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Submission to Scottish Parliament Call for Views: Climate Change Targets Bill

Catherine Higham, Emily Bradeen, Alina Averchenkova
and Tiffanie Chan

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About this submission

In August 2024, the Scottish Parliament launched a call for views on the Climate Change Targets Bill. More information on the consultation is available at: <https://yourviews.parliament.scot/nzet/climate-change-targets-bill/consultation/intro/>.

This report consists of a submission to this consultation written by the authors on behalf of the Grantham Research Institute on Climate Change and the Environment. The submission draws on research and policy analysis conducted by the Grantham Research Institute 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 the positive and negative impacts arising from the laws (Averchenkova et al., 2021a; 2021b; 2024a; 2024b). This research in turn draws on the Climate Change Laws of the World Database, available at: <https://climate-laws.org/>.

The submission includes responses to the consultation questions that our research and evidence is directly relevant to, or where any indirectly relevant evidence is strong enough to draw credible inferences. As such, we respond to most questions in Part One on Carbon Budgets and Part Two on Climate Change Plans, and the first question in Part Three on Monitoring and Reporting.

The response was submitted on 16 August 2024. The version presented here has been lightly edited.

About the authors

Catherine Higham is a Policy Fellow and Coordinator of the Climate Change Laws of the World Project at the Grantham Research Institute on Climate Change and the Environment.

Emily Bradeen is a Research Assistant at the Grantham Research Institute on Climate Change and the Environment.

Alina Averchenkova is a Distinguished Policy Fellow at the Grantham Research Institute on Climate Change and the Environment.

Tiffany Chan is a Policy Analyst at the Grantham Research Institute on Climate Change and the Environment.

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Summary recommendations

Part One – Carbon Budgets

- We recommend that Scotland adopts carbon budgets with a five-year duration, in line with the UK, with a shorter initial budget period from 2025–2027.
- We do not recommend that the legislation includes ‘banking’ or ‘borrowing’ provisions for managing a surplus or shortfall of emission reductions.
- It is advisable that the Scottish Government waits until the UK Climate Change Committee (CCC) publishes its advice for the UK’s Seventh Carbon Budget before setting a carbon budget for the same period.
- In the revised legislation, we recommend specifying:
 - The Parliamentary committee responsible for reviewing the proposed carbon budgets
 - The timeframe within which Parliamentary review must be conducted
 - A requirement for the Scottish Government to provide Parliament with an explanation of the degree to which the CCC’s advice has been considered in the setting of carbon budgets.

Part Two – Climate Change Plan (CCP)

- A plan to deliver Scotland’s first carbon budget should be introduced as rapidly as possible to avoid further delays to climate action.
- The legislation should specify clear deadlines for CCPs and processes for both Parliamentary scrutiny and independent scrutiny by the CCC. We suggest that CCPs are iteratively updated within specified time periods before the start of each subsequent carbon budget cycle.
- For the creation of CCPs, at least five updates should be made to different areas of the current legal framework:
 - Explicit inclusion of the principle of non-regression
 - Incorporation of specific wording to ensure that plans include quantitative and qualitative information on how measures are expected to achieve required emissions reductions
 - Clearly connecting the work of the Scottish citizens’ assembly or other public participation mechanisms to the climate action planning process
 - Explicit reference made to the need to consider the consequences of mitigation actions proposed in the CCP for adaptation and resilience outcomes
 - Specified roles given to local authorities to develop local climate action plans that are aligned with the national climate action plan.
- Certain aspects of the current legal framework should be retained for CCPs, including:
 - The emphasis on just transition principles
 - The principle of climate justice
 - The requirement for public authorities to align their activities with climate goals.
- The legislation should specify the process to be followed if carbon budgets are not met, and any resulting consequences.

Part Three – Monitoring and reporting

- We recommend that the Scottish Government continues its existing system of annual progress reporting against targets alongside the new five-yearly carbon budgets.
- We also recommend that the CCC provides a progress report at the end of each carbon budget cycle for Scotland, and at least one interim report per carbon budget cycle.

Responses

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)?

- Please set out any advantages or disadvantages of a 5-yearly carbon budget approach in Scotland.

Our research confirms that setting into legislation short-term economy-wide emissions reduction targets, in addition to long-term net zero, carbon or climate neutrality targets, has significant positive impacts for climate governance. Countries have adopted a range of different approaches to developing short-term targets, such as annual emissions limits and five-yearly carbon budgets or ceilings, and medium-term targets that cover a 10-year period.

Advantages of five-yearly carbon budgets include:

- **Providing direction for both short- and longer-term emissions reductions**, when employed in combination with a long-term net zero, carbon or climate neutrality target.
- **Offering greater time and flexibility to adopt and implement the necessary emissions reduction measures than an annual system** (Averchenkova et al., 2021a; 2024a).
- **Avoiding the creation of a ‘culture of failure’ around targets, which could dent public trust and weaken accountability for climate action** (Averchenkova et al., 2024a).
When combined with regular progress reporting (such as an annual reporting system), five-yearly carbon budgets offer an opportunity for course correction to meet the targets. (Read more in the question below on annual target systems.)
- **Providing a more accurate picture of progress on overall emissions reduction efforts.** A five-yearly carbon budget may help to smooth out fluctuations in a country’s annual emissions that result from ‘outlier’ or unusual events, such as a particularly cold winter or the Covid-19 pandemic, which can make it challenging to assess the extent to which progress on emissions reductions can be attributed to policy interventions.
- **Improving accountability for climate action**, as demonstrated in the cases of New Zealand and Ireland, where five-year emissions budget systems were introduced in 2019 and 2021 respectively (Averchenkova et al., 2024a). The positive effects of improved accountability depend on bodies with an oversight role, such as Parliamentary committees and independent advisory bodies, having sufficient expertise and capacity to provide detailed and authoritative assessments of progress. A five-year cycle may be a realistic timeframe for such bodies to provide assessments, whereas shorter assessment cycles may stretch their capacity, and generate less public and media attention.

There could also be disadvantages to the use of five-year carbon budgets, including:

- **Obscuring the need for longer-term action.** In New Zealand, for example, climate policy experts raised concerns that the onus on five-year planning cycles overly focuses the country’s policy debate on the five-year period, giving policymakers little incentive to achieve more rapid emissions reductions even where they might be feasible (Averchenkova et al., 2021a). This problem may be compounded in systems based around annual targets. To mitigate the risk that five-yearly carbon budgets create a focus on short-term actions, there should be a requirement that they are set well in advance, as is currently done in the UK.
- **Reduced ability to scrutinise progress towards meeting targets.** This can be avoided by retaining annual reporting requirements when switching to a five-yearly carbon budget.

- *Please set out any advantages or disadvantages of retaining the current annual target system.*

The main potential advantage of an annual target system relates to how it may strengthen accountability for climate action:

- **Annual targets and reporting requirements offer regular opportunities to check in on progress made in reducing emissions**, enabling policymakers to evaluate year-on-year fluctuations in levels of emissions and respond quickly when they surpass the set threshold. Our research found that accountability was perceived to have increased in Germany due to the annual target system implemented as part of its climate framework law (Averchenkova et al., 2024b).

The disadvantages of an annual target system include:

- **The high transaction costs associated with more frequent reporting.** Processes around setting carbon budgets and negotiating corresponding sectoral emission ceilings are perceived by some experts as overly time-consuming and resource-intensive (Averchenkova et al., 2024a). These drawbacks may be exacerbated when responsibility for meeting annual targets set in primary legislation needs to be apportioned to sectors and actors on a short-term basis.
- **Creating a ‘culture of failure’ from repeatedly missing annual targets.** A culture of failure may engender disillusionment and backlash from the public, increase the risk of litigation over government failure to comply with legislated targets, and make it less likely that key actors such as civil servants and politicians view the target as credible and take subsequent action to comply with it (Averchenkova et al., 2024b). Recent experience in Germany provides an example. The German Climate Protection Act includes a set of annual sectoral emission budgets up to 2030 and – until this year – if a sectoral budget was missed, the line ministry responsible would be required to propose an ‘immediate action programme’ to address the shortfall. After targets were missed by some sectors and responses to address the shortfall were deemed insufficient, a new approach was adopted: sectoral targets would remain in place but immediate action programmes to address a shortfall would only need to be introduced if it were projected that annual targets would be missed two years in a row. Responsibility for correcting the shortfall then rests not only with the responsible ministry, but also with the broader Government, enabling more cross-sectoral coordination on solutions. This amendment has been criticised by civil society groups as watering down the law, but some experts believe it is more workable in the long run due to increased flexibility and potential for cross-sectoral measures (see further discussion in Flaschland et al., 2024).

It is important to note that certain conditions can contribute to the effectiveness of the climate legislation, regardless of whether a carbon budget or annual target system is adopted. For both approaches, it should be ensured that the country is on an emissions reduction pathway consistent with the Paris Agreement, taking into account the latest developments in scientific knowledge and national circumstances. Clear mechanisms for defining sectoral emission reduction targets and/or pathways within the context of economy-wide targets or budgets should also be included to increase clarity on the minimum emission reductions required from each sector, and to create shared accountability across the government. Sectoral approaches must not be introduced without also ensuring that there is ongoing coordination, negotiation and collaboration between sectors (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, such as the potential to facilitate public awareness and understanding of the relevant climate governance architecture. Our studies on the impact of framework laws in the UK, Ireland, Germany and New Zealand (Averchenkova et al., 2021a; 2024a) show that regular reporting on progress creates key information points for the media, public and civil society to engage with the climate change debate. The studies also suggest that people often find it difficult to grasp the relevance of media reporting on progress towards climate targets when it is too technical and difficult to understand (Averchenkova et al., 2024a). Misalignment between UK and Scottish timelines is likely to exacerbate this problem.

Our research also supports the broader case for alignment between levels of government on carbon budget periods wherever possible. For example, New Zealand’s climate law does not contain provisions to create a framework for subnational action. The lack of explicit provisions to support vertical integration was considered by experts a missed opportunity to simplify a complex landscape of competing policy processes (Averchenkova et al., 2024b). While the UK’s climate governance architecture already contains some provisions to support such integration between the Government and devolved administrations, aligning the timelines for not only the carbon budgets but also the associated action plans would likely increase their effectiveness. In 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 improved coordination between local authorities and between local and national levels (ibid.). This example, while not an exact parallel given the different levels of government involved, may indicate possible benefits to alignment in the UK context.

Streamlining the role of the CCC in assessing progress and advising both the UK and Scottish Governments would be a significant advantage, as indicated by the Committee itself (CCC, 2024). This would be made possible by matching the carbon budget periods.

One disadvantage to aligning Scotland’s carbon budget periods with the UK’s is that, if it sets budgets in 2025, the Scottish Government would be starting halfway through the UK’s 2023–2027 budget period. It would be deeply detrimental to progress, perceived and actual, if Scotland’s first carbon budget began at the start of the 2027–2032 budget period, with no legally-binding emissions reductions required between 2025 and 2027. We therefore recommend that a shorter budget is adopted for the 2025–2027 period. Countries such as France have set a precedent for an initial shorter carbon budget 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, sending important signals to actors within and beyond government (Averchenkova et al., 2021a; 2024a). ‘Borrowing’ provisions (as established in some climate legislation in Europe), which allow emission reductions to be borrowed from future periods, can reduce the levels of certainty provided by carbon budgets and potentially cause great damage to the signalling function of the legislation and the government’s credibility on climate action. For these reasons, we do not recommend that borrowing provisions are included in Scotland’s legislation.

Analysis has suggested that ‘banking’, i.e. carrying over for future use, a surplus of emission reductions, may have benefits in incentivising early emission reductions and preventing carbon budgets from constraining the ambition of near-term policy actions (Climate Change Advisory Council, 2019). While several European countries have adopted carbon budgets that permit

banking, there is a significant risk that if a surplus was not achieved through a policy intervention but rather an external event (as seen with the 2008 financial crisis and Covid-19), carrying it over may prevent policy action from being taken when it would be most effective, resulting in the need for more rapid and expensive emission reductions in the future. Therefore, we do not recommend that banking provisions are included in Scotland's legislation.

As we discuss further in Question 5 below, in the event of failure to comply with a carbon budget and achieve the requisite emission 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. 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?*
- *Should the Scottish Government propose multiple 5-year carbon budgets in 2025 up to the year 2042?*
- *How soon after the Scottish Government has received advice from the CCC should it propose their carbon budgets?*

This section responds to the above three parts of Question 5 together.

As outlined in Question 4, we believe that alignment between the UK and Scottish carbon budgets would bring significant advantages. As the CCC is due to publish its advice regarding the UK's Seventh Carbon Budget for 2038–2042 in early 2025, it is advisable that the Scottish Government waits until this time before setting a carbon budget for the same period. This would reduce the likelihood that a carbon budget is based on out-of-date information and advice, particularly around the relative costs of low-carbon technologies.

The Scottish Government should propose multiple budgets for the period 2025–2042 in 2025, as soon as is feasible after the advice from the CCC is provided. Firm deadlines should be set in the legislation for: (i) the production of the budgets; and (ii) for the introduction of the final carbon budget for 2042–2045 – ideally aligning with the UK's timeline for its Eighth Carbon Budget, which covers the same period.

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

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; 2024b). Our research provides evidence to suggest that allocating responsibility for 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 thus be important to specify both the specific Parliamentary committee responsible for reviewing the proposed carbon budgets and the timeframe within which the review must be conducted. Provision should also be made for the Scottish Government to provide Parliament with an explanation of the degree to which the CCC's advice has been considered in the setting of budgets.

A separate process for Parliamentary scrutiny of Climate Change Plans (CCPs) 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 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 Scottish Government to produce plans on how they intend to meet the carbon budgets after they are adopted. Ambiguity around this timeframe is a weakness in the UK Climate Change Act that can lead to delays in implementation in the event of weakened political commitment (Averchenkova et al., 2021a). In the existing stock of European climate laws, a plan for meeting each carbon budget is often required to be submitted shortly after the budget is set. However, if the new Scottish legislation requires all, or nearly all, budgets to be set in 2025, there will likely be benefits to staggering the planning process to prioritise the carbon budgets that come soonest. Our research suggests that cooperation between government agencies in the development of climate action plans is highly beneficial for climate governance, and that it can be helpful if this process is iterative. (This point is discussed further in Question 6 below.)

In addition to Parliamentary scrutiny of CCPs, it is highly desirable that plans are scrutinised by the CCC. 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 create positive impacts in the Scottish context.

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?*

This section responds to the above two parts of Question 6 together.

As noted above, our research into the impact of framework laws suggests that planning processes for climate action offer important opportunities for inter-agency coordination and policy innovation (Averchenkova et al., 2024a). However, given that the current legislative reform already entails a delay to the publication of Scotland's CPP, 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 the first budget (and possibly the second budget), and provide an overview of policies and measures to be adopted to ensure that Scotland remains on track for 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 action to reduce emissions in the short term.

To maximise the benefits that planning processes for climate action bring in terms of coordination and accountability, planning processes should be iterative. We suggest that the revised legislation requires the CPP to 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 will be revised may support policy certainty (Averchenkova et al., 2021a).

For each planning cycle, revised CCPs should include both detailed policies and measures for meeting the carbon budget, and updates to the long-term strategy. The current requirements that each plan should assess progress towards implementing the policies set out in the immediately preceding plan, as per Section 35 (sub-sections 25 and 26) of the Climate Change (Scotland) Act 2009 ('the 2009 Act'), should also be retained to ensure continuity between planning processes.

- *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?*

This section responds to the above two questions together.

We recommend that the following updates are made to the current legal framework for the creation of CCPs:

- **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.**¹ Where the Scottish Government no longer intends to implement measures set out in previous plans, they should be replaced with new measures that are at least as ambitious, along with detailed reasons for the change in policy direction.
- **To ensure that plans include policies and measures that are clearly sufficient to deliver specific carbon budgets, requirements should mirror the standards in the judgment of a previous case.** It was determined in the judgment of the case *R (Friends of the Earth) v. BEIS [2022] EWHC 1841 (Admin)* that, to satisfy the requirements of the UK's regulatory framework, a plan to meet a carbon budget requires: (i) clear quantitative information regarding the extent to which the planned measures were expected to deliver the required emissions reductions; and (ii) 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 further [Higham and Setzer, 2021](#)). Such requirements should be explicitly incorporated into the amended legislation, thus providing clear guidance to ministers and civil servants on the level of detail needed to comply with obligations to produce plans to deliver carbon budgets.
- **Governments should integrate public participation into critical stages of decision-making on climate change, including climate action plans.** 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; 2024b](#)). One mechanism for such integration is the use of deliberative democratic processes such as citizens' climate assemblies. While the current legislation includes provision for a Scottish citizens' assembly, it could more clearly connect the work of the assembly to the climate action planning process. (Find resources on the benefits of citizens' assemblies by Knowledge Network on Climate Assemblies, of which the Grantham Research Institute is a founding member, at: www.knoca.eu.)
- **The framework for the CCP should explicitly reference the need to consider the possible impacts that proposed mitigation actions are likely to have on adaptation and resilience.** Under the 2009 Act, Scotland's Climate Change Plan is focused on actions to reduce emissions and mitigate climate change, with adaptation to climate change treated separately in the Act. There are risks to taking an overly siloed approach to climate mitigation and adaptation actions. For example, climate policy experts in New Zealand raised concerns that mitigation action in the forestry sector had actually contributed to a reduction in levels of climate resilience ([Averchenkova et al., 2024b](#)).

¹ Article 4.3 incorporates the principle of non-regression with regard to Nationally Determined Contributions (NDCs), requiring that each successive NDC should represent a progression in ambition. As NDCs must be met through domestic mitigation measures (see Article 4.2) this logically extends to domestic policies.

- **The CCP planning framework should be updated to explicitly include a role for local authorities.** The current legislation does not include a mechanism to ensure that local authorities adopt climate action plans aligned with the goals of the national plan. However, studies on the impact of climate laws in other countries suggest that such requirements can have major positive impacts on sub-national climate action and vertical coordination (Averchenkova et al., 2024a).

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

- **The emphasis on just transition principles and the principle of climate justice,** and the need to analyse the possible implications of proposed policy measures for both the just transition and climate justice.
- **Sections 44–46 of the 2009 Act,** with a strengthening of Section 44 to make explicit reference to aligning decisions with climate action plans, and the need to contribute to the delivery of short- and long-term emission reduction targets and climate adaptation programmes. Our research suggests that giving public bodies a mandate to operate in way that is aligned with climate goals can have significant positive benefits for climate action (Averchenkova et al., 2024a).
- **The annual system of reporting on progress towards emission reduction targets,** including the requirements under Section 35B of the 2009 Act to provide a report on progress towards implementing the proposals and policies set out in each substantive chapter of the plan.
- **A mechanism detailing the process to be followed if carbon budgets are not met.** This should be at least as strong as the mechanism included in Section 36 of the 2009 Act, which requires the Government to provide the Scottish Parliament with a report setting out proposals and policies to compensate for any shortfall in meeting targets. However, this mechanism could be further strengthened. Examples of mechanisms used by other countries in the case of non-compliance include:
 - Nigeria’s Climate Change Act specifies that ministries, departments and agencies that fail to meet emission reduction targets will be subjected to a review and, if found liable, its principal officers will be sanctioned and fined as appropriate.
 - In New Zealand and Ireland, there are provisions for judicial scrutiny on compliance with emissions reduction targets, but they impose limits on available forms of judicial intervention. Both countries’ laws make judicial scrutiny possible in the case of non-compliance, but courts are prevented from imposing financial penalties, damages or compensation. The French model differs on this point: the Administrative Court of Paris has ordered the Government to take action to repair damages caused by a failure to meet targets (see e.g. the case of *Notre Affaire à Tous and Others v. France*).
 - In developing any accountability mechanism, due consideration should be given to the potential damage that can be done if a government’s failure to comply with targets is not perceived by the public to be met with appropriate sanctions (see Averchenkova et al., 2024a; 2024b). A lack of clear consequences for missing targets was raised as a concern in our research by experts 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.

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?*

If Scotland adopts a five-yearly carbon budget system, the legislation should continue to require the Government to submit annual progress reports to Parliament to strengthen accountability for remaining within the carbon budget and to enable course correction to be made in advance when required.

Our research found that experts in Germany noted increased accountability due to the requirement to submit annual progress reports, and that this observation 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 is given a specific number that can be cross-referred in the progress report).

- *What are your views on the potential changes to the level of Scottish reporting provided by the CCC?*

As noted in Part One, accountability can be strengthened by ensuring that bodies with an oversight role, such as Parliamentary committees and independent advisory bodies, have sufficient expertise, resourcing 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 favour their involvement on a less frequent basis, thus enabling more detailed assessments. However, we recommend that CCC reports are requested at the end of each carbon budget cycle and that at least one interim report is made in each carbon budget cycle, as it may offer timely opportunities for course correction.

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