In addition, the consultation, scrutiny and approval processes set out by the 2009 Act should be retained.

Notwithstanding all the above, it is likely that the next draft CCP is unlikely to be published until late 2025 at the earliest. This means that, as in 2021, the Parliament scrutiny period will be in the months running up to the 2026 Scottish elections. SCCS recommends that the NZET Committee and the Scottish Government should examine how to manage that process. In particular, all parties would wish to avoid the situation that arose in 2021 when the Parliament's recommendations were, in effect, "parked".

Finally, the time that will pass during the consideration and enactment of this Bill, the setting of the new budgets and the preparation of the new CCP must not be allowed to deflect from the need for continued urgency of delivery between now and the next CCP. For instance, the Scottish Government must take every opportunity for action - including those matters set out in the current CCP, committed to in previous Programmes for Government and/or in the Ministerial statement of 18 April or Climate Emergency debate on 26 June. Therefore, it is vital that delivery continues - starting with the **Programme for Government, expected in September, which must include the laying of a Heat in Buildings Bill and commitments for rapid action on transport and agriculture.**

Part Three: Monitoring and reporting

7. The Scottish Government has confirmed that their annual reporting on progress towards targets will be retained. The CCC have, however, suggested that if 5-yearly budgets are adopted in Scotland, CCC reporting may move from a system of annual Scottish 'Progress' reports to two dedicated reports on Scottish progress every 5 years.

- **What are your views on whether there should be changes to the existing Scottish Government monitoring and reporting framework?**
- **What are your views on the potential changes to the level of Scottish reporting provided by the CCC?**

As set out in our briefing, published in June, SCCS believes that the Bill should ensure that annual accountability mechanisms are retained.

This should include a continuation of the CCC's annual Progress Reports to the Scottish Parliament and similar annual responses by the Scottish Government as to the actions being taken to address any recommendations. The reports and responses should also include an assessment of the steps taken to ensure that emissions reductions are fair (that is, socially equitable) as well as the co-benefits (including warmer homes, cheaper energy, improved health and a more sustainable economy) secured. A recent review of cases relating to delivery of climate policies has highlighted the importance of a rigorous and transparent approach to data monitoring, reporting, scrutiny, and the regular assessment of progress.

SCCS therefore does not support any reduction in the frequency of CCC Progress Reports. In our view, this could lead to damaging complacency and the risk of falling

even further behind in the necessary journey to net zero - especially during the first 2-3 years of each 5-year cycle.

If, however, any changes to be made to the reporting, one important change would be to require a full explanation of the anticipated and actual amounts of emissions 'captured' using CCUS and NETS. In the previous CCPs, SCCS has been critical and sceptical of the extent and the likely deployment dates of CCUS/NETs - a view that was shared by the former ECCLR Committee who called for a "plan B". With CCUS, so far from being proven at scale, SCCS shares the view of the International Energy Agency (IEA) that "removing carbon from the atmosphere is costly and uncertain". The IEA report adds that "so far, the history of CCUS has largely been one of unmet expectations. Progress has been slow and deployment relatively flat for years. This lack of progress has led to progressive downward revisions in the role of CCUS in climate mitigation scenarios," including the IEA's own Net Zero Emissions by 2050 Scenario, published in 2023.

Therefore, the hopes and assumptions about CCUS should be recorded transparently in the carbon budgets as well as the climate change plan. Given how elusive and expensive attempts have been to date to develop CCUS, the less we rely on CCUS the better. The carbon budgets, CCP and annual reports should be used to bring this hidden but fundamental detail to the public eye.

8. A Bill, according to the Standing Orders of the Scottish Parliament, must "...be accompanied by a Financial Memorandum which sets out best estimates of the costs, savings, and changes to revenues to which the provisions of the Bill would give rise, and an indication of the margins of uncertainty in such estimates." (Rule 9.3.2).

- **The 2045 target will not be amended. How much do you estimate it would cost to achieve that target?**
- **Are current spending levels on policies to achieve this in line with what is required?**

While SCCS does not have the expertise to estimate in detail the costs of reaching net zero, or indeed the benefits, we are certain that **the costs (both financial and otherwise) of not doing so would be immense** – and many times that of doing so. For instance, recent research has warned that, globally, average incomes could fall by almost a fifth within the next 26 years compared to a world with no climate change, with the cost of damage six times higher than the price of limiting global warming to 2 oC. While estimates of the costs of delivering the policies, such as those produced by the Scottish Fiscal Commission, are valuable, the debate should be more focused on how to generate the revenue to fund necessary policies and the allocation of those resources, including how to raise and allocate the resources in the fairest way possible, rather than simply debating the cost – which, whether deliberate or not, tends to encourage consideration of reducing effort to 'save money'.

In 2022, SCCS commissioned a report on the use of fiscal measures (covering both the revenue raising aspects and allocation issues) to encourage wider debate. While our briefing on this report and its recommendations reflect the situation at the time,

the overall ideas in the report and the need for more informed debate on fairer revenue raising and allocation of funds for climate action remain crucial – and ideas to progress this are included in SCCS' manifesto.

Budget

- **How can the Scottish Government use this year's Budget to ensure all portfolio areas are focused on achieving the 2045 target?**
- **Has the inclusion of a Climate Change Assessment of the Budget improved outcomes and progress towards a target?**
- **What are your views on the presentation of the Climate Change Assessment and are there any changes you would like to see to this?**

As set out above (see question 8), SCCS considers that the fiscal decisions of the UK and Scottish Governments (as set out in annual budgets) are vital to the delivery of climate change policies. We therefore fully support greater debate about and scrutiny of these financial decisions in relation to their role in ensuring emissions reductions and achieving the net zero target. Our report on the use of fiscal measures (covering both the revenue raising aspects and allocation issues) sought to encourage such debate.

In relation to this year's budget, the Scottish Government could, as a priority: -

- Immediately make an explicit commitment that it will both maximise the use of its existing fiscal levers and identify new and additional sources of finance, using a polluter pays approach, to accelerate emissions reduction in Scotland and to finance Scotland's international climate justice contributions. This would complement the proposal to consult on options for a carbon land tax (as part of exploring regulatory and fiscal changes that could be made to further incentivise peatland restoration, afforestation, and renewable energy generation). It should also be made as part of responding to the research on fiscal issues, which SCCS understood was commissioned by the Scottish Government in June 2023, and was being conducted by the ClimateXchange.
- Bolster its very welcome policy and financial contributions to international climate justice, including to address climate-induced loss and damage, in the global south. It should build on its current, annual £2m contribution (or £10m over the lifetime of this Parliament) by making a continued, long-term financial commitment to addressing the loss and damage suffered by low-income, climate-impacted communities.
- Make clear that the implementation of the forthcoming Agriculture and Rural Communities (Scotland) Act 2024 will ensure that agriculture subsidies incentivise emissions reductions and carbon sequestration. This is vital given agriculture's significance as a contributor to Scotland's emissions and the amount of public funds allocated to its support.
- Make clear that funding will be made available to support the necessary transitions in both heating of buildings and transportation – and that revenue

for this is raised fairly. Some ideas for the delivery of these measures are set out in SCCS' fiscal measures report and in our manifesto.

Whatever fiscal policies are set out in a budget, however, it is imperative that the measures proposed are subject to a Climate Change Assessment – and we welcome the steps taken, thus far, by the Scottish Government. However, as demonstrated by the case of the s.94A assessment of the Scottish Government's Infrastructure Investment Plan (IIP), it is important that such assessments are both detailed and meaningful. In particular, it is vital that the impact of such assessments is transparent – so that it is clear to Parliament and stakeholders what decisions were taken to amend/adjust proposals in the light of the assessment – at present, this is not the case.

Submission of Dr Muinzer

1. I am Dr Thomas L Muinzer, Reader in Energy Transition Law at the University of Aberdeen. I am an academic lawyer with specialist expertise in climate law. I wrote the first in-depth book-length examination of the first national Climate Change Act, the UK's Climate Change Act 2008: *Climate and Energy Governance for the UK Low Carbon Transition: The Climate Change Act 2008* (Palgrave, 2019; Foreword by Lord Deben). Although the UK Act is not without criticism, it is widely held as gold standard legislation in the field of climate law. My book included consideration of the Climate Change (Scotland) Act 2009, which is also highly regarded.
2. My next book undertook the first major study of national Climate Change Acts: *National Climate Change Acts: The Emergence, Form and Nature of National Framework Climate Legislation* (Hart, 2021 (hard copy)). As Contributing Editor, I was responsible for drawing together the first overall book-length statement and analysis of these Acts as they began to emerge around the world. The final chapter (written by me) draws the foregoing work across the book together to provide best-practice insights for Climate Change Acts in general based on current knowledge and experience.¹ My next book, a general introduction to climate litigation, is due to be published by Bloomsbury in February 2025: *Major Cases in Climate Law: A Critical Introduction* (Bloomsbury, 2025).

Climate Change Bill: General Points

3. Scotland's Climate Change (Scotland) Act 2009 ("CC(S)A 2009") is generally regarded as an important example of sophisticated, pioneering framework climate legislation.² The UK Climate Change Act 2008 ("CCA 2008") was the world's first national framework Climate Act, setting the tone for many Climate Acts to follow around the world. Enacted only a year later, the CC(S)A 2009 was the first major example of substate framework climate legislation in the world. Like the UK's national Act, it is generally highly regarded, and its pioneering nature has made it internationally important, demonstrating to the world the type of form that sophisticated substate framework climate legislation might take.
4. The CC(S)A 2009 was modelled in significant part on the CCA 2008, but since its inception it has also incorporated some distinct components. Interim targets are not unique to the CC(S)A 2009, however annual targets are: annual targets

¹ Muinzer, Thomas L., "Conceptualising and Formulating National Climate Change Acts", Chapter 10 (pp.227-257) in Muinzer, Thomas L. (ed.) *National Climate Change Acts: The Emergence, Form and Nature of National Framework Climate Legislation* (Hart: UK, 2021).

² See further, e.g., "Multilevel Drivers: the International Level and the Devolved Level (Northern Ireland, Scotland and Wales)", Chapter 3 (pp.83-121), in Muinzer, Thomas L., *Climate and Energy Governance for the UK Low Carbon Transition: The Climate Change Act 2008* (Palgrave, 2019).

are absent from the national Act. It is also notable that the UK's other major item of substate framework climate legislation, Northern Ireland's Climate Change Act (Northern Ireland) 2022 ("CCA(NI) 2022"),³ does not incorporate binding annual targets in the way that the Scottish legislation does either.⁴

5. Under the CC(S)A 2009 as originally enacted, s.3(1) required the Scottish Ministers to set annual targets for the maximum amount of the net Scottish emissions account for each year over 2010-2050, and to ensure that those targets were met. CC(S)A 2009, s.3(2)(c) asserted that the annual targets were to be in line with the Act's overall Net Zero 2050 target trajectory, and that each target was to be at least 3% lower than the preceding year. In 2019, the 2050 target year for the overall Net Zero obligation was amended to 2045.⁵ CC(S)A 2009, s.3(2)(b) required the targets for each year over 2011-2019 to be set so as to ensure Scotland was on track to reach a 2020 interim target, which sat at a 42% greenhouse gas emissions reduction based on 1990 levels.⁶ CC(S)A 2009, s.3(2)(c) extended this format for subsequent years, requiring the downward annual target trajectory to be in line with achievement of the Act's long-term Net Zero target. An increased interim target for 2020, and further interim targets for 2030 and 2040, were amended into the Act in 2019,⁷ which served to continue sketching out the general trajectory that the annual targets were to be pegged to.⁸
6. The Climate Change (Emissions Reduction Targets) (Scotland) Bill ("the Bill") **proposes to remove interim targets** and replace them with a "**Scottish carbon budget**", as per the Bill, s.2(1)-(3), where the CC(S)A 2009 "interim targets" and "modification of the interim targets" sections are to be repealed. **Annual targets** are also to be removed, as per the Bill, s.2(6)-(8), repealing ss.3, 3A and 3B of the CC(S)A 2009. Pegging a constantly diminishing greenhouse gas emissions trajectory to interim targets is understood to be a best practice approach in framework climate legislation of this kind,⁹ and in proposing to depart from this approach by removing interim targets from the CC(S)A 2009, the Bill departs from best practice and thus weakens the legislative character of

³ This extensive climate framework was passed by the Northern Ireland Assembly relatively recently (2022), and extends to Northern Ireland only.

⁴ Inspired by the Scottish legislation, however, the CCA(NI) 2022 does require annual greenhouse gas emissions targets to be included in Climate Action Plans produced under the Act; see further CCA(NI) 2022, s.51.6(a), s.32(3)(a).

⁵ Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, s.1.

⁶ Climate Change (Scotland) Act 2009, s.2(1) (as originally enacted).

⁷ Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, s.3.

⁸ Section 10 of the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 introduced a fairly complicated calculus for annual targets, but the thrust of the overall framework is the requirement for greenhouse gas emissions to be mitigated consistently over time, linked to steady progression from one interim target year to another.

⁹ See, e.g., n.1 above.

the Scottish framework. ***It is therefore recommended that the Bill's removal of interim targets should be rejected.***

7. The Scottish framework currently employs **annual reduction targets**, whereas the CCA 2008 employs 5-year carbon budgets, and the Bill proposes to **institute carbon budgets** of its own in a certain form. This invites the question as to which reduction mechanism is preferable in principle within framework climate legislation of this kind— annual reduction targets, or carbon budgets? The answer to this question could be debated. There is a legitimate case for the utilisation of annual reduction targets and there is also a legitimate case for the utilisation of carbon budgets¹⁰; therefore, ***the Bill's proposed transition from annual targets to carbon budgets is not necessarily inadvisable.***
8. In relation to **annual targets**, it is noteworthy that the CCA(NI) 2022, which was directly influenced by the CC(S)A 2009, followed perceived Scottish best practice by incorporating annual targets into its framework Climate Action Plans; and also in accordance with best practice, these targets are articulated in the shaping context of an **interim target** system:

Climate action plan

51(1) The Department must lay before the [Northern Ireland] Assembly and publish a plan, known as the climate action plan, within 24 months from the day on which this Act receives Royal Assent...

(3) Subsequent plans must be published within 5 years from the date on which the previous plan was laid before the Assembly.

(4) *The climate action plan must set out how the interim targets and the target of net zero will be achieved by the year 2050...*

(6)(a) *The plans must include annual targets on greenhouse gas emissions[.]*¹¹

One notes, however, both the robust legally binding nature of Scottish annual targets (the Northern Irish annual targets are framed in softer terms), and the fact that the Scottish Government has by now missed numerous annual reduction targets. As such, there is a case that the Bill's proposed transition to carbon budgeting could result in a more deliverable system.

9. Bill insertion Section A3, covering "Duty of Scottish Ministers in relation to budgets", stipulates that "The Scottish Ministers must ensure that each Scottish

¹⁰ The merits of carbon budgets are discussed in relation to the Bill amendments in: Interim Chair of the CCC, *Letter to Cabinet Secretary for Net Zero and Energy, Scottish Government*, 14 May 2024.

¹¹ Climate Change Act (Northern Ireland) 2022, s.51 (emphasis added).

carbon budget target is met”. The greater latitude afforded by carbon budgeting, in contrast to granular year-on-year annual targets, results in a more flexible approach than is provided by the current annual system, which on current trends should assist the Scottish Ministers in reducing the incidence of the governmental breaches of reduction duties that have been arising to date.

10. If the Bill’s proposed carbon budget approach is taken forward, it has been highlighted above that best practice indicates that interim targets should be retained, such that the carbon budget trajectory can be pegged to those targets. This will assist the Act in driving a steady mitigation trajectory over time, and in a manner that both supports the Act’s ultimate Net Zero objective, and provides policy, business and investment certainty over the long-term. Such an approach follows best practice under the CC(S)A 2009 as it stands, under the CCA 2008, and under the CCA(NI) 2022.¹²

Climate Change Bill: Narrow Points

11. Bill insertion Section A2(3) (“Scottish carbon budgets and associated concepts”) stipulates as follows:

“Not exceeding a Scottish carbon budget is referred to in this Act as a ‘Scottish carbon budget target’.”

This will be perceived by some as slightly odd legislative phrasing, and I would encourage the drafters to review it again with a view to possibly adjusting it. The primary issue is that it seems quite likely that *a set Scottish carbon budget level* will be understood as a type of “target” in its own right (this is fairly common thinking in relation to Climate Change Act budgets). If *that* “target” is understood to be exceeded (i.e., a specific budget level that has been set for a specified time period), the provision above does not appear to make clear sense.

12. Bill insertion Section A4 (“Budget-setting regulations”) jumps around rather a lot between the modal verbs “must” and “may”. These words have substantially different implications in legislation.

“The Scottish Ministers ***must***, by regulations, set Scottish carbon budgets so that every year between 2026 and the net-zero emissions target year is covered by a budget.”

(Bill insertion Section A4(1))

¹² The Northern Ireland framework operates a carbon budget scheme, and pegs its trajectory to interim targets for 2030, 2040 and 2050: Climate Change Act (Northern Ireland) 2022, ss.1-4, ss.23-28 (“Carbon Budgets”).

“A budget for a period **may** be set by expressing the prescribed number of tonnes of carbon dioxide equivalent for the period either as a figure or as a method for calculating a figure, and **may**, in particular, be set by expressing the number as a proportion of the baseline multiplied by the number of years comprising the period.”

(Bill insertion Section A4(2)(a)-(b))

“The period covered by a Scottish carbon budget **is to be** [i.e., **must** be] 5 years (for example 2026 to 2030), but **may** be shorter in the case of the budget for the period that ends with the net-zero emissions target year.”

(Bill insertion Section A4(3))

“In preparing a draft of regulations to be made under this section, the Scottish Ministers **must** have regard to the target-setting criteria, and the most up-to-date advice they have received from the relevant body.”

(Bill insertion Section A4(4))

The modal verb “may” amounts to broad and weak legal rhetoric. One effect here is that the provisions do not place a significantly clear frame on the way in which a budget for a given period is to be set. Relatedly, Bill insertion Section A4(5) indicates that the Scottish Ministers can depart from the target-setting criteria (and from CCC advice). This seems fairly slack and unspecific in comparison to best practice climate legislation, i.e., the CC(S)A 2009 as it stands, the CCA 2008, and the CCA(NI) 2022 (etc.). ***It is recommended that this section should be reviewed, with a view to articulating a means of budget calculation in somewhat narrower, more specific terms.*** The CCA 2008 and the CCA(NI) 2022 could be consulted for comparative reference.

13. Bill insertion Section A5(1) provides a capacity for the Scottish Ministers to alter 5-year carbon budget lengths, and Bill insertion Section A5(2) provides that the power can only be exercised if it appears necessary in order to align with similar periods under “any international agreement to which the United Kingdom is a party”. It is not clear why national factors – including (e.g.,) Northern Irish and Welsh factors, as well as UK-level factors – should not be recognised here also. Northern Ireland has set an extensive carbon budgeting framework in place as of 2022, and Wales commenced running carbon budgets from 2016–2020 (ongoing). The UK CCA 2008 also operates an extensive carbon budgeting regime. It seems reasonable that the Scottish Ministers might wish to take account of this (potentially changeable) context, and Scotland’s place within that overall system, in relation to the review of the temporal structure of Scottish carbon budget periods. Thus, ***it is recommended that a power to adjust budget lengths in relation to national factors should also be included here.***

14. In relation to the recommendation in the preceding paragraph, the following advice to the Scottish Government from the CCC is noteworthy:

“There is value in the duration of budgets being consistent with the other nations of the UK. The Scottish Government should also consider aligning the start and end years for budgets with the UK carbon budgets, as policies developed in Scotland will need to contribute to delivering the emissions reductions required under both frameworks.”¹³

The Scottish Ministers may not wish to follow this advice on alignment, but it seems beneficial to incorporate an express capacity in the legislation to make such adjustments with reference to the national context should the Scottish Government wish to consider doing so at some point in the future.

15. When the Scottish Ministers are reporting on emissions reductions formally to the Scottish Parliament, they are to “use current international carbon reporting practice”; but if the methods used to determine net Scottish emissions of greenhouse gases change and result in adjustment to an amount for a reported year, such “adjustment... must, in so far as practicable, be made in accordance with current international carbon reporting practice” (Bill insertion Section 34A(7)). Again (per Paras 13 and 14 above), ***it seems helpful to open up the option to align with adjustments to national reporting practice as well*** (and again, I include, e.g., devolved Northern Irish and Welsh institutional reporting practices within the intended meaning of “national” reporting here, in addition to national-level reporting practices of, e.g., the UK Government under the terms of the CCA 2008).

16. The Bill stipulates that after each period covered by a Scottish carbon budget, the Scottish Ministers must lay a report before the Scottish Parliament reporting on aspects of that period. The following matters must be covered in the report:

“The report must state the Scottish carbon budget for the period, whether the Scottish carbon budget target arising from that budget has been met, the percentage by which the net Scottish emissions account for the period is lower than the baseline multiplied by the number of years comprising the period, the difference between the net Scottish emissions account for the period, and the Scottish carbon budget for the period.”

Bill, s.2(15)(a)

¹³ Interim Chair of the CCC, *Letter to Cabinet Secretary for Net Zero and Energy, Scottish Government*, 14 May 2024, p.2.

In order to give a clearer picture of the condition of Scottish emissions, and the meta-approaches adopted in driving emissions down, ***it is recommended that the quantity of international emissions credits that have contributed to a carbon budget for the period being reported on should be stated in the report.*** Similarly, if when the Bill is passed it is the case that carbon budget quantities themselves can be carried back and/or forward between budget periods (per the UK CCA 2008 approach), ***it is recommended that budget quantities carried back/forward relating to the period being reported on should be stated mandatorily.***

17. In relation to elements such as the following –

“The first regulations under section A4 of the 2009 Act setting Scottish carbon budgets are to do so by inserting a new section into the 2009 Act, and replacing the words ‘by virtue of regulations under section A4’ in section A2(5) of the 2009 Act with a cross reference to the new section.”

Bill, s.4(1) (“Further provision about setting first budgets”)

“Regulations under this section may modify any enactment (including this Act), and make different provision for different purposes.”

Bill, s.5(2) (“Ancillary provision”)¹⁴

Such provisions should be carefully reviewed in order to ensure powers to amend primary legislation via secondary legislation / executive regulations are constrained from enabling a greater capacity to alter primary climate law than may be intended or advisable. It is good constitutional practice to avoid amending primary legislation – which has been set in place by the democratically elected legislature – via secondary legislation where possible.

Climate Change Bill: My Personal View

18. My own view is that the Scottish Government should use the reflection prompted by the Bill phase as a turning point, retaining the current annual target system with a refreshed vigour while stepping up decarbonisation activity in order to drive the achievement of the targets. Moreover, although it is not ideal that Scotland has been missing annual targets, note that there are no sanctions expressed in the legislation for a breach of annual target duties. Such targets have been characterised as aspirational,¹⁵ and given the grave problems posed by climate change, I would recommend that we keep aspirations high at this time, rather than reducing them. Indeed, the Bill itself proposes to retain annual

¹⁴ Bill s.5(3) applies some constraints on government autonomy via affirmative and negative procedure.

¹⁵ See, e.g., Reid, Colin T., "A New sort of Duty? The Significance of ‘Outcome’ Duties in the Climate Change and Child Poverty Acts" *Public Law* (2012) 4: 749-767.

reporting, so it is well placed to continue annual targets, as there is no proposed fundamental time lag or information lag in the legislative scheme. I recognise, however, that such a view does not appear to be in the ascendancy among a majority of MSPs at present. Further, I accept that the carbon budgets that seem likely to replace annual targets can also be an effective device. These operate best in law when pegged to interim targets, which in my view should be retained in the legislation.

19. As a point of general note, Bill insertion Section A4(4), concerning “Budget-setting regulations”, stipulates that “In preparing a draft of regulations to be made under this section, the Scottish Ministers must have regard to the target-setting criteria, and the most up-to-date advice they have received from the relevant body.” The “relevant body” is the CCC. The framing of this provision seems fine. Speaking broadly, it is to be recalled, and is worth emphasising, that the CCC is an *independent advisory body*; it is *not a policy setting body*. The role of this important and valuable body is undermined if it is seen to shift to a policy setting position, because setting policy is outwith its remit and is the business of elected representatives. The CCC in a recent report recommended the softening of Scottish legislative targets, and this galvanised the Bill¹⁶; such recommendations are advisory only and must not be treated as a view that must be taken up automatically as policy. Circumstances of a slightly similar nature arose in Northern Ireland when the CCA(NI) 2022 was at the Bill stage in the Northern Ireland Assembly; the CCC recommended that the Bill’s proposed Net Zero target was too stringent for Northern Ireland and should be reduced, and this was misinterpreted by a small minority of politicians to amount to a mandatory policy position, introducing some confusion into the legislative process.

¹⁶ The Scottish Government’s Position Paper on the Bill notes as follows:

“The purpose of the Climate Change (Emissions Reduction Targets) (Scotland) Bill (“the Bill”) is to amend the Climate Change (Scotland) Act 2009 (“the 2009 Act”) in response to the Climate Change Committee’s (“CCC”) advice that Scotland’s interim emissions reduction target for 2030 is beyond what can be achieved. This built upon repeated advice from the CCC that meeting the 2030 target set by Parliament would be extremely challenging.”

Scottish Government, *Climate Change (Emissions Reduction Targets) (Scotland) Bill: Position Paper* (2 August 2024).