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An Comhchoiste um Ghníomhú ar son na hAeráide

Tuarascáil maidir leis an nGrinnscrúdú Réamhreachtach ar an Dréacht-Bhille um Ghníomhú ar son na hAeráide agus um Fhorbairt Ísealcharbóin (Leasú), 2020

Nollaig 2020

Joint Committee on Climate Action

Pre-Legislative Scrutiny on the draft of the Climate Action and Low-Carbon Development (Amendment) Bill 2020

December 2020

[33-JCCA-01]



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Chairman's Foreword



On the 6th October 2020 the Minister for Environment, Climate and Communications Mr. Eamon Ryan T.D., submitted a draft unstamped text of the Climate Action and Low Carbon Development Amendment Bill 2020 and an explanatory memorandum to the Joint Committee on Climate Action (hereafter, 'the Joint Committee') for the purpose of Pre-Legislative Scrutiny. The Draft Bill was published on 7th October 2020. The Joint Committee decided that it would undertake pre-legislative scrutiny in respect of this Draft Bill.


The purpose of the Draft Bill is to strengthen the statutory framework for more effective governance of the State's Climate objectives. Key elements include:

- National Climate 2050 objective;
- Climate action plans and strategies;
- Carbon Budgets;
- Change to the role and composition of the Climate Change Advisory Council; and
- Strengthened Oireachtas oversight of Climate Policy.

In carrying out its pre-legislative scrutiny of this Draft Bill the Joint Committee met in public session on 14, 15, 21, 27, 28 and 29 October and 4 November and heard from a number of stakeholders including Officials from the Department and expert witnesses.

I would like to express my appreciation to all the witnesses for their contributions and to the members of the Committee for all their work on this process. I would also like to thank the L&RS for the comprehensive paper they produced for the Committee which greatly assisted us in the consideration of the Draft Bill.

I hope that this report will help to inform the legislative process and make a valuable contribution to the forthcoming legislation.



Brian Leddin T.D.
Chairman
Joint Committee on Climate Action
16 December 2020

Introduction

Committee's approach to pre-legislative scrutiny

Conscious of the wide-ranging impacts of climate policy and a short timeframe in which to conduct scrutiny of the draft Bill, the Committee wished to confine itself to scrutiny of the proposed legislative provisions insofar as possible. Wider policy decisions which are connected to the aims of the draft Bill may not be within the scope of the draft Bill in a strictly legislative sense.

The objective of the Committee therefore, in seeking inputs from experts, is to focus on legislation and this report also maintains this legislative focus, keeping to current and potential textual provisions, rather than exploring climate policy more generally.

Over the course of the Committee's public hearings 8 key themes emerged. These are outlined below.

High level summary of draft Bill

This draft Bill aims to update the Climate Action and Low Carbon Development Act 2015 (the 2015 Act) and establishes a target of carbon neutrality for the State by 2050. Carbon neutrality means that any greenhouse gas emissions which are produced within the State would be balanced by the removal of greenhouse gases.

The national mitigation plan, which is a feature of the 2015 Act, is superseded by the provisions of this draft Bill. The planned actions which will exist under the new framework include:

- annually updated climate action plans
- Long term climate action strategies updated every ten years (with an option to update every five years instead), with local authorities are required to prepare local authority climate action plans.
- carbon budgets, each covering five-year timespans, which set out the total amount of greenhouse gases allowed in the State during that time. These five-year carbon budgets will be designed in groups of three and complemented by sectoral decarbonisation target ranges. The Climate Change Advisory Council will initially propose the carbon budgets which will be finalised by Government.

Stakeholder engagement

Hearings:

14 October 2020 - Mr. Brian Carroll, Assistant Secretary, and Ms Emer Griffin, Assistant Principal, Department of the Environment, Climate and Communications -

https://www.oireachtas.ie/en/debates/debate/joint_committee_on_climate_action/2020-10-14/

15 October 2020 - Dr. Diarmuid Torney, Associate Professor at the School of Law and Government, Dublin City University, DCU, and Dr. Áine Ryall, co-Director of the Centre for Law and the Environment, University College Cork, UCC -

https://www.oireachtas.ie/en/debates/debate/joint_committee_on_climate_action/2020-10-15/

21 October 2020 - Professor John Sweeney of Maynooth University and contributing member of the Intergovernmental Panel on Climate Change, IPCC, and Dr. Andrew Jackson of the Sutherland School of Law, University College Dublin -

https://www.oireachtas.ie/en/debates/debate/joint_committee_on_climate_action/2020-10-21/

27 October 2020 - Mr. Jonathan Church, a climate accountability lawyer from ClientEarth, and Dr. Thomas Muinzer, lecturer on energy transition law from the University of Aberdeen -

https://www.oireachtas.ie/en/debates/debate/joint_committee_on_climate_action/2020-10-27/

28 October 2020 - Professor John FitzGerald, Chair of the Climate Change Advisory Council -

https://www.oireachtas.ie/en/debates/debate/joint_committee_on_climate_action/2020-10-28/

29 October 2020 - Professor Yvonne Buckley, professor of zoology in Trinity College, Dublin, and Dr. James Glynn of MaREI, the Science Foundation Ireland research centre for energy, climate and the marine in University College Cork -

https://www.oireachtas.ie/en/debates/debate/joint_committee_on_climate_action/2020-10-29/

4 November 2020 - Dr. Larry O'Connell, Director, and Dr. Jeanne Moore, Policy Analyst, the National Economic and Social Council, NESC. Ms Sharon Finegan, Head of the Climate Action Unit, and Ms Ciara Kennedy, the Department of the Taoiseach. Professor Kevin Anderson, University of Manchester, the Tyndall Centre for Climate Change Research -

[https://www.oireachtas.ie/en/debates/debate/joint committee on climate action/2020-11-04/](https://www.oireachtas.ie/en/debates/debate/joint_committee_on_climate_action/2020-11-04/)

The Committee also requested a small number of written submissions. These and supplementary evidence from witnesses are available in Appendix 3.

1. Language

Members of the Committee and witnesses expressed concern that there was lack of clarity around definitions and in parts of the draft Bill vague or aspirational language is used, where more certain terms could be used instead. This may prove problematic in ensuring the legislation drives the change required. The Committee heard from legal experts that ambiguous language can lead to differences of interpretation, disputes and that it may “fuel litigation”. Dr. Ryall stressed the need for precision and clear obligations. Dr Jackson was of the view that the language in the bill may make for legal accountability more difficult in the future. Dr. Glynn advised that from a scientific and engineering perspective, ambiguity of language makes it difficult to ascertain whether commitments are being met.

Examples of such language included:

The use of “pursue” carbon neutrality rather than “pursue and achieve”, “ensure”, “in the opinion of the Minister”, and “one or more greenhouse gases”

The use of the government “taking account of” and “having regard to” salient matters (for example, the 25 matters listed in section 3(3) of the draft Bill) instead of, for example, acting “consistent with” or tying specific matters to specific obligations.

Dr. Glynn noted that the terms “climate resilient”, “climate neutral” and “removal” need to be more clearly defined, and that removal could be more widely defined to include offshore as well as onshore.

Professor Yvonne Buckley advised the Committee that “biodiversity” and “nature-based solutions” should be clearly defined.

Dr. Andrew Jackson noted the exclusion of the phrase “environmentally sustainable economy” which is included in the 2015 Act and suggested that this should be reinserted in this Bill”.

Section 3(3):

Particular concern was expressed about how ‘have regard’ was applied to 25 matters in section 3 of the draft Bill are set out in one long list, with no differentiation in roles or prioritisation. Professor Fitzgerald advised the Committee that the length of this list could make Climate Change Advisory Council deliberations difficult and leave its advice open to legal challenge.

It was also noted that this long list of salient matters omits mention of Article 4 of the Paris Agreement and does not refer to the Intergovernmental Panel on Climate Change, IPCC. Dr. Jackson told the Committee that, importantly, actions should

be mandated to be consistent with the overall objective of the UN framework convention and the temperature limits specified in the Paris Agreement. He also said that Ireland's performance in achieving its "highest possible ambition" as per the Paris Agreement should be regularly reported on. Members also raised the concern that having regard to "value for money", "carbon leakage" and "Government policy" (depending on a possible future government's attitude to climate) could be interpreted in ways harmful to the ultimate goals of the draft Bill. Professor Fitzgerald also advised the Committee that considering the cost-effectiveness of proposals must be maintained as a criterion to allow the Climate Change Advisory Council to propose workable solutions. However, some members noted the lack of clarity around measuring "value for money" and the potential duplication through citing both 'value for money' and 'cost effectiveness' in the Bill.

Concern was expressed that biodiversity and just transition should be included.

Professor Sweeney told the Committee that it would be unwise to include carbon leakage in the Bill and that carbon leakage could equally be used against Ireland by other countries (in terms of trade and tariffs).

Professors Torney and Ryall noted that if 'government policy' were included, it should be prefaced by the weaker language of 'have regard to' in order to signal independence of the process.

The multiple and differing references to science and technology were also noted, with concern expressed by some witnesses about potential overreliance on scientific projection.

Members discussed what definitions are required for "climate justice" and "sustainable development." Witnesses also mentioned that Sustainable Development Goals should be included, as they are in the Scottish legislation.

2. The Climate Change Advisory Council (The CCAC)

Composition of the CCAC

Members of the Committee questioned whether there should be stronger and more prescriptive provision for specific representation in the CCAC, including greater representation of climate scientists, biodiversity and ecology experts, and featuring youth and gender balance. The Committee also heard that the CCAC would benefit if membership included legal expertise and expertise in adaptation resilience.

The role of the *ex officio* members (the Director General of Teagasc, the Environmental Protection Agency and Met Éireann) was also raised. Professor Sweeney was of the opinion that representatives of State bodies should serve in an advisory capacity only. According to Dr. Jackson, it is anomalous for an

independent expert advisory body such as the CCAC to have *ex officio* members. The Committee recognises the expertise and value of having these bodies provide inputs to the considerations of the CCAC, whether or not they are best placed to be part of the formal decision-making process.

Professor Fitzgerald informed the Committee that having ex-officio members at the table had been helpful as it gives the CCAC timely access to those bodies' resources and expertise. He said it is essential for the Environmental Protection Agency to be represented, not least because it houses the CCAC's secretariat.

Whereas the required expertise of members is provided in the draft Bill, Members also noted that only one of the areas of expertise listed is required and this could, unintentionally, result in an uneven spread of expertise on the Council.

Dr. Ryall advised the Committee that having an open, competitive and transparent appointments process is a feature of independent bodies and should be considered for the CCAC.

Professor Fitzgerald highlighted that it is not a representative body and is in place to provide expert policy advice; he stressed the need for expertise and collaborative working.

Resourcing of the CCAC

Professor Fitzgerald, Chair of the CCAC told the Committee that a better-resourced secretariat is required to enable the CCAC deliver its intended mandate in relation to the carbon budget process. He also said that experience in other jurisdictions had shown the need to mobilise significant resources for the task of proposing carbon budgets and that the expected timeline for their development is not practical. He recommended the immediate development of a memorandum of understanding guaranteeing the CCAC access to the necessary skills, expertise and models in Departments, Government agencies and academia.

Professor Fitzgerald identified the core work of the CCAC as advising Government on climate policy and preparing carbon budgets and said that additional processes implied in the draft Bill could overload the CCAC and dilute its impact. These processes include excess consultation or dialogue involving the CCAC, especially considering that as it is constituted now it has a small secretariat, comprises members serving in a part-time capacity, meets every one or two months and has to consider every relevant policy document produced by the Government. He warned that strengthening reporting obligations would be extremely time-consuming.

The Committee notes that it is critical the CCAC has access to the data it needs to conduct modelling in a timely and effective manner. The active participation of Government Departments in the research leading to the conclusions of the CCAC is also key. Professor Fitzgerald also informed the Committee that due to

Ireland's size, collaborative research between agencies is generally the most effective approach – for example, joint modelling between the ESRI and the Department of Finance – and that collaboration to make best use of limited resources needs to be balanced against concerns relating to the independence of the body.

3. Target structure

Sectoral Decarbonisation Ranges

Members of the Committee queried the expected size of decarbonisation ranges, noting that overly large ranges might disincentivise ambition.

The Department advised the Committee that work on defining the size of decarbonisation ranges would progress in the context of preparing carbon budgets.

In terms of how sectoral carbon budgets should be allocated, Dr. Glynn suggested that allocation based on carbon intensity per value added per NACE¹ should be considered.

Dr. Muinzer advised the Committee that it may be a strength of the draft Bill that contains a sectoral focus as this approach recognises that different sectors pose different problems. Mr. Church, however, informed the Committee that he has a concern that the sectoral decarbonisation ranges could constitute an extra burden in a framework which already prescribes many duties on the Minister. Moreover it will be a real challenge to produce these ranges, which in the draft Bill, do not need to be strictly tied into carbon budgets. He also questioned the efficacy of using target ranges rather than more precise target figures.

In his submission to the Committee, Professor McMullin highlighted that the draft Bill does not set out any clear relationship between the setting of sectoral decarbonisation ranges and carbon budgets, and it is not explicitly stated that they should be mutually consistent. He stated that it would preferable to replace the current concept of decarbonisation target ranges with sectoral allocations of the overall carbon budget.

¹ NACE, explanation from Eurostat: "The Statistical classification of economic activities in the European Community, abbreviated as NACE, is the classification of economic activities in the European Union (EU); the term NACE is derived from the French Nomenclature statistique des activités économiques dans la Communauté européenne. Various NACE versions have been developed since 1970."

Banking and borrowing provisions

“banking and borrowing” refers to provisions in the draft Bill which would allow Government to “borrow” up to 1% from future carbon budgets in case emission reduction targets are not being met (Section 6D(5)), or conversely, to bank surplus reductions for future carbon budgets (Section 6D(4)).

The Committee notes that the draft Bill provides for banking of reductions in excess of a carbon budget against future carbon budgets, as well as borrowing of up to 1% from future budgets.

The Department advised the Committee that the ability to bank over-performance in carbon budgets incentivises early action. The limit of 1% borrowing over the carbon budget ceiling from future carbon budgets is regarded as a conservative allowance, which should disincentivise underperformance.

Professor Sweeney disagreed with banking reductions on the basis that no State should be rewarded by being entitled to pollute more heavily in the next five-year budget. He also referred to 1% borrowing as an “amnesia clause” as not achieving targets beyond that 1% could conceivably be disregarded and there is no provision to bring them forward into the next carbon budget, unlike in legislation in other jurisdictions (e.g. the UK).

Targets outside the Bill

The Paris Agreement was signed in 2015 and the EU and its Member States, including Ireland, are among its parties. Parties agreed to a long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels, and to aim to keep it below 1.5°C.

The EU is currently negotiating provisions to amend its emission reductions targets upwards.

Ireland is subject to EU emissions targets and the Programme for Government commits to 7% emission reductions each year to 2030. Neither EU obligations nor 7% Government targets are referred to in the draft Bill. Members of the Committee questioned whether the Bill should make reference to obligations under EU law, obligations under international agreements and the Government’s own 7% targets.

The Department advised the Committee that it had received legal advice that where an existing legal obligation has been imposed under EU law, it is not appropriate to restate the same obligation in national law.

Dr. Ryall informed the Committee that she does not see a difficulty in making explicit references to our international and EU law obligations in the text of our legislation, and these processes should be mutually reinforcing.

Professor Anderson said that to ensure compliance with the Paris Agreement, his analysis based on 2018 levels, indicates an 80% cut in CO2 emissions is required by 2030. This would provide a 33% chance of remaining below +1.5C global temperature increase, compared to pre-industrial levels. He offered that, in general, countries are still deluding themselves about the scale of the changes needed.

In his submission to the Committee, Professor McMullin stated that a “national net zero” goal is insufficient, and that the Bill should make reference to meeting the global temperature goals set out in Article 2.1(a) of the Paris Agreement.

Interim targets

Members of the Committee noted a lack of interim targets in the draft legislation and questioned whether enshrining interim targets in law would facilitate the overall 2050 target. The requirement for interim targets, set as a floor and in line with climate science, was highlighted by a number of experts including Professor Fitzgerald, and the need to integrate with our EU obligations.

While specific interim targets are not set out in the draft Bill, the Department made the point that, in effect, the carbon budgets which are set in groups of three would form interim targets as Ireland progresses towards 2050. When questioned on the potential mutability of carbon budgets, the Department said: “Once the carbon budgets have been approved by the Government and laid before the Oireachtas there is no revising those except in exceptional circumstances. The first is if we have new climate obligations which are likely to be an upward revision. The second is if there is some big development in climate science that warrants their changing.”

Dr. Torney noted there is no obligation in the draft Bill for the Government to approve carbon budgets which are consistent with the 2050 objective, and there is nothing in the draft Bill to stop the Government from setting carbon budgets which are explicitly inconsistent with it.

Professor Sweeney highlighted that reporting lags in emissions levels negatively impact the ability to set accurate targets. He suggested that the Environmental Protection Agency be tasked with issuing a provisional fifth year emissions projection, which would be used in the formulation of the next carbon budget. Mr.

Church also said that emissions projections published by the CCAC should identify the likelihood and extent of climate action plans achieving or failing to achieve carbon budget targets.

Speaking in favour of specifying legislative interim targets, Professor Sweeney advised the Committee: "The Bill should have a glide path with annual figures to indicate whether we are on the right path or trajectory. If we are not, then corrective action needs to be taken." Mr. Church advised the Committee that in relation to accountability "little and often" is a more effective approach than trying to retroactively correct breaches after five, ten or fifteen year intervals. He said that legislative frameworks in Finland and Sweden have greater emphasis on taking remedial action based on projected emissions.

Mr. Church identified a potential flaw in the draft Bill wherein climate action plans are not explicitly required to be adequate for meeting the carbon budgets. The draft Bill provides for the Minister to set out a roadmap of actions that, in the opinion of the Government, "should be pursued" to remain within the carbon budget but that plans can be "subject to such modifications" as the Government considers "appropriate", without any apparent constraint.

Dr. Muinzer advised the Committee that, in Scotland, interim targets are very important and "the key to the success" of carbon budgeting.

Professor Fitzgerald said that interim targets are essential and that the carbon budgets will mostly function as these, but that the Oireachtas should also set a clear target for 2030 to help guide carbon budget formation.

There were differing views from witnesses on what interim targets should be, from differing baseline years.

4. Greenhouse Gases including Biogenic Methane

Members also voiced concern around the inclusion of the distinctive character of biogenic emissions and questioned the objective of this inclusion. There does not seem to be explicit provision within the draft Bill for treating different greenhouse gases separately in different carbon budgets. Equally, as Dr. Daly pointed out to the Committee in her submission, there is uncertainty around which greenhouse gases are to be included in carbon budgets (2(a) "*carbon budget' means, in relation to one or more greenhouse gases, the total amount of greenhouse gas emissions that are permitted during the budget period*").

The Department outlined that biogenic methane has a shorter lifetime in the atmosphere than carbon but has a higher warming potential. The Department further advised: "while we have technological solutions to get our carbon emissions to zero by 2050 there will be residual biogenic methane and nitrous

oxide emissions. What we are aiming for is that they will be balanced by the creation of sinks and nature-based solutions and other ways of removing them from the atmosphere.”.

Professor Sweeney informed the Committee that while the half-life of methane is approximately ten years, it is still present in the atmosphere after that and much of it converts to CO₂ thereafter. He also said that the traditional way of measuring its impact, by 100-year global warming potential, underestimates the potency of methane in shorter time periods and that its contribution to Ireland’s warming relative to CO₂ has been enormous.

Dr. Torney advised the Committee that it should be defined clearly in law whether the carbon budget is one budget covering all gases or separate budgets for different gases.

Professor Sweeney advised the Committee that “whatever way we wish to measure methane, the reporting requirement is simply established at United Nations Framework Convention on Climate Change, UNFCCC, level according to IPCC² methodology, and that is the 100-year global warming potential criteria. When it comes to Ireland reporting, that is the only criteria that applies.... Although it is open to policy makers to measure separate gases such as SF₆ or methane and to have separate quantification of them, it is not open to them to start changing the reporting requirements at present.”

On the issue of potentially having split targets for different gases, the treatment of methane in the in New Zealand legislative framework was raised. Dr. Muinzer informed the Committee that, similarly to Ireland, a high proportion of New Zealand’s emissions come from agriculture, but the New Zealand Act has more rigidly-defined carbon budgets and methane has a stringent target. He said a split-gasses targeting approach is controversial and he would not recommend it in the context of the Irish legislation.

Professor Fitzgerald informed the Committee that the council had recommended a split national target for 2050, net zero emissions of long-lived gases and a separate target for biogenic methane.

Dr. Glynn outlined to the Committee that there are different methodologies to convert diverse greenhouse gases into carbon dioxide equivalents for the purpose of assessing warming impact along one yardstick. Two of these methodologies are GWP 100 and GWP* (Global Warming Potential). The utility of the traditional GWP 100 method is good for annual targets but diminishes as reduction targets and carbon budgets increase in temporal length, as the impact of warming impact of each of those gases over time is different. Therefore, from the point of view of scientific accuracy, it could be sensible to create different budgets for gases with different atmospheric lifetimes. However, given that radiative forcing is ultimately

² <https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/greenhouse-gas-inventories-annex-i-parties/reporting-requirements>

what drives up temperatures, the intensity of different gases should also be considered as well as length of impact if targets and budgets are to be split among different gases.

Dr. Daly recommended that a separate and distinct long-term target for methane should be included in the Bill, since the draft Bill recognises a special role for agriculture and the distinct characteristics of methane. She argues that methane still requires an ambitious reduction target and that this should be done in a separate carbon budgeting process if methane is to be considered differently.

5. Nature-based solutions and biodiversity

Biodiversity refers to the variety of living organisms and the health and sustainability of their habitats.

Ireland's 3rd National Biodiversity Action Plan covers the period 2017 – 2021.

Members of the Committee highlighted the importance of biodiversity and put forward a preference that there should be specific mention of it in the Bill.

The Department advised the Committee that the Bill provides a definition of greenhouse gas removal which includes the use of natural solutions (section 2(b)). The Committee noted that there could be scope in this section for elaborating on such natural solutions and highlighting biodiversity. The concern was raised that utilitarian approaches to nature-based solutions might be harmful to biodiversity. Professor Buckley informed the Committee that biodiversity increases resilience to climate shocks and that this has further societal implications as fundamental as food security.

Dr. Jackson advised the Committee that section 15 which deals with duties imposed on public sector bodies could be amended to give precedence to nature-based solutions that enhance biodiversity.

Members of the Committee questioned whether the draft Bill should oblige local authorities to implement more nature-based solutions in tandem with biodiversity protection, as part of their climate action plans, given their particular role in relation to large areas of land.

Professor Buckley advised the Committee that active restoration of biodiversity is a nature-based solution which reduces emissions, enables carbon capture and storage and increases resilience to climate change shocks. She recommended that all policies and plans coming under the auspices of the draft Bill should actively

support the national biodiversity action plan. This should be explicitly referred to in the Bill; the current draft which refers to “enhancing” biodiversity may be open to interpretation and less directional. The role of biodiversity and nature-based solutions in reducing emissions should also be explicitly referenced in the text of the Bill rather than solely the potential offered in the removal of greenhouse gases.

In a supplementary submission, Professor Buckley recommended the following amendments to the draft Bill:

Section 3. Amend to include the text in bold:

Section 3 (1) “The state shall pursue the transition to a climate resilient and climate neutral economy by the end of the year 2050 **while ensuring biodiversity is protected and restored**”

Section 3 (3) Amend to include the following paragraph the text in bold:

(z) ensuring biodiversity is protected and restored through implementation of the national biodiversity action plan and in accordance with EU and international biodiversity obligations.

Renewable energy solutions and adaptation technologies could be harmful to biodiversity e.g. windfarms and impact on habitats. Case-by-case assessments of consistency with a biodiversity action plan will help mitigate this risk. For example, each change in land use (e. g. from agricultural land to a wind farm) should be assessed for carbon emission, impact on biodiversity and ways in which the intended objective can be achieved in a way that supports biodiversity. In the broad sense, deciding where to place projects can be viewed as a dynamic optimisation problem for balancing greenhouse gas reduction and preserving and enhancing biodiversity.

Professor Anderson called the Committee’s attention to many models’ reliance on biomass energy with carbon capture and storage, BECCS, which he said was “probably the worst” negative emissions technology, involving huge amounts of tree planting with negative sustainability and natural consequences. He said that this reliance is dangerous across an entire set of Sustainable Development Goals principles.

Professor Buckley also recommended that research on nature-based solutions and measurement of their efficacy should be a condition of funding (from the Climate Action Fund). Professor Buckley informed the Committee, “to demonstrate the efficacy of nature-based solutions and get recognised value from their implementation, we need to measure and validate impacts as well as monitor effectiveness over short to longer timescales.”

The Committee notes the rapidly changing environment and the risk that assumptions underpinning the draft Bill may need to be revisited. Therefore,

incorporating research, performance measurement and monitoring will enable effectiveness to be reviewed in “real time”. In addition, research is also required to understand how much carbon is stored in different elements of our natural landscape.

6. Carbon-dioxide removal / negative emissions technologies

Carbon dioxide removal technologies remove CO₂ and sequester it, from both the atmosphere and point sources. This relies on sequestration (for example, underground). Carbon capture and storage technologies remove CO₂ at source point and sequester it before it reaches the atmosphere.

The draft Bill refers to technological innovation and to sequestration but does not specify the level of emissions are expected to be compensated for by technological sequestration solutions as a percentage of the target reduction of emissions. Members discussed whether sequestration should be capped to a certain level within carbon budget projections.

Dr. Glynn said that findings from his modelling showed that scenarios without carbon dioxide removal (CDR) technologies could require, approximately, a doubling in decarbonisation rates. He told the Committee “globally [these technologies] are already far behind the technology readiness levels needed to meet the Paris Agreement goals.” He said there is therefore a risk in relying on yet to be commercialised technologies. He also highlighted that Ireland does not currently allow for any area of its territory to be used for CO₂ storage. Dr. Glynn highlighted that Irish territorial waters are already functioning as a sink, and that it is possible to store CO₂ in offshore geological formations such as oil and gas fields, and further natural solutions around algae or seaweed can be realised. He suggested the definition of “removal” should be widened as it only explicitly mentions land-based solutions.

Additionally, it seems some technologies may be reported as accounting for greater emission reduction than actually occurs. Dr. Glynn confirmed “there is ambiguity in some of the global models as to the accuracy with which bioenergy, in combination with carbon capture and storage, is represented. Bioenergy, carbon capture and storage could be a big vulnerability in the IPCC models.” In the short term, the impact on the legislative framework is unclear but there needs to be an awareness of the problem at Climate Change Advisory Council level.

Professor Anderson told the Committee that, in his view, there should be no reliance on negative emissions technologies or on carbon capture and storage, primarily because carbon capture and storage in energy still have high life cycle emissions. Professor Anderson also highlighted the uncertainties around technological solutions for extraction and associated projections, versus the unambiguous positive outcome from reduction in Greenhouse gases, in

achievement of the National Climate Objective. He reiterated the IPCC's statement that such technology has "multiple feasibility & sustainability constraints."

Research in the area is appropriate but to assume they will work in the future is a moral hazard. He said that the full life cycle emissions of a gas power station are estimated to be typically about 100 g to 300 g of CO₂ equivalent, with carbon capture and storage. A good gas-fired power station without carbon capture and storage is probably about 400 g and a coal station is probably about 900 g. Offshore or onshore wind power generation is probably nearer to 5 g to 25 g. He said the role of carbon capture and storage is more appropriate to process emissions from cement production.

The Committee is of the view that offshore mitigation is not defined clearly in the Bill.

In addition, it is not clear how the Bill approaches the issue of offsets or credits. In his follow up submission to the Committee, Dr. Diarmuid Torney, expressed his view that in the current drafting of the bill it appears that offsets cannot be used in calculating the state's compliance with emissions targets.

Professor Anderson also noted that "*there should be no offsetting or accountancy ruses to avoid wealthy countries meeting their obligations*". In discussion with the Committee, Dr. Glynn also noted that "double counting" was a concern in relation to offsetting and carbon capture.

7. Just Transition and Climate Justice

Just Transition

Given the whole-of-society underpinning to Just Transition, the Committee considered whether Just Transition should be explicitly referred to in the Bill.

Just Transition is a phrase which originated in the labour movement and, according to ICTU's submission to the Committee it "In essence, [...] seeks to align labour, social and environmental priorities."

The Department advised the Committee that there is reference to "climate justice" in the list of 25 items which the Climate Change Advisory Council and the Government must have regard to (see "Language" section of this report), and that this includes just transition. Members of the Committee and witnesses noted that just transition and climate justice are two separate terms and should be defined separately. It was observed that, generally, "climate justice" is associated with international obligations and "just transition" implies policies at national level to achieve fair burden sharing within the domestic economy.

Dr. Torney advised the Committee that, while the Bill's primary purpose is to set out a framework rather than prescribe policies, a stronger emphasis might be put on poverty-proofing, environmental justice or enabling a more just transition in the CCAC and the Government's respective roles in creating climate action plans and carbon budgets.

Dr. O'Connell informed the Committee that there is uncertainty in relation to impact, including in terms of employment. There are economic benefits to be realised in the transition and careful measurement and management of loss and benefit is central to a Just Transition.

While Dr. Moore informed the Committee that it is not yet clear which policies are most effective in achieving Just Transition, the social and political consequences of an unjust approach could make the transition unachievable. She said that while Just Transition approaches can be place-based and focus on skills, social protection and labour markets, a participative approach to transition governance is also present in NESF's international case-study research. She identified five key areas for consideration: (1) proactive planning and national, regional and local areas (2) participative social dialogue which considers costs and benefits (3) decent jobs, training and social protection for those at risk (4) place-based regeneration facilitating bottom-up local action, and (5) fair, inclusive and equitable outcomes.

Dr. O'Connell said that the Scottish Just Transition Commission has made a lot of progress on the details of their work and done a lot of community engagement and the Scottish experience would be valuable to draw on. Dr. Moore said that Scotland has embedded Just Transition on multiple levels – in legislation, in the work of the Just Transition Commission and in the articles of association for the new state investment bank. She said that the key focus should be to ensure that plans developed at a local level and at a statutory level really consider just transition.

Dr. O'Connell informed the Committee that the best source of creating economically viable alternatives for people in sectors vulnerable in transition is dialogue with those people. ICTU also emphasised in its submission to the Committee the importance of social dialogue to achieving Just Transition. This highlights to the Committee the importance of meaningful consultation as a general principle.

The Committee requested a submission from the International Labour Organisation to inform consideration of possible references to Just Transition for the legislation. The ILO suggested consideration of the following definition:

A "just transition to a climate resilient and climate neutral economy" means a transition that ensures that the economic, environmental and social consequences of the ecological transformation of economies and societies are managed in ways that maximize opportunities of decent work for all, reduce inequalities, promote social justice, and support industries, workers

and communities negatively affected, in accordance with nationally defined priorities, and based on effective social dialogue.

The ILO also made, inter alia, the following suggestions for inclusion in the legislation:

- references to a “transition to a climate resilient and climate neutral economy” could be made explicit as a just one
- climate action plans and strategies could stipulate inclusion of measures for just transition
- that the Minister shall consult with social partners
- the national long term climate action strategy should include an assessment of potential economic, social and employment impacts of climate actions
- The implementation of just transition policy measures should be included in climate reporting
- local just transition planning should be included in local authority climate action plans

The full list and precise form of suggested amendments is available in the ILO’s submission in appendices.

The Committee similarly requested the views of TASC on the best way to include Just Transition in the Bill. Like other expert witnesses, they referred to the Scottish Act, specifically its use of Just Transition principles, quoting its definition of these as:

“In this Act, the “just transition principles” are the importance of taking action to reduce net Scottish emissions of greenhouse gases in a way which—

- a) supports environmentally and socially sustainable jobs,
- b) supports low-carbon investment and infrastructure,
- c) develops and maintains social consensus through engagement with workers, trade unions, communities, non-governmental organisations, representatives of the interests of business and industry and such other persons as the Scottish Ministers consider appropriate,
- d) creates decent, fair and high-value work in a way which does not negatively affect the current workforce and overall economy,
- e) contributes to resource efficient and sustainable economic approaches which help to address inequality and poverty.”

TASC suggested that all policies and plans under the draft Bill should come with a requirement to explain how they will affect different sectors and regions and how they will be supported; that a new Just Transition Commission with a wider remit should be legislated for; that climate action should be linked to climate justice and sustainable development. TASC's full submission is available in the appendices.

Public Involvement

Noting the importance of public buy-in and meaningful public engagement in driving change, Members of the Committee questioned whether there should be greater weight given to public consultation in the draft Bill.

The Department informed the Committee that local authorities are required in the draft Bill to publish draft local authority climate action plans on the internet and invite public submissions, and that more generally there are plans for wider climate dialogue.

Members of the Committee expressed the view that stronger provision for public consultation at central Government level would be welcome, as the draft Bill states only that the Minister "may" have regard to public consultation when setting plans.

The Committee also notes that meaningful public engagement on the draft Bill might have been enhanced had a consolidated version of the legislation, showing the 2015 Act along with the proposed amendments included, been published alongside the draft amending legislation.

Dr. Muinzer informed the Committee that a public engagement component may be seen not to be meaningfully present in the draft Bill, depending on one's view. He also informed the Committee that the Scottish Act provides for the development of a public engagement strategy and that the Dutch Act sets out a framework for citizens' participation and includes a citizens' monitor required to monitor citizens engagement with climate issues.

The Committee notes the follow-up contribution of MaREI on the urgent need for a more strategic approach to stakeholder and citizen engagement with a focus on inclusion participation, deliberative methods, collaboration and activation. The Committee also notes Dr. Torney's assertion that the climate Bill should be seen as one part of a much bigger jigsaw. It is an important start, but it needs to be accompanied by a wide range of other actions, including strong measures to ensure citizen participation and a just transition.

The Committee also notes the follow-up evidence given by Dr. Ryall of the Centre for Law and the Environment, in relation to models of best practice for public participation including the Maastricht Recommendations on Promoting Effective Public Participation in Decision-making in Environmental Matters (UN, ECE, 2015).

Climate Justice

There was much discussion by the Committee on climate justice, including its definition and how the principle of climate justice might be reflected in policy on trade, overseas development aid, and international mitigation and adaptation mechanisms. While this is important to the ultimate aims of the draft Bill, much of this, like other related policy areas, would be outside the scope of this legislative framework.

Ireland's international obligations and "common but differentiated responsibilities" under the UNFCCC also need to be considered.

However, Dr. Glynn did suggest to the Committee that the Bill could consider the impact of international aid and providing knowledge transfer and support to other jurisdictions. In his testimony to the Committee Professor Kevin Anderson told Members that "Many people are already dying from climate change and with the 1.5°C to 2°C target, many more people will die. They will be poor. Typically, they will be people of colour, initially the burden will fall disproportionately on women and children, they will live in climate-vulnerable parts of the world and they will be low emitters. Let me be clear. We have, knowingly, in the wealthy parts of the world imposed that upon them by our choice to fail, thus far, to address climate change."

In their submission to the Committee, Community Law & Mediation, Society of St. Vincent de Paul and the Jesuit Centre for Faith & Justice highlighted that climate change will have profound effects on human life. Effects which will be felt most deeply by those experiencing poverty, social exclusion or inequality which are also the communities least responsible.

Furthermore, Professor Anderson suggested there may be a need to implement changes akin to a "new deal or Marshall plan framework."

Several witnesses also raised the limited territorial scope of the current model, recommending that international aviation and shipping should be included within scope, and that consumption-based greenhouse gas reporting should be done as well as on a production basis.

8. Accountability including consequences for shortfalls

Throughout the scrutiny process a number of witnesses noted gaps around accountability in the legislation. Members of the Committee were concerned that the draft Bill seemed to lack specific consequences and the requirement for corrective action if emission reductions are not on track.

While the Oireachtas is the primary site of accountability for the Government's performance in relation to the provisions of the draft Bill, members pointed out

that strong legislation and targets are also key to the effectiveness of cross-party oversight.

Witnesses shared information on accountability measures in other legislation and made suggestions to the Committee as to how accountability and oversight could be strengthened in Ireland's legislation. Mr. Church informed the Committee that requiring a parliamentary vote to approve climate action plans could help to ensure a higher level of performance.

Mr. Church informed the Committee that the provision allowing the Government to alter proposed climate action plans as it considers appropriate before approving them allows too much leeway, and that the Government should at the least have to provide a justification if it wishes to modify plans under the draft Bill, perhaps in conjunction with the CCAC. Dr. Muinzer echoed this point around the system for setting carbon budgets. Under section 6B(6)(a) to (b) the Government can modify the budget without being required to account for and explain departures.

The Department informed the Committee that the Government is accountable to the Oireachtas and highlighted that the State would face financial consequences if it did not meet EU targets (which run in parallel to this draft Bill, which is national framework legislation).

The Department said that "administrative arrangements could be made to distribute that purchasing cost across the relevant sectors that are not hitting their targets." However, this does not seem to be provided for in the draft Bill and would be a choice for Government. Professor Sweeney suggested that it would be worth considering making such a consequence a provision in the legislation, because the draft Bill suffers from a lack of consequences for missed targets and incentives for Departments. Dr. Jackson also suggested that additional budgets for Departments and public bodies for meeting targets could act as an incentive as an alternative to financial penalties acting as a deterrent.

Dr. Torney told the Committee that there is no clearly stated obligation on the Government to comply with its carbon budgets, in contrast to the UK Climate Change Act which states unambiguously that "It is the duty of the Secretary of State...to ensure that the net UK carbon account for a budgetary period does not exceed the carbon budget". He also informed the Committee that the German Act requires, where reporting reveals that sectors have exceeded emissions limits, an "immediate action programme for the relevant sector" that "shall ensure compliance with the annual sectoral emission budgets in the subsequent years.

Dr. Jackson said that "the Bill should include legal obligations requiring the Taoiseach or Minister to ensure that carbon budgets and targets are met and requiring the Taoiseach or Minister to correct course and compensate if a carbon budget or target is not met."

Dr. Ryall referenced the Act in the US State of Vermont which sets binding targets and timetables for greenhouse gas reductions in every sector and provides for a right to go to court to enforce them.

On the point of the need for enforcement, Dr. Ryall highlighted that the Citizens Assembly had recommended that an independent body should be given the power to pursue the State, in litigation if necessary, to ensure it meets its obligations. Dr. Ryall stated that there are existing models for this, such as The Irish Human Rights and Equality Commission's statutory power to initiate litigation where it believes it is necessary to protect and enforce human rights.

Dr. Muinzer informed the Committee that the UK Act contains the facility for judicial review, which some consider to be a form of sanction for underperformance.

Members of the Committee also expressed concern that legal enforcements need to be balanced by specific actions and policies which have public buy-in to achieve targets, and that a persuasive approach may be more effective than a punitive one.

Dr. Glynn expressed the view that a ratchet mechanism, which is compatible with article 4 of the Paris Agreement, should be enshrined in the legislation. This would obligate that each five-year carbon budget should not be larger than the previous five-year cumulative emissions.

Dr Jackson referred to the target setting mechanisms in Scottish legislation as an example.

Dr. Jackson alerted the Committee to the possibility that section 4(7) of the draft Bill, in its amendment of the language of the 2015 Act, could undermine the basis of the Supreme Court's judgment in *Climate Case Ireland* : "section 4(7) of the Bill should be amended or deleted, to ensure that the effect of the Supreme Court's judgment in *Climate Case Ireland*. He explained:

"Section 4(6) of the Act replicates the language on the basis of which *Friends of the Irish Environment* was successful in the Supreme Court. One needs to specify the manner in which it is proposed to achieve the 2050 objective. That is then supplemented by section 4(7) of the Bill, of which I have serious concerns about its impact. Could it be said, if a long-term strategy was challenged relying on the Supreme Court's judgment, that the law has moved on? We have since legislated and now we also have section 4(7) that states, "The national long-term climate action strategy may include the following." So, provided that I have made a strategy that includes those three things then that is legally compliant. In other words, this layer is on top of the Supreme Court's judgment. I suggest that section 4(7) is deleted or amended to be without prejudice to the obligation in section 4(6)."

Some experts gave examples of potential sanctions or corrective measures, such as those in the 2009 Heads of Bill, the UK Climate Act, the Scottish Climate Act and the German Federal Climate Change Act.

Cross-sectoral co-operation and governance

The Committee noted the importance of central government leadership in driving change and ensuring buy-in across the State. Ms. Sharon Finegan outlined to the Committee that the Climate Action Unit in the Department of An Taoiseach has a role in ensuring whole-of-government coordination. It monitors the implementation of climate action plans and supports the Climate Action Delivery Board, which is tasked with holding Departments and public bodies accountable on the delivery of actions set out in climate action plans.

She said that structural barriers to implementation have been revealed through centralised monitoring. These include issues around resources, expertise and ownership in public bodies, the speed of the legislative process for complex pieces of legislation needed to underpin the transition (such as offshore wind), the complexity of the work and consultations required, and delays caused by EU negotiations.

Conclusions and recommendations

General conclusions / miscellaneous recommendations

- 1.** This draft Bill represents a step forward in the legal framework within which Climate Policy will be developed in the years ahead. Specifically, it establishes a net zero emission target for 2050 for the first time; introduces binding five-year carbon budgets; introduces the requirement for government to break this down into specific sectoral targets and makes individual Ministers directly accountable for those targets. It also enshrines the concept of a single cross government climate plan overseen by an Implementation Board, jointly chaired by the Taoiseach's office and the Climate Department ensuring the necessary cross-government commitment to tackling the challenge. Notwithstanding these important developments, the Committee wants to see the Bill strengthened in a number of ways.
- 2.** The bill should be drafted in a way which creates clear legal obligations and ensures legal accountability in the future.
- 3.** The Scottish Act is worthy of further exploration and could help Ireland prepare for the changes that are necessary if we are to meet our goals.
- 4.** It is recommended that the Minister address in the Bill and/or revert to the Committee with a comprehensive plan to ban the importation of fracked gas and specifically to ban LNG terminals in Ireland within the year 2021.
- 5.** The Bill will need to be accompanied by appropriate measures for climate resilience. The Bill focuses on mitigation and should empower and oblige the Council and future Governments to plan for adaptation.
- 6.** The Committee has set out its views on just transition, climate justice, biodiversity and nature-based solutions. The implementation of these, and other principles pointed to in these recommendations, should be included in climate planning and reporting mechanisms as provided for in this Bill.
- 7.** The entire Bill should be checked for compliance with the Aarhus convention.

1 Language

- 8.** The Committee recommends that the National Climate Objective should be amended as follows:

The State shall pursue and achieve climate neutrality by 2050 at the latest.³

This shall be achieved through a transition to a climate resilient and environmentally sustainable economy while ensuring our biodiversity is protected.

9. The Committee feels that section 3(3) is too wide and that a more precise hierarchy would be beneficial. Having such a long list could also create difficulties. The Committee proposes that these items be split hierarchically across three headings.

Be consistent with:

a) the ultimate objective should mention articles 2 and 4 of the Paris Agreement and IPCC advice

Aarhus Convention

UN Convention on Biodiversity

National Climate Objective and Interim Targets

Climate Justice⁴

Just Transition⁴

Must have regard to:

Sustainable Development Goals

National Biodiversity action plan/ National Biodiversity Strategy and subsequent plans and strategies

Nature based solutions for climate action

Items (e) (i) (l) and possibly (j) could be combined into one clear item (e) Cost-effectiveness, including lifecycle cost and net public benefit, consistent with the sustainable management of the public finances and with due regard for imperatives around early action, innovation and long term impact.”

³ Some members felt this target should be earlier.

⁴ Some members queried whether this might have legal difficulties, but on principle the Committee supports these concepts having a high importance.

Items (r), (s), (t) and (v) – which refer to other carbon budgets, climate action plans, long term frameworks, national adaptation frameworks and sectoral adaptation plans

The protection of public health

May have regard to:

Items (g) and (n) should be removed and (m) should be slightly expanded to incorporate reference to the IPCC and to technology

“relevant scientific, technical or technological advice, including IPCC advice”

Government policy

The National Planning Framework (or, where appropriate, the National Spatial Strategy)

The role of behavioural change on the part of individuals, businesses, organisations and society in supporting the Government to pursue the national 2050 climate objective and the policies and measures required to effect such change

Item (p) which refers to ‘carbon leakage’ should be removed and replaced by a reference to ‘the full life-cycle of emissions including consumption emissions and the implications for non-territorial emissions’

Item (x) should be removed or, if included, should be adapted to read “the special, economic, social and environmental role of agriculture”

Section 3.3 has implications for 3.4 and 8. Sections 3.4 and 8 may need to be adapted to reflect these proposed changes.

10. The Committee felt that, in a number of places, the language in the Bill needs to be stronger.

11. Amend Section 4(2)(a) as follows:

(2) The Minister shall, when updating the climate action plan under subsection (1)(a) –

(a) adhere to the carbon budget programme applicable to the periods referred to in subsection (3)(a) to (c),

(previously take account of rather than adhere to)

12. Obligation to “have regard” to an update or strategy in 4(13) should be stronger, eg “A Minister of the Government shall, in the performance of his or her functions, take all reasonable steps to ensure that greenhouse gas emissions do not exceed the carbon budget for that period”.

13. Language should be stronger to ensure consistency between Climate Action Plans and local authority plans.

14. The obligation on government to propose carbon budgets should be more explicit.

15. Remove references to “in the opinion of the Minister” from Section 4(2)(b)(i), 4(3) and elsewhere. Delete ‘as he or she considers appropriate’ in 4.(4) and 4.(6).

16. Section 6 (c) (7) Amend text to ensure the Minister ensures that the decarbonisation target range approved by the Government under this section is achieved.

2 CCAC

17. The Climate Change Advisory Council (CCAC) should be adequately resourced. Consideration should be given to funding it from the Central Fund.

The Bill should highlight the need for inter-agency cooperation for the CCAC to have access to all relevant data for its modelling, in particular the EPA should have a clear role in the provision of data inventories. It should be supported to access international data where necessary.

To enhance public engagement, the resourcing should be put in place for a Communications Specialist to be employed by the CCAC.

18. The CCAC should be independent.

19. The Bill should state that ex officio members do not necessarily have to be the head of their organisations.

20. Rather than -solely- specify the skills of individual members, it should be ensured that the Council in total has a balanced mix of competences. The composition of the CCAC should reflect scientific climate expertise as well as relevant sectoral expertise for proposing solutions. The mix of competences could additionally include environmental law, biodiversity, adaption resilience and just transition and industrial relations.

21. The CCAC should be gender balanced or demonstrate the actions taken to try to achieve gender balance in its appointment process.

22. Consideration should be given to inclusion of a youth member as part of the general mix of competences and/or nominated by an established youth organisation.

23. Appointments of non ex officio member of the Council should be through an open, competitive and transparent process. The ultimate appointment is made by the Minister.

24. The CCAC should proactively disseminate information. The CCAC should be mandated to report regularly on whether current decarbonisation dates, interim targets, long term strategy, carbon budget programme and the climate action plans represent adequate progression and whether they are representative of Ireland's "highest possible ambition" in accordance with the Paris Agreement.

25. Require the CCAC to include a non-exhaustive section in each of its annual and periodic reports relating to nature-based solutions and protection of biodiversity and to consider and set out, in its advice, recommendations, and proposed carbon budgets, the extent to which climate action plans address nature-based solutions and biodiversity protection.

26. The Committee is concerned section 7(2)] might delay the implementation of a new CCAC with new appointments.

Provision should be made in the Bill for the transition to a new CCAC, with new appointments, or re-appointments, after the enactment.

3 Target structure

Sectoral decarbonisation ranges:

27. The relationship between Sectoral Decarbonisation Ranges and Carbon Budgets should be clarified so that they are mutually consistent (e. g. In 6C(7) "take account of the" should be strengthened to "shall ensure that the" and "is achieved" should be added to the end of the sentence). The Bill should specify that the sum of sectoral allocations or ranges should not add up to more than the carbon budget and reporting should be consistent with the IPCC standards of r28

28. The merit of setting a range for sectors which recognises the difficulty in projecting the exact impact of policies, versus the clarity of a point target should be further assessed.

Carbon budget formation and banking and borrowing provisions:

29. It should be stated clearly that all emissions in excess of the carbon budget limit should be carried forward, without Ministerial or Government discretion. Excess emissions should also trigger an obligation to carry out an immediate review of the adequacy of the rolling Climate Action Plan. (Amend Section 6(d)(5) to insert such provisions).

30. There should be incentives for sectors to achieve reductions early. If however, as in section 6 (d)4 any allowance for carryover is included, it cannot be a factor in the calculation of an overall carbon budget and its inclusion should not result in any expansion of or exceeding of the overall carbon budget.

31. The Minister could consider a ratchet mechanism to ensure that each carbon budget is progressively more ambitious.

Interim Targets:

32. The Bill needs to nail down the availability of timely annual indication of whether each sector is on track to meet its Carbon budget.

33. National minimum Interim targets that put Ireland on a pathway to achieving the National Climate Objective should be set out in the Bill. These should include an interim target for 2030 of 51% reductions based on 2018 levels.⁵

Other:

34. Consideration should be given to including in the Carbon Budget process, the outlining of a Research and Development Programme to be addressed in the five years.

35. Amend Section 4 (1)(b) to oblige the Minister to prepare a national long term climate action strategy not less than once every 5 years, instead of every 10 years. Amend Section 5(1)(a) the Minister shall not later than 12 months after the passing of this Act draft an Adaptation Framework, instead of after 24 months.

4 Greenhouse gases including Biogenic Methane

⁵ Some members expressed a concern about the legal implications of interim targets and felt that the existing carbon budgeting process would suffice.

Some Members felt that more ambitious interim targets should be included.

36. The issue of managing greenhouse gases, with different half-lives, is one that should be addressed. This would have ramifications for the decision to proceed (or not) with split targets in carbon budgets.

37. The bill should be explicit that its provisions and functions, including carbon budgets, include all greenhouse gases and not just “one or more greenhouse gases”.

38. In the event of a separate target for biogenic methane in carbon budgets, this Committee calls for a clear target as is the case in the New Zealand Carbon Act.

39. There should not be a split target in respect of the NCO (or minimum interim targets).

40. It is suggested that reference to Global Warming Potential be used to ensure that all greenhouse gases are treated equally in terms of their contribution to climate change, so that ‘carbon budget’ is defined as the “the total amount of greenhouse gas emissions and other climate pollutants, aggregated on the basis of their Global Warming Potential, that is permitted during the budget period”; and ‘Global Warming Potential’ is defined as “the contribution of the climate pollutant in question to warming expressed in proportion to the contribution of carbon dioxide, as advised by the Advisory Council”.

Ireland should ensure that it appropriately reflects IPCC methods and fulfils its monitoring and reporting requirements under the UNFCCC, notwithstanding any additional monitoring or measurement which Ireland might put in place in respect of biomethane, nitrogen or other gases.

41. Consideration should be given to appropriately addressing the specific impacts of Nitrogen in terms of achieving our Paris-aligned co2 emission reductions, drawing on examples of best practice in other countries.

5 Nature Based Solutions and Biodiversity

42. Suggested definition to be inserted for biodiversity:

“the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems.” [Source - Convention on Biological Diversity]

43. Suggested definition to be inserted for nature based solutions:

Nature based solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities,

landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions.

44. When preparing, adopting, and revising climate action plans, adaptation frameworks, long-term strategies, and carbon budgets, the Minister, Government, public bodies, and Climate Change Advisory Council should be required to explain the extent to which they acted consistently with and furthered the objectives of Ireland's National Biodiversity Action Plan and the EU Habitats and Birds Directives, and had regard to nature-based solutions for climate action.

45. When making a local authority climate action plan (Section 12, 14A (3)) local authorities should be obliged to act consistent with the Biodiversity action plan/ National Biodiversity Strategy and subsequent plans and strategies and to not have any adverse impacts with regards to biodiversity. They should also have regard to the Sustainable Development Goals.

46. Recognise explicitly the integral role of biodiversity in regulating the climate and ensuring long-term resilience to climate change in this Bill.

47. The Bill should also amend the National Oil Reserves Agency Act 2020 in the following ways:

In page 13, line 7, to **include** the following:

“(iv) nature-based solutions for climate mitigation and adaptation;”.

In page 13, to **delete** line 9 and substitute the following:

“economy,

(g) to support projects in relation to—

(i) nature-based solutions that contribute to climate mitigation and adaptation, and which enhance biodiversity, including aquatic, terrestrial and marine biodiversity,

(iiv) improving air quality and reducing pollution, and

(iivi) community-led, place-based transition solutions.”.

In page 13, lines 30 to 32, to **delete** all words from and including “Reform,” in line 30 down to and including line 32 and substitute the following:

“Reform and the relevant committee of the Oireachtas, for that purpose and which are published on the website of the Department of Communications, Climate Action and Environment. The Minister shall report annually to the relevant Committee of the Oireachtas on the activities under this section and review guidelines as appropriate to ensure that all activities funded by this measure are consistent with

the State's international climate action obligations and related national decarbonisation objectives.”.

Every reference to “increase the removal of greenhouse gases” in the National Oil Reserves Agency (Amendment)... Act 2020 include reference to biodiversity & nature-based solutions for consistency between supporting “projects” and supporting “research”. The efficiency and benefits from nature based solutions projects can be increased through targeted research as well as through implementation of existing solutions.

6 CDR technologies / negative emissions technologies

48. The Government should invest in carbon dioxide removal technology and negative emissions technology research but priority should be given to bringing emissions from fossil fuels down to zero. The calculation, production or revision of any carbon budget under the Bill should not rely on any projected Carbon Dioxide Removal or Negative Emissions beyond those measurable within the timeframe of that particular budget.

49. While enormous work will be needed in evaluating different technologies, the Bill should not seek to include or exclude any particular option other than to insist that the full long-term lifecycle costs and benefits should always be taken into account.

50. Consider providing for a future expansion of the definition of sinks to potentially include marine and coastal solutions, with due regard to marine and environmental protection, in this Bill or future legislation.

7 Just Transition and Climate Justice

Just Transition

51. Include separate definitions of just transition, climate justice and sustainable development.

52. The following definition of just transition is suggested for inclusion:

A just transition means a transition that ensures the economic, environmental and social consequences of the ecological transformation of economies and societies are managed in ways that maximise opportunities of decent work for all, reduce inequalities, promote social justice, and support industries, workers and communities negatively affected, in

accordance with nationally defined priorities, and based on effective social dialogue.

53. The Minister and local authorities should have regard to just transition as defined.

Public Involvement:

54. The Committee recognises the urgent need for a more strategic approach to stakeholder engagement, preferably to include engagement from all stakeholders within the same process, and also for citizen engagement, with a focus on inclusion, participation, deliberative methods, collaboration and activation. However, given the urgency, a process must be designed that recognises the need for quick progress.

The Committee recommends that a new provision is inserted into the Bill requiring the Minister to establish a body or task force to prepare, publish and implement a permanent, large scale public involvement strategy to include;

- a. informing members of the public, including vulnerable and impacted communities, about the targets specified by virtue of the Act;
- b. encouraging and supporting them to contribute to the achievement of those targets;
- c. affording them opportunity to inform carbon budget preparation and climate policy more generally.

The public involvement strategy must, in particular, identify actions which persons in Ireland may take to contribute to the achievement of climate neutrality. The public involvement strategy should be published no later than 31 December 2021.

55. Strengthen the onus of consultation with the public in the preparation of the national long term climate action strategy by editing Section 4(8)(b)(ii) to “the public and such persons (and organisations) that he/she considers appropriate”

56. The Committee recommends that the Minister ‘shall’ rather than ‘may’ have regard to the outcome of public involvement initiatives when setting policy.

57. The Committee recommends that the Bill is checked for compliance with the rights of public participation in environmental decision making and access to justice as set out in the Aarhus Convention.

Climate Justice:

58. Climate Justice should be defined in the Bill. It is recommended that this definition reflect the UNFCCC commitment to 'common but differentiated responsibilities and respective capabilities' and the principles that climate justice should;

- support those who are most affected by climate change but who have done the least cause it.
- support the human rights and wellbeing of local communities, indigenous peoples and the most vulnerable
- be informed by science, respond to science, and acknowledges the need for equitable stewardship of the world's resources, particularly biodiversity and ecosystems.
- help address inequality and progressively distribute the financial responsibility for climate mitigation and adaptation measures.

59. Given the impact of non-territorial emissions on the Global South, the committee recommends that the Minister should consider, either in the Bill or through another mechanism, providing for the EPA to develop a tracking system to monitor and report on consumption based emissions.

60. Amend Section 1 of the Bill to include a definition of non-territorial emissions in the definitions section.

61. The committee recommends that the Minister should consider a mechanism to provide for the EPA to develop a tracking system to monitor and report on aviation and shipping emissions.

62. In building meaningful climate justice obligations, either through government policy or in the Bill, there should be provisions to address reparations for loss and damage caused by Ireland's contribution to climate change, and to fulfill common but differentiated responsibilities in accordance with our commitment to the UNFC. These include;

- A provision requiring Ireland to increase its contribution to the UN Climate Fund could be inserted.
- The provision of loss and damage funding and support for mitigation and adaptation in LDCs should be named as essential to our collective capacity to remain within a 1.5C temperature threshold.
- Ensuring Irelands long established principle of Untied ODA be retained.

63. The Committee would regard it as inappropriate if the Government planned to meet its obligations by seeking offsetting from other countries rather than reducing emissions in Ireland. A specific prohibition could be considered.

64. Separate to the provisions of this Bill, the Government should seek to define offshore mitigations to include:

emissions reductions and removals, or allowances from emissions trading schemes –

- (a) that originate from outside the State,
- (b) that are expressed as a quantity of carbon dioxide equivalent,
- (c) that are robustly accounted for to ensure that, among other things, double counting is avoided, and that either –
- (d) represent an actual additional, measurable, and verifiable reductions or removal of an amount of carbon dioxide equivalent, or
- (e) are a verified, traceable emissions trading scheme allowance that triggers the reductions of carbon dioxide equivalent;
- (f) adhere to human rights principles, especially the principle of free and prior informed consent

8 Accountability including consequences for shortfalls

65. Accountability in the Bill needs to be clearer and more well-defined.

66. Carbon budgets should be legally binding and all activities undertaken by Government Departments should be consistent with the carbon budgets. In section 3(1) of the Bill insert a legally binding obligation to ensure that the Minister and Government must achieve the National Climate Objective and comply with the carbon budgets.

67. Sections 4(2)(a), 6A, 6B, 6C, 6D, 14, 14A and 15 could be examined in terms of strengthening accountability.

68. Public bodies, Government Departments, and local authorities should be required to carry out their duties in a manner consistent with the temperature limits and principles of the Paris Agreement. The Oireachtas standing committee on climate change should have a remit to hold not only Government Departments, but also public bodies, to account for their operations and response to targets under section 14.

69. The Bill needs to make explicit the obligation of a Minister to list actions which have the clear capacity to get the sector back on track, including any mitigation actions needed to ensure sustainable Just Transition for affected sectors. Some of the existing language in the Bill needs to be strengthened in that respect.

70. If the Government is off course in any carbon budget period, or where a carbon budget is exceeded, the Government should have a legal obligation to take measures to correct course and compensate as soon as possible.

71. There should be measures which ensure there are consequences for Government Departments that fail to meet carbon budgets or sectoral allocations.

72. More regular, up-to-date, and timely reporting to the Oireachtas committee should be provided for by the Minister on carbon budgets and relevant Ministers and Secretary Generals on sectoral carbon budgets and climate action plans. In Section 6 As per the Paris Agreement, Ireland's compliance with this should be reported on a regular basis. Amend Section 14 of the Bill to place a duty on the Minister to report on the progress to meet carbon budgets and (sectoral) decarbonisation target ranges, including progress towards meeting the long-term strategy and any interim targets.

73. Section 11(1) should be amended to require the Government to publicly report on how Climate Action Plans align with the carbon budget.

74. Performance, monitoring and reporting under the bill should be planned and delivered in a way which is compatible with and complementary to Ireland's performance, monitoring and reporting on the UN Sustainable Development Goals, the UNCRPD and other relevant international treaties and obligations.

75. Task the Climate Change Advisory Council to review the adequacy of the 'climate objective' target at regular intervals to ensure progress and the highest possible ambition, in response to climate science and Ireland's commitments under the Paris Agreement as represented by the reports of the IPCC.

76. The Minister should consider Amending section 6A(6) to ensure that the science relied on is not inconsistent with scientific reports from the Intergovernmental Panel for Climate Change-

77. The Committee heard there is a potential conflict between Section 4(7) and 4(6). The Committee asks the Minister to preserve the effect of the Supreme Court judgment in Climate Case Ireland. It should be examined whether section 4(7) should be deleted or amended to "without prejudice" to section 4(6).

Cross-sectoral co-operation and governance

78. The central role of cabinet responsibility and the leadership of the Taoiseach, and leadership within the Government, will be key to delivering across the siloed interests which can prevail. Consideration should be given as to how that might be recognised in the Bill. There should be a well resourced and empowered oversight function in the Department of the Taoiseach.

Appendices

Appendix1: Committee Membership

Joint Committee on Climate Action Deputies



Richard Bruton
Fine Gael



Réada Cronin
Sinn Féin



Cormac Devlin
Fianna Fáil



Alan Farrell
Fine Gael



Brian Leddin (Chair)
Green Party



Darren O'Rourke
Sinn Féin



Christopher O'Sullivan
(Vice-Chair)
Fianna Fáil



Bríd Smith
*Solidarity – People Before
Profit*



Jennifer Whitmore
Social Democrats

Joint Committee on Climate Action Senators



Lynn Boylan
Sinn Féin



Timmy Dooley
Fianna Fáil



Alice-Mary Higgins
Independent



John McGahon
Fine Gael



Pauline O'Reilly
Green Party

Appendix 2: Terms of Reference

Functions of the Committee – derived from Standing Orders [DSO 95; SSO 71]

- (1) The Select Committee shall consider and, unless otherwise provided for in these Standing Orders or by order, to report to the Dáil on any matter relating to—
 - (a) legislation, policy, governance, expenditure and administration of—
 - (i) a Government Department, and
 - (ii) State bodies within the responsibility of such Department, and
 - (b) the performance of a non-State body in relation to an agreement for the provision of services that it has entered into with any such Government Department or State body.
- (2) The Select Committee appointed pursuant to this Standing Order shall also consider such other matters which—
 - (a) stand referred to the Committee by virtue of these Standing Orders or statute law, or
 - (b) shall be referred to the Committee by order of the Dáil.
- (3) The principal purpose of Committee consideration of matters of policy, governance, expenditure and administration under paragraph (1) shall be—
 - (a) for the accountability of the relevant Minister or Minister of State, and
 - (b) to assess the performance of the relevant Government Department or of a State body within the responsibility of the relevant Department, in delivering public services while achieving intended outcomes, including value for money.
- (4) The Select Committee appointed pursuant to this Standing Order shall not consider any matter relating to accounts audited by, or reports of, the Comptroller and Auditor General unless the Committee of Public Accounts—
 - (a) consents to such consideration, or
 - (b) has reported on such accounts or reports.
- (5) The Select Committee appointed pursuant to this Standing Order may be joined with a Select Committee appointed by Seanad Éireann to be and act as a Joint Committee for the purposes of paragraph (1) and such other purposes as may be specified in these Standing Orders or by order of the Dáil: provided that the Joint Committee shall not consider—
 - (a) the Committee Stage of a Bill,
 - (b) Estimates for Public Services, or

- (c) a proposal contained in a motion for the approval of an international agreement involving a charge upon public funds referred to the Committee by order of the Dáil.
- (6) Any report that the Joint Committee proposes to make shall, on adoption by the Joint Committee, be made to both Houses of the Oireachtas.
- (7) The Chairman of the Select Committee appointed pursuant to this Standing Order shall also be Chairman of the Joint Committee.
- (8) Where the Select Committee proposes to consider—
- (a) EU draft legislative acts standing referred to the Select Committee under Standing Order 133, including the compliance of such acts with the principle of subsidiarity,
 - (b) other proposals for EU legislation and related policy issues, including programmes and guidelines prepared by the European Commission as a basis of possible legislative action,
 - (c) non-legislative documents published by any EU institution in relation to EU policy matters, or
 - (d) matters listed for consideration on the agenda for meetings of the relevant Council (of Ministers) of the European Union and the outcome of such meetings,

the following may be notified accordingly and shall have the right to attend and take part in such consideration without having a right to move motions or amendments or the right to vote:

- (i) members of the European Parliament elected from constituencies in Ireland,
 - (ii) members of the Irish delegation to the Parliamentary Assembly of the Council of Europe, and
 - (iii) at the invitation of the Committee, other members of the European Parliament.
- (9) The Select Committee appointed pursuant to this Standing Order may, in respect of any Ombudsman charged with oversight of public services within the policy remit of the relevant Department consider—
- (a) such motions relating to the appointment of an Ombudsman as may be referred to the Committee, and
 - (b) such Ombudsman reports laid before either or both Houses of the Oireachtas as the Committee may select: Provided that the provisions of Standing Order 130 apply where the Select Committee has not considered the Ombudsman report, or a portion or portions thereof, within two months (excluding Christmas, Easter or summer recess periods) of the report being laid before either or both Houses of the Oireachtas.

b. Scope and Context of Activities of Committees (as derived from Standing Orders) [DSO 94; SSO 70]

- (1) It shall be an instruction to each Select Committee that—
- (a) it may only consider such matters, engage in such activities, exercise such powers and discharge such functions as are specifically authorised under its orders of reference and under Standing Orders;
 - (b) such matters, activities, powers and functions shall be relevant to, and shall arise only in the context of, the preparation of a report to the Dáil;
 - (c) it shall not consider any matter which is being considered, or of which notice has been given of a proposal to consider, by the Joint Committee on Public Petitions in the exercise of its functions under Standing Order 125(1); and
 - (d) it shall refrain from inquiring into in public session or publishing confidential information regarding any matter if so requested, for stated reasons given in writing, by—
 - (i) a member of the Government or a Minister of State, or
 - (ii) the principal office-holder of a State body within the responsibility of a Government Department or
 - (iii) the principal office-holder of a non-State body which is partly funded by the State,

Provided that the Committee may appeal any such request made to the Ceann Comhairle, whose decision shall be final.

- (2) It shall be an instruction to all Select Committees to which Bills are referred that they shall ensure that not more than two Select Committees shall meet to consider a Bill on any given day, unless the Dáil, after due notice to the Business Committee by a Chairman of one of the Select Committees concerned, waives this instruction.

Appendix 3: Submissions received

The Committee received a large volume of correspondence on the draft Bill. Included in this appendix are (i) submissions specifically requested by the Committee from certain individuals or organisations and (ii) follow-up submissions from witnesses on issues which arose during hearings.

(i) requested submissions:

Dr. Hannah Daly, UCC

Professor Barry McMullin, DCU

Béla Galgóczi, European Trade Union Institute

International Labour Organisation

Irish Congress of Trade Unions

TASC – Think-tank for Action on Social Change

(ii) follow-up submissions from witnesses:

Dr. Áine Ryall, UCC

Dr. Andrew Jackson, UCD

Dr. Diarmuid Torney, DCU

Professor Yvonne Buckley, TCD

MaREI, UCC

Climate Change Advisory Council

**Comments on the publication of the draft Climate Action and Low Carbon Development
(Amendment) Bill 2020**

Submission to Oireachtas Joint Committee on Climate Action

Dr. Hannah Daly, University College Cork¹

Contact: h.daly@ucc.ie; Profile: www.hannahdaly.ie

November 3rd, 2020

The publication of the draft *Climate Action and Low Carbon Development (Amendment) Bill 2020* is greatly welcome. The Bill sets the “rules of the game” in place for Ireland to transition to a sustainable society, necessary for compliance with the 2015 Paris Agreement, and harnessing the many potential benefits of a sustainable energy transition. It will put Ireland among the handful of countries which have set such targets and pre-empts a likely requirement from the EU for the same.

I thank the Committee for the opportunity to offer the following recommendations and observations, which are based on my more than 10 years’ experience in sustainable energy systems analysis in Ireland, the UK and at the international level.

1. A separate mandatory target for biogenic methane is strongly advised

The distinct warming characteristics of biogenic methane make it inappropriate to aggregate all greenhouse-gases into a single target; models used by the IPCC suggest that global methane from agriculture needs to fall by 24-47% by 2050 to limit global warming to 1.5C. Ireland should adopt a distinct target for methane based on this analysis.

The purpose of setting carbon budgets is to give stable and credible signals on the trajectory of emissions mitigation. They also allow flexibility in mitigation efforts across sectors as technologies and demands evolve. The current formulation of the Bill creates significant uncertainty and therefore fails in this purpose, specifically for emissions of methane from the agriculture sector.

There is uncertainty as to which greenhouse gases (GHGs) are to be included in carbon budgets: 2(a) “‘carbon budget’ means, in relation to one or more greenhouse gases, the total amount of greenhouse gas emissions that are permitted during the budget period;” This ambiguity is a shortcoming. If carbon budgets are to contain CO₂ alone within this definition, then other GHGs including biogenic methane, a potent GHG, will not be covered. The wording of much of the rest of the Bill implies that methane

¹ Dr Hannah Daly is a lecturer in sustainable energy systems modelling at the School of Engineering in University College Cork. She is a Funded Investigator with the MaREI centre for Climate, Energy and the Marine and is currently co-leading the re-development of the TIMES-Ireland energy systems model under the DECC-funded CAPACITY project. She previously worked at the International Energy Agency and University College London.

from agriculture is to be included in carbon budgets using standard accounting frameworks. I argue against methane being included in carbon budgets, and for a separate and distinct long-term target for methane to be included in the Bill for the following reasons.

The Bill gives special treatment to agriculture and methane. It uses wording which allows for “*the distinct characteristics of biogenic methane*” and “*the special economic and social role of agriculture*”, also referring to carbon leakage, and therefore gives the impression that decarbonisation ranges (sector-specific targets) can be set with less ambition for agriculture.

This implies that the energy system would need to decarbonise faster to compensate. For example, the Programme for Government aims for a halving of aggregated GHGs by 2030. If emissions from methane only declined at the rate envisaged in the Climate Action Plan, then energy emissions would need to fall by around two-thirds so that the overall target is reached, which is likely impossible. The uncertainty fails to give a reliable signal to the agriculture sector.

Aggregating both gases into a single target is inconsistent with the following text in the Bill: 3.3(y) “*the Government shall have regard to ... the distinct characteristics of biogenic methane referred to in the Special Report on Global Warming published by the Intergovernmental Panel on Climate Change on 8 October 2018*”. The current GHG accounting framework does not achieve this.

The GWP* metric, which does account for methane’s distinct characteristics (strong potency as a warming gas but short life), find that that between 2012 and 2018, when emissions were rising, methane from agriculture accounted for 35% of Ireland’s global warming impact – this is eleven percentage points more than when measured using the current accounting metric². This refutes assertions that the GWP* metric implies that “the warming impact from Irish livestock is vastly overestimated”³.

Furthermore, Section 2(a) of the Bill states that the definition of a ‘climate neutral economy’ means “*a sustainable economy, where greenhouse gas emissions are balanced or exceeded by the removal of greenhouse gases*”. This definition is valid for CO₂, whose warming impact will continue to grow until emissions are balanced by removals (i.e., they reach net-zero). However, methane has a shorter lifetime in the atmosphere, therefore additional warming from this source ceases when its emissions begin to fall slightly, not when they reach zero.

However, these are not arguments for setting an unambitious target for methane. **All evidence points to agriculture contributing a very significant share of Ireland’s global warming impact**, particularly when agriculture production is growing⁴.

Furthermore, **global methane from agriculture needs to reduce by one-quarter to one-half to meet the 1.5C temperature target**. Global climate-energy-land use models which inform the IPCC’s assessment of mitigation pathways for the 1.5C temperature target indicate that CO₂ emissions need to fall to net-zero by around 2050, with strong early action, with CO₂ emissions halving by 2030. However, the same pathways require strong but less rapid reductions from methane emissions from agriculture – a fall of 11 to 30% by 2030 and 24 to 47% by 2050, relative to 2010 (Figure 1).

² A new technical working paper has been provided alongside this document to present this analysis.

³ <https://www.farmersjournal.ie/warming-impact-of-methane-emissions-from-irish-livestock-vastly-overestimated-576649>

⁴ Note that my comments are limited to the warming of CO₂ and methane. In addition, the role of Nitrous Oxide (N₂O) should be taken into account.

Insights from these models imply that the 2019 Climate Action Plan target for agriculture emissions is likely appropriate, but a longer-term 2050 target, which is consistent with the Paris Agreement temperature limit, is also necessary to send a strong and credible signal to the sector.

Therefore, I strongly argue that the Bill should include a distinct and clear mandatory long-term target for biogenic methane, consistent with IPCC models, along with a net-zero target for CO₂. This has been done in New Zealand where methane accounts for 43% of GHGs for the reasons I outlined above. This has also been advocated by the Advisory Council.

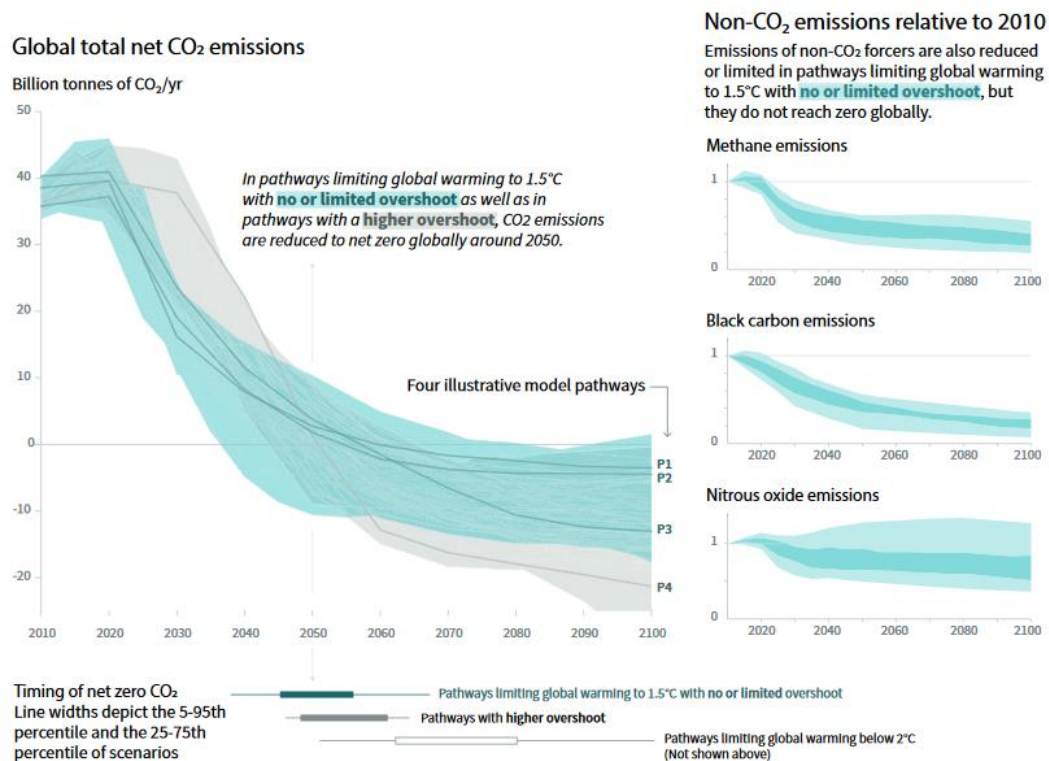


Figure 1 - Global emissions pathway characteristics limiting global warming to 1.5°C. Global scenarios meeting the temperature target with "no or limited overshoot" show that agriculture methane emissions decline by 11-30% (interquartile range of model scenarios) by 2030 relative to 2010, and 24-47% in 2050. This compares with an interquartile range of CO₂ emissions reductions of 40-58% in 2030 and 94-107% in 2050, relative to 2010. Source: Figure SPM.3a (IPCC, 2018)

Ireland should also **advocate for binding and distinct methane targets at the EU level** or alternatively, seek that the effort-sharing decision is made taking into account the distinct warming characteristics of methane. A more ambitious target for 2030 is currently being negotiated, for likely adoption in early 2021. Ireland has by far the highest share of methane from agriculture in its emissions inventory in the EU (Figure 2). If the EU sets effort-sharing targets based on the existing accounting framework, without consideration for the distinct characteristics of biogenic methane, this could create an inconsistency with Irish climate policy.

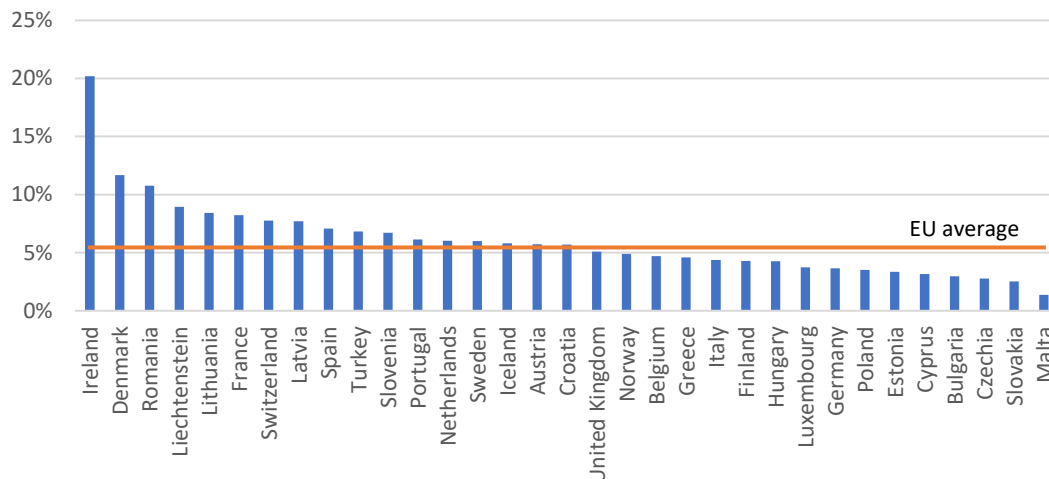


Figure 2: Share of methane in GHG accounts in EU countries, 2018. Data source: European Environment Agency (EEA)

On the question of carbon leakage, **I challenge the rationale for including the following provision:** “the risk of substantial and unreasonable carbon leakage as a consequence of measures implemented by the State to pursue the national 2050 climate objective;” 3(3)(p). It is frequently asserted that Ireland’s agriculture has a low carbon footprint, to justify continued growth in production. A review by the Advisory Council in 2019 showed that evidence for this is mixed, with some studies suggesting Irish agriculture has an average to high carbon footprint compared with other EU countries⁵. It also concludes that “there is insufficient evidence to provide a definitive answer to whether a reduction in agricultural production in Ireland will lead to a net increase in global greenhouse gas emissions.” Furthermore, EU GHG targets are based on territorial emissions, therefore using this provision in Ireland would lead to an inconsistency.

2. A principle for setting intermediate targets is needed for consistency with Article 2 of the Paris Agreement

The Bill defines an emissions target for 2050, which aligns with the so-called “climate neutral goal” of Article 4 in the Paris Agreement⁶. However, the purpose of this goal is to enable the achievement of Article 2 (temperature rise limit).

Ireland’s impact on global warming is driven by total cumulative CO₂ emissions, rather than emissions in a given year in the future (Figure 3). An “effort sharing methodology” which allocates the global estimated carbon budget consistent with Article 2 on a global per-capita basis suggests that the trajectory of mitigation in Ireland should be rapid (the “Early action” trajectory in Figure 3) (evidence to this effect has already been presented to the Committee by my colleague, Dr James Glynn).

The Bill fails to define the process by which the Advisory Council should set the carbon budgets to achieve the 2050 target. **Therefore, I propose that Bill be amended in Section 6.6 such that the**

⁵ Emmet-Booth, Dekker & O'Brien (2019) *Climate Change Mitigation and the Irish Agriculture and Land Use Sector* Climate Change Advisory Council Working Paper No. 5 pages 16-20

⁶ “In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century...”

Advisory Council should set carbon budgets having regard to both Articles 2 and 4 of the Paris Agreement.

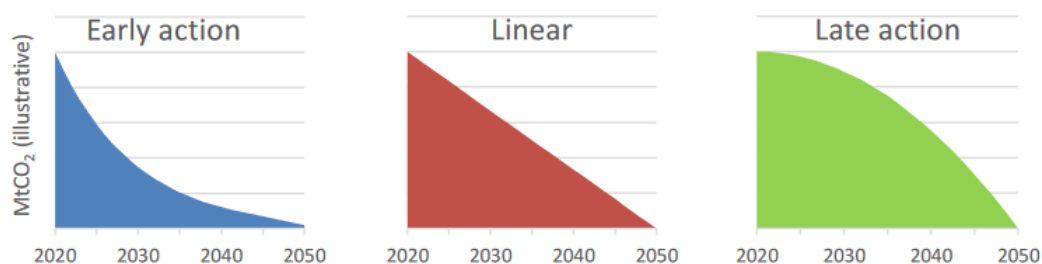


Figure 3 Illustrative decarbonisation trajectories to 2050: each pathway above reaches the same 2050 goal of net-zero CO₂ emissions, but in the Late Action pathway, cumulative emissions are double that of the Early Action pathway, leading to double the warming impact (McGuire et.al., 2020)⁷.

3. Scrutiny of climate policy analytical capacity is needed

The comments in this section are not intended to influence the content of the legislation, and are based on my familiarity with the analytical process of underpinning carbon budgets, sectoral carbon ranges, and policies in the Climate Action Plan to meet sectoral decarbonisation targets.

International best practice suggests that setting carbon budgets and Climate Action Plans requires a sound evidence base that is i) transparent, ii) based on a wide range of modelling tools, and iii) consulted widely with stakeholders and interdisciplinary experts. This is to ensure societal buy-in, and that sub-optimal policies are not adopted which would either lead to unintended consequences or miss potential co-benefits of the sustainable energy transition.

Analysis behind the 2019 Climate Action Plan relied primarily on a proprietary Marginal Abatement Cost (MAC) Curve, details of which (to my knowledge) have not been published or peer reviewed. I argue that using a MAC Curve alone is not appropriate for long-term climate abatement analysis as it does not capture complex energy system interactions, uncertainty, sensitivity or path-dependency⁸. Additionally, the evidence base for climate policy should be as transparent as possible⁹.

Furthermore, I suggest that the Committee review the analytical expertise and capacity of the relevant Departments and Advisory Council to understand whether they are appropriately and sufficiently resourced to develop the evidence base behind sectoral carbon targets and mitigation policies. Deep institutional expertise and capacity is needed. I suggest that benchmarking against similar countries, like Denmark and New Zealand, in this regard is advisable.

⁷ Mc Guire, J., Rogan, F., Daly, H., Glynn, J., & Ó Gallachóir, B.. (2020). The role of carbon budgets in translating the Paris Agreement into national climate policy - Discussion Paper. Retrieved from https://www.marei.ie/wp-content/uploads/2020/10/Discussion-Paper_The-role-of-carbon-budgets-in-translating-the-Paris-Agreement-into-national-climate-policy.pdf

⁸ Kesicki & Ekins (2011) *Marginal abatement cost curves: a call for caution*. Climate Policy, Pages 219-236. <https://doi.org/10.1080/14693062.2011.582347>;

Kesicki, F., & Strachan, N. (2011). Marginal abatement cost (MAC) curves: Confronting theory and practice. Environmental Science and Policy, 14(8), 1195–1204. <https://doi.org/10.1016/j.envsci.2011.08.004>

⁹ Strachan, N., Fais, B., & Daly, H. (2016). Reinventing the energy modelling-policy interface. Nature Energy, 1, 16012.

DeCarolis, J., Daly, H., Dodds, P., ... others. (2017). Formalizing best practice for energy system optimization modelling. Applied Energy, 194, 184–198.

4. Other considerations

- a) I believe that the overly-narrow term “climate neutral economy” should be replaced by “climate neutral society” or “climate neutral state” to be inclusive of the fundamental social institutions which are required to play a part in the sustainability transition, and which stand to benefit¹⁰. Ireland is far more than the sum of its economic transactions and the market alone cannot become sustainable, outside of strong governance and societal buy-in.
- b) The Committee should consider the rationale for starting the first budget period on January 1st 2021, less than two months away at the time of writing.
- c) I share the concerns that others have expressed about the limited accountability of the Government in case carbon budgets are exceeded.
- d) The Committee is aware that this legislation and target-setting is a necessary step to create a system of accountability, but insufficient to actually achieve mitigation. The great challenge of ending unmitigated fossil fuel burning in 30 years will only be met with strong policy and political leadership, as well as societal buy-in, and policies are currently far from being in place to actually reduce emissions – the EPA’s projections of emissions under existing policies indicate a continuing rise in emissions, an untenable future.

¹⁰ Speech by President Michael D. Higgins - “Confronting Planetary Emergencies” OECD Conference, 9th October 2020. Retrieved from https://www.oecd.org/naec/confronting-planetary-emergencies/OECD_Speech_President_Michael_D_Higgins.pdf

Carbon Budgets and Climate Action Governance: Assessing the Climate Action and Low Carbon Development (Amendment) Bill 2020

A submission to the Oireachtas Joint Committee on Climate Action

Professor Barry McMullin
Faculty of Engineering and Computing
Dublin City University

30th October 2020



Introduction

I thank the Joint Committee for the opportunity to make this written submission to its pre-legislative scrutiny of the draft Climate Action and Low Carbon Development (Amendment) Bill 2020. I will focus specifically on the role of the “carbon budget” concept and governance of climate change *mitigation*, including the issue of sectoral “decarbonisation target ranges”. Climate change mitigation and adaptation are both important, but **mitigation has an overriding physical and ethical priority**: without adequate mitigation, climate change impacts will physically overwhelm any possibility of effective, managed, adaptation; and the localised nature of adaptation *may* serve to obscure globalised injustice.

The National Climate Objective

The National Climate Objective (NCO) serves to set the overarching purpose and rationale for this legislation. All actions potentially arising under it must ultimately be derived from their contribution, or otherwise, to the NCO. It is therefore of critical importance to frame this in a way that captures the correct ultimate goal(s). **In my view, the text in the draft Bill has fundamentally failed to do this.**

The draft Bill defines the NCO as the *pursuit* (not the *achievement*) of a “... transition to a climate resilient and climate neutral economy by the end of the year 2050”, where “climate neutral economy” is defined as “... a sustainable economy, where greenhouse gas emissions are balanced or exceeded by the removal of greenhouse gases”. This echoes the recent adoption of some form of “net-zero by 2050” objective in a number of jurisdictions, including the UK and at EU level. Nonetheless, I would *strongly* urge the Committee to reconsider this formulation, which is subject to severe, well documented, and fundamental, flaws.

Global heating is a consequence of the combined global actions of all nations. Nation state mitigation can be effective *only* in a context of global coordination. Thus, any satisfactory national climate objective must be unambiguously aligned with the required global mitigation action. Unfortunately, nation level “net zero by 2050” targets generically fail this test. Coordination of global climate mitigation is currently addressed through the Paris Agreement. It is true that Article 4.1 of that agreement refers to achieving (not merely pursuing!), at global level, “... a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century”, which superficially suggests a “net zero by 2050” formulation. But this is to fundamentally misread the Paris Agreement text. Article 4.1 clearly states that this (global) balance between emissions and removals is *not* an objective in itself; it is rather just one necessary (but insufficient) aspect of the means to achieve *the long-term temperature goal set out in Article 2*. Further, Article 4.1 is explicit that this “balance of emissions and removals” must not be simplistically applied in a uniform way at nation state level (“... recognizing that peaking will take longer for developing country Parties”); because of course, such a uniform approach would fly in the face of the commitment to equity and “common but differentiated responsibilities and respective capabilities” of different countries (Article 2.2).

In the current draft Bill, the overarching Paris Agreement temperature goals are only obliquely recognised in section 3(3)(a)(ii), merely as one among many matters to “have regard to”, rather than being the very essence and test of the required national contribution to effective global climate change mitigation.

By contrast, I recommend to the Committee to consider reformulating the NCO itself, replacing the flawed concept of national “net zero by 2050” with a simple but explicit commitment, on behalf of the Irish people, that the State will act to make a full, equitable and just national contribution to meeting the global temperature goals set out in Article 2.1(a) of the Paris Agreement.

Adopting the Rolling Carbon Budget Programme

The administrative provisions in the draft Bill for setting a rolling 15-year carbon budget programme, laying out cumulative 5-year emissions limits, appear well structured and appropriate. However: the basic starting point, where the Climate Change Advisory Council proposes the initial budget values is fundamentally problematic, because the criteria to be used by the Council in articulating such recommendations are not clearly specified. There is simply a reference to the omnibus list in section 3.(3)(a)-(y) of matters to “have regard to”, without any meaningful differentiation or prioritisation.

One might suppose that this could be resolved by reference to the overarching imperative of the National Climate Objective. But in addition to the criticisms already presented of the NCO, it is *a/so* entirely unsatisfactory for the purpose of grounding the development of the carbon budget programme. The scientific rationale for cumulative carbon budgets in policy and governance is that any agreed *global limit on temperature increase* can (with some caveats) be translated into a finite limit on future anthropogenic emissions of carbon dioxide — the so-called global carbon budget or GCB. This ultimate “forever” GCB provides the essential scientific grounding for national and temporal (e.g., five-year) carbon budgets, precisely because the aggregate total of these national and temporal budgets must be constrained to “add up” within the GCB. But the NCO, as drafted, makes no reference to a global temperature goal, and thus provides no basis for recognition of an overarching GCB constraint or recommendation of a specific local temporal carbon budget programme.

This failing in the draft Bill could be fully addressed firstly by the revision proposed above of the NCO (binding the NCO to the Paris temperature goals), and combining this with a revision of section 11(2A) to make clear that the ultimate, overriding criterion to be used by the Council in proposing the carbon budget program must be alignment and consistency with this reformulated NCO.

This would enable the Council to give informed advice on the reasonable bounds of a just and equitable national share of the GCB, as well as whether to plan for (temporary) overshoot of this share (with consequent inter-generational commitment to carbon dioxide *removal* from atmosphere). These are the *essential* parameters to allow the setting of any coherent, near-term (15-year) temporal carbon budget programme. Conversely, absent such revision of the Bill, the recommendations of the Council on the carbon budget programme would remain essentially ungrounded. The advisory task being ostensibly delegated to the Council would be at best arbitrary, and at worst utterly ineffective.

Executing the Rolling Carbon Budget Programme

The motivation for a carbon budget programme in climate action governance is, precisely, to ensure that these fixed-term budgets ultimately “add up” to alignment with a just and equitable national claim on the finite, “forever”, global carbon budget. The first requirement for this is that governments are bound, in a meaningful way, to take actions that are credibly aligned with compliance with each component, fixed-term budget. The draft Bill appears to rely primarily on the development of “sectoral decarbonisation target ranges” to give effect to this. Specifically, section 4(2)(b)(i) requires that the rolling 10-year Climate Action Plan set out a roadmap of “sector specific actions that, in the opinion of the Government, should be pursued to remain within the carbon budget and decarbonisation target range”; section 6B(13) requires Ministers to “have regard to” the carbon budget in effect at any given time; and 6C(7) requires them to “take account of” the currently approved decarbonisation target ranges. I leave it to others to comment on whether this language adequately captures the appropriate force and priority of climate action on Ministers and the Government as a whole. I will simply comment that the draft Bill does not set out any clear relationship between the setting of sectoral decarbonisation ranges and the overarching carbon budgets. One assumes that the intention of the Bill is that they should be mutually consistent: but this is not stated in any explicit way. I recommend that the Committee consider how this omission might be best addressed.

In my view, it would be preferable to simply remove the current concept of “decarbonisation target ranges” (whose definition is, at best, obscure) and replace it with **sectoral allocations of the overall carbon budget** in effect in any given period — subject, of course, to the arithmetic constraint that these allocations must sum to no more than the budget. This would be simpler, clearer, and much easier for all stakeholders (specifically including ordinary citizens) to understand.

Separately from this, there remains the possibility that even with full, good faith, action, the cumulative emissions outcome may be either lower or higher than the approved budget in any given 5-year period, yielding a budget surplus or deficit respectively. *The perceived priority of compliance with the fixed-term budgets, and the ultimate effectiveness of the carbon budget approach as a whole, therefore relies critically on how such temporal surpluses and deficits are handled.* **In simple terms, the implacable arithmetic of the finite “forever” budget constraint is that deficits, in particular, must carry forward.**

The draft Bill ostensibly addresses this in section 6D(4) (surplus) and 6D(5) (deficit). 6D(4) allows unconstrained carry forward of surpluses to the immediately succeeding budget period. However 6D(5) has the effect of limiting the formal carry forward of deficits to at most 1% of the “total budget” (presumably referring to the period where the deficit arose). Prima facie this severely undermines the cumulative discipline of the carbon budget framework by tacitly discarding or “forgiving” deficits. I assume that is not the intended effect. The provision appears to have been modelled on that of the UK Climate Act, section 17(1); but the UK Act contains key complementary provisions in section 19(1): in the event of a budget deficit this requires the Secretary of State to “... lay before Parliament a report setting out proposals and policies to compensate in future periods for the excess emissions”. Unfortunately, there is no corresponding provision in the draft Irish Bill.

I recommend that the Committee consider adding a requirement comparable to that of the UK Act, but made more explicit: namely that deficits must *automatically* carry forward (without Ministerial or Government discretion), and trigger an obligation to carry out an immediate corresponding review of the adequacy of the rolling Climate Action Plan.

Some “cushioning” of this carry-forward effect might be considered by allowing it to be applied not just to the immediately following 5-year budget period, but on a pro rata basis to the next two following budget periods (10 years in total, being the full period of the Climate Action Plan).

Other Matters

In addition to the critical issues above, I suggest that the Committee give further consideration to whether the following matters should be explicitly addressed in the Bill:

- The treatment of greenhouse gases other than carbon dioxide in the carbon budget framework. There has been much discussion of the treatment of methane in particular, due to its quite different atmospheric lifetime and role in warming compared to carbon dioxide and nitrous oxide. It has been suggested that methane might be treated via a mitigation target separate from the general “carbon budget”, as has been recently done in New Zealand. I support the argument that the current method of accounting for methane effects, relative to carbon dioxide, is not well-suited to direct incorporation within a single carbon budget: **however, I would argue explicitly against the New Zealand approach of a separate, top down, methane target.** This risks obscuring the most effective combination of mitigation actions across all greenhouse gases. Instead, *for strictly national, cumulative carbon budget purposes*, consideration should be given to applying the recently developed methodology known as GWP* for aggregating (at least) carbon dioxide, nitrous oxide and methane into a single, unified “GHG budget” framework. In any case, it would be premature to formalise any of this on a statutory basis: **the treatment of non-CO₂ gases in carbon budgets should be explicitly referred for advice from the Council, as part of the preparation of the initial carbon budget programme.**

- The treatment of emissions from so-called “bunker fuels” for international aviation and shipping is not addressed explicitly in the draft Bill. **I recommend that the Bill make explicit that such emissions must be included in the national carbon budget framework.**
- Fixed-term carbon budgets offer a potentially useful climate governance framework: but given the severity of the unfolding climate crisis, such a framework can conceivably be effective only in a context of pervasive societal understanding and support for what will now require significantly disruptive policy actions. **I recommend that the Committee consider adding to the Bill explicit provision for a permanent, large scale, programme of citizen participation in the formulation and execution of climate action.**

Conclusion

I apologise to the Committee for the length of this submission: but the issues at hand are complex, the stakes for all of society could not be higher, and so the most careful possible consideration is genuinely necessary.

The commitment of the Government to much strengthened climate action legislation is greatly to be welcomed. The draft Bill introduces a number of very important new governance mechanisms to support this. Chief of these are the proposed adoption of a new, overarching, National Climate Objective, and the governance of climate mitigation through a rolling 5-year carbon budget programme. The current formulation of both of these is significantly flawed: but if those flaws can be adequately addressed, then this legislation would make climate governance in Ireland an exemplar for all nations committed to just and effective climate action. I commend the Committee for its ongoing scrutiny of the Bill, and remain ready to support the Committee in any further way that may be requested.

European Trade Union Institute submission :

Why *just transition* should be an *integral* part of any climate policy plan

While the transition to a net zero carbon economy is an imperative, only a *just* green transition will deliver the necessary climate policy targets.

Just transition was an early trade union demand with the key objective to avoid a `climate/environment vs. (quality) jobs` dilemma.

Managing an ambitious decarbonisation is an interest of humanity (a common public interest) therefore public support to those affected negatively by this transition need to have public support.

From the mid-1990-s on the concept of just transition has become a mainstream policy tool applied by international institutions and treaties.

There is no single (or official) definition of just transition, but as a working definition one can consider this:

`**Just Transition** is a **framework** to encompass a range of social interventions needed to secure workers' rights and livelihoods when economies are shifting to sustainable production, primarily combating climate change and protecting biodiversity.`

More importantly, it can provide further guidance how key international institutions use the term:

The preamble of the *Paris Agreement* makes the following reference: "Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities".

The *European Green Deal* has just transition as a central element.

"The Just Transition Mechanism (JTM) is a key tool to ensure that *the transition towards a climate-neutral economy happens in a fair way, leaving no one behind*. It provides targeted support to help mobilise at least €150 billion over the period 2021-2027 in the most affected regions, to alleviate the socio-economic impact of the transition."

https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/just-transition-mechanism_en

European Commission:

https://ec.europa.eu/info/news/focus-towards-just-and-clean-energy-transition-2020-oct-1_en

The 2015 *ILO Just Transition Guidelines* highlight the need to secure the livelihoods of those who might be negatively affected by the green transition and also stress the need for societies to be inclusive, provide opportunities for decent work for all, reduce inequalities and effectively eliminate poverty. The three dimensions of sustainable development – economic, social and environmental – are strongly interrelated and need to be addressed by the use of a comprehensive and coherent policy framework. The ILO Guidelines provide a set of practical tools for governments and social partners in managing this transformation process.

The main approach of the ILO Guidelines is that sustainable development is only possible with the active engagement of the world of work.

Although the just transition concept has several dimensions and needs to be applied in a given socio-economic and institutional context, its main pillars are common:

- 1) Distributional justice: address potentially negative distributional effects of climate or energy policies on lower income groups (e.g. effects of a higher energy or fuel price on low income households).
- 2) Address employment loss and facilitate employment transitions that necessarily come up with a decarbonisation policy as energy intensive and fossil fuel dependent industries will lose employment while others will go through a major restructuring.
- 3) Decarbonisation may have huge impact on regional economies that depend on carbon intensive activities. These regions need a complex transition plan with active industrial and regional policies and public support (a good practice example is the recommendations of the German Commission for Growth, Structural Change and Employment that were adapted by the federal government).
- 4) Procedural justice: active involvement of social partners and civil society groups in the policy and decision making process related to the decarbonisation of the economy.

A just transition framework should thus include a strong and supportive labour market policy component (job losses, employment transitions, training retraining) a regional development policy pillar, industrial policy and social policy (address distributional effect as e.g. energy price) pillars. This should be incorporated into a comprehensive policy framework.



International Labour Office's submission to the Oireachtas Joint Committee on Climate Action

October 2020

Climate Action and Low Carbon Development (Amendment) Bill 2020

The International Labour Office presents its compliments to the Oireachtas Joint Committee on Climate Action and wishes to respond to the request for inputs in relation to the Climate Action and Low Carbon Development (Amendment) Bill 2020.

The International Labour Office welcomes the opportunity to share its perspectives with respect to the area for which its inputs are solicited, namely a just transition towards environmentally sustainable economies and societies for all. The work of the International Labour Office in this area is guided by the Constitution of the International Labour Organization in its article 10 (2) (b), the ILO Centenary Declaration for the Future of Work which provides that “the ILO must direct its efforts to: (i) ensuring a just transition to a future of work that contributes to sustainable development in its economic, social and environmental dimensions (Part II A (i))”, and the ILO Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All.

Climate change has major implications for economic growth, employment, health and livelihoods. Uncontrolled climate impacts will cause damage to infrastructure, disrupt business activity, and affect jobs and livelihoods on an unprecedented scale. The increasing frequency and intensity of natural disasters associated with human activity have already lowered productivity. Annually, between 2000 and 2015, natural disasters caused or exacerbated by humanity resulted in a global loss of working-life years equivalent to 0.8 per cent of a year's work. Projected temperature increases will make heat stress more common. It can lead to several medical conditions, including exhaustion and stroke. It is estimated that heat stress will cause a 2 per cent global loss in hours worked by 2030 due to sickness.¹

On the other hand, the transition to a climate resilient and climate neutral economy could become a strong driver of employment creation, skills upgrading, and social justice. There is growing evidence that such employment creation potential will offset the risks of job losses. Estimates suggest that measures to meet the Paris agreement's targets will have a global net positive effect on jobs. The transition to a green economy will inevitably cause job losses in certain sectors as carbon- and resource-intensive industries are scaled down, but they will be more than offset by new job opportunities. Measures taken in the production and use of energy, for example, will lead to job losses of around 6 million as well as the creation of some 24 million jobs. The net increase of approximately 18 million jobs across the world will be the result of the adoption of sustainable practices, including changes in the energy mix, the projected growth in the use of electric vehicles, and increases in energy efficiency in existing and future buildings.²

¹ International Labour Office, World Employment and Social Outlook: Greening with Jobs (Geneva, 2018).

² Ibid.

However, positive labour market outcomes that enable decent work and a just transition for all, leaving no one behind, will require the ongoing engagement of actors in the world of work and the development and implementation of specific policies and strategies.

On the occasion of the 2019 Climate Action Summit, Ireland together with 45 other countries, made commitments to a just transition and the creation of green jobs for ambitious climate action. Such commitments included the formulation of just transition plans, and appropriate action on:

- Creating mechanisms of social dialogue to forge strong social consensus to enable transformative change without major adverse social and economic disruption.
- Assessing employment, social and economic impacts of ecological transition and green jobs potential.
- Implementing skills development and upgrading measures to enable transitions in labour markets, and low-carbon and more resource-efficient enterprise development and green job creation for women and men.
- Designing innovative social protection policies to protect workers and vulnerable groups in the context of more ambitious climate adaptation and mitigation strategies.
- Increasing the transfer of technology and knowledge to developing countries, as well as innovation and responsible investment by both public and private entities that can stimulate economic transformation, sustainable and inclusive growth, and green job creation, including rallying the private sector and actors in the investment and finance community.³

Note: In the insertions proposed below, headings refer to the headings as contained in the draft legislation:

Amendment of section 1 of Principal Act

2. Section 1 of the Principal Act is amended -
(a) by the insertion of the following definition:

It is proposed to consider adding a reference on the notion of just transition

- A “just transition to a climate resilient and climate neutral economy” means a transition that ensures that the economic, environmental and social consequences of the ecological transformation of economies and societies are managed in ways that maximize opportunities of decent work for all, reduce inequalities, promote social justice, and support industries, workers and communities negatively affected, in accordance with nationally defined priorities, and based on effective social dialogue.

National 2050 climate objective

3. (1) The State shall pursue the transition to a climate resilient and climate neutral economy by the end of the year 2050 (in this Act referred to as the ‘national 2050 climate objective’). (pp. 6)

³ Commitments can be found at https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/genericdocument/wcms_715201.pdf

It is proposed to consider including the following addition (highlighted)

3. (1) The State shall pursue **a just** transition to a climate resilient and climate neutral economy by the end of the year 2050 (in this Act referred to as the 'national 2050 climate objective').

(3) For the purposes of performing their functions under sections 4, 5 and 6 the Minister and the Government shall have regard to the following matters (pp 7)

It is proposed to consider including the following items

- **a just transition towards a climate resilient and climate neutral economy, as defined under Section 1 of the Principal Act (as amended)**
- **the importance of policy coherence,**

(j) the requirement to be able to act quickly in response to economic, and environmental occurrences and circumstances; (pp. 8)

It is proposed to consider including the following addition (highlighted)

(j) the requirement to be able to act quickly in response to economic, **social** and environmental occurrences and circumstances;

Climate action plans and strategies

4. The Principal Act is amended by the substitution of the following for section 4:

(2) The Minister shall, when updating the climate action plan under subsection (1)(a) –

(b) set out a roadmap of actions, including –

(ii) other actions and measures that, in the opinion of the Government, are necessary to support Government policy on climate change. (pp 13)

It is proposed to consider including the following addition (highlighted)

(ii) other actions and measures that, in the opinion of the Government, are necessary to support Government policy on climate change, **including actions and measures to promote a just transition, such as just transition plans and/or measures in the field of skills, enterprise development, social protection and social dialogue.**

(4) When preparing the update referred to in subsection (1)(a) the Minister-

(a) may consult with such persons (including members of the public) as he or she considers appropriate, and (pp. 14)

It is proposed to consider adding a new item (highlighted below)

- **shall consult with social partners**

(7) The national long term climate action strategy may include the following – (pp. 14)

It is proposed to consider adding the following item

- an assessment of potential economic, social and employment impacts of climate actions

Amendment of section 9 of Principal Act

7. (1) Section 9 of the Principal Act is amended –

(b) by the substitution of the following subsection for subsection (4):

“(4) In nominating and appointing the chairperson and the ordinary members under subsection (3), the Minister and the Government shall –

- (a) have regard to the range of qualifications, experience and competence necessary for the proper and effective performance of the functions of the Advisory Council and ensure that each member has knowledge of, or expertise in, at least one of the following areas: (pp.30)

It is proposed to consider adding the following item

- employment and social policy

Amendment of section 11 of Principal Act

8. Section 11 of the Principal Act is amended –

- (b) by the substitution, in paragraph (c) of subsection (1), of the following subparagraphs for subparagraphs (i) to (iii): (pp 38)

It is proposed to consider adding the following item

- As necessary, just transition plans for regions and/or sectors, and relevant policy measures, such as measures on skills, enterprise development, social protection and social dialogue.

Amendment of section 12 of Principal Act

9. (1) Section 12 of the Principal Act is amended, in subsection (1) –

(a) by the substitution of the following paragraph for paragraph (a):

- (a) “(a) conduct a review (in this section referred to as the ‘annual review’) by 15 September in each year of the progress made during the immediately preceding year in – (pp. 39)

It is proposed to consider adding the following item

- Promoting a just transition for all

Amendment of section 13 of Principal Act

10. Section 13 of the Principal Act is amended –

(a) in subsection (2), by the substitution of the following subparagraphs for subparagraphs (ii) and (iii):

“(ii) the most recent approved climate action plan, approved national long term climate action strategy, approved national adaptation framework, approved sectoral adaptation plans and approved carbon budget, and (pp. 41)

It is proposed to consider including the following addition (highlighted)

“(ii) the most recent approved climate action plan, approved national long term climate action strategy, approved national adaptation framework, approved sectoral adaptation plans and approved carbon budget, **and relevant just transition plans and policy measures,** and

(b) in subsection (7)(d), by the substitution of the following subparagraphs for subparagraph (i) and (ii): (pp 41)

It is proposed to consider adding the following item

- **relevant just transition plans and policy measures**

“Climate Reporting

(3) For the purposes of subsection (2), each Minister of the Government shall, in relation to the sector for which the Minister has responsibility, give an account of the following matters during the period to which the annual report relates – (pp. 43)

It is proposed to consider adding the following item

- **The implementation of just transition policy measures**

Role of local authority

12. The Principal Act is amended by the insertion of the following section after section 14:

“Role of local authority

(2) A local authority shall, within 12 months of receipt of a request under paragraph (1), make a local authority climate action plan and that plan shall specify the mitigation measures and the adaptation measures to be adopted by the local authority. (pp. 45)

It is proposed to consider including the following addition (highlighted)

(2) A local authority shall, within 12 months of receipt of a request under paragraph (1), make a local authority climate action plan and that plan shall specify the mitigation measures and the adaptation measures to be adopted by the local authority **and, as relevant, prepare a local just transition action plan and/or include just transition considerations in the local authority climate action plan**

(3) In making a local authority climate action plan, a local authority shall take account of the most recent approved climate action plan and national adaptation framework, and have regard to – (pp 46)

(d) any policies of the Minister or the Government on climate change.

It is proposed to consider including the following addition (highlighted)

(c) any policies of the Minister or the Government on climate change and on just transition

Amendment of section 15 of Principal Act

13. Section 15 of the Principal Act is amended by the substitution of the following subsection for subsection (1):

“(1) A relevant body shall, in the performance of its functions, take into account -

It is proposed to consider adding the following item

- just transition plans

The following documents provide additional sources of information in relation to the integration of decent work and just transition in climate change policies:

- ILO Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All. These are guidelines formulated by representatives of governments, workers’ and employers’ organisations. They provide a framework on key principles and potential policy entry points for a just transition. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432859.pdf
- *Work in a changing climate: The Green Initiative*, Report of the Director-General, International Labour Conference, 106th session, 2017. Report I. https://www.ilo.org/ilc/ILCSessions/previous-sessions/106/reports/reports-to-the-conference/WCMS_554315/lang--en/index.htm
- Training Guide on How to measure and model social and employment outcomes of climate policies, here https://www.ilo.org/global/topics/green-jobs/publications/WCMS_613934/lang--en/index.htm
- The ILO produced the following global flagship reports on decent work and just transition aspects of climate change policies, including individual country analysis:
 - World Employment and Social Outlook: Greening with Jobs 2018 (aggregated at regional level and including cross-border impacts) https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_628654.pdf
 - International Labour Review 2019: Does climate action destroy jobs? An assessment of the employment implications of the 2-degree goal (cross border impacts included) <https://onlinelibrary.wiley.com/doi/full/10.1111/ilr.12118>
 - Skills for a Greener Future 2019 (aggregated at regional level, cross border impacts as well as 31 individual countries) https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_732214.pdf
 - The impact of Heat Stress on Productivity 2019 (for 180 individual countries) https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_711919.pdf

Irish Congress of Trade Unions

Energy Sector Group

**Submission on Climate Action and Low Carbon Development
(Amendment) Bill 2020**

October 2020



On behalf of the Congress Energy Sector Group, I would like to thank the Committee and its members for the opportunity to make a submission on the Climate Action Bill and to input into the wider, critical debate on climate change policy.

The Congress Energy Sector Group represents workers across the energy generation and production sectors, workers who are on the frontline of the transition to a low carbon economy and who experience the reality of that process daily.

For these workers, their families and their communities the idea of a Just Transition is neither an academic abstraction nor an optional policy extra.

Rather it is an urgent and necessary component of the planned transition and one which will help to determine the ultimate success or failure of that process.

In that respect, the inclusion of some 16 separate and specific references to Just Transition in the Programme for Government - *Our Shared Future* - was a positive development, from the perspective of Congress.

In relation to existing industries in the Midlands and elsewhere, the Programme explicitly states: “We will support a just transition for the workers and regions impacted as peat and coal fired power generation is phased out.”

In terms of emission targets and wider climate policy ambition the Programme commits to ensuring that the overarching process is “underpinned by the core philosophy of a just transition.”

The **Climate Action and Low Carbon Development (Amendment) Bill 2020** is the first major piece of legislation on climate policy to issue from this government.¹

As such, it serves a number of functions: it should signal intent in respect of future policy; communicate a sense of the wider vision that underlies official policy; put in place key elements of that broad policy framework.

Just Transition is neither mentioned nor referenced anywhere in the Bill.

This is a serious cause for concern for the Congress and for workers across the energy sector and the wider economy.

To be clear, Just Transition is an essential component of any climate change policy with ambitions to be sustainable, viable and credible.

A failure to remedy this deficit in the Bill will serve merely to further erode trust and confidence in the overall transition process, a trust that is already under severe strain given the lived experiences of workers and their communities in the Midlands, to date.

As the Programme for Government attests, the exit from peat in the Midlands is the ‘first test’ of transition process here.

If so, then it is a litmus test we have failed miserably so far.

¹ <https://www.gov.ie/en/publication/984d2-climate-action-and-low-carbon-development-amendment-bill-2020/>

To date we have seen some 1000 jobs lost at Bord na Móna and not *one single new, replacement job created* in response, while no targeted training or reskilling programme of sufficient scale has yet been put in place.

There is little evidence of coherence in overall government policy on this issue.

A case in point is the Midlands Retrofit Programme, which involves some eight local authorities and is effectively a pilot for the larger National Retrofit Programme announced as part of Budget 2021.

A coherent Just Transition policy approach would ensure that the Midlands Retrofit Programme made a clear and direct linkage with workers in the region impacted by the transition - specifically current or former Bord na Móna workers - in terms of employment and training opportunities, that might arise under the Programme.

As far as Congress can ascertain, no such linkage or provision has yet been established.

Union Origins

Just Transition is a concept that emerged from the hard realities of industrial change over many decades and the key role of trade unions in managing such change, for the benefit of workers and communities.

In essence, it seeks to align labour, social and environmental priorities.

It was first included in the Framework Convention on Climate Change that emerged from the COP 16 conference in Cancún, Mexico in 2010, with a specific commitment to “ensuring a just transition of the workforce that creates decent work and quality jobs.”²

In 2015 the landmark Paris Agreement spoke of the “imperatives of a Just Transition”, a position reaffirmed by the 2018 Silesia Declaration.

Critically, the Paris Agreement also specifically referenced comprehensive Guidelines on Just Transition, drawn up by the International Labour Organisation (ILO).³

These guidelines describe a process that requires “a coherent country-specific mix of macroeconomic, industrial, sectoral and labour policies. The aim is to generate decent jobs all along the supply chain.”

The ILO guidelines stress the centrality of Social Dialogue to any Just Transition process: “For such a policy framework, institutional arrangements must be made for a meaningful social dialogue to take place at all levels.”

The ILO Guidelines establish a clear and critical global framework for the Just Transition process at national and territorial level.

² <https://unfccc.int/sites/default/files/resource/docs/2010/cop16/eng/07a01.pdf>

³ https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432859.pdf

In that context, Just Transition cannot be reduced to a system of enhanced welfare protections for those most affected by the process, that being the limit of the State's responsibility.

Rather, as the key April 2020 NESC report on this issue confirmed, the State has a key role in planning, coordinating and facilitating the overall process, in conjunction with workers and trade unions, employers and communities.⁴

The low carbon transition is a transformative process that is materially different from 'normal' ongoing change that happens across a range of industries.

As such, it cannot simply be abandoned to the market.

Addressing a recent NESC conference on Just Transition, President Michael D. Higgins said of the April 2020 report's recommendations:

"I strongly support the Council's call for the establishment of a meaningful **social dialogue** and deliberative process, which should be framed in the wider context of discussions with regard to how we embed the just economy and society, now so urgently needed, and indeed desired by the citizenry.

"Social dialogue and real, inclusive democratic consultation with all social partners should be a fundamental principle of any just transition approach."⁵

At the same conference, Professor John Tomaney of University College London outlined the devastating impact of the failure to do so - as evidenced by the ideologically-driven and markedly unsuccessful transition of the UK's old manufacturing sector in the 1980s and 1990s.

This resulted in greater division, 'left behind' regions and a legacy of bitterness that persists to this day and contributed in no small part to the the success of Brexit.

Once lost or damaged, trust and confidence in the systems and institutions of governance are extremely difficult to rebuild.

Just Transition & the Climate Action Bill

The Climate Action Bill presents an opportunity for the current government to correct some of the missteps made in the transition process here.

In doing so, it can learn from the example of others. Thus a new, draft Spanish Climate Change law commits to:

"....every five years, the Government must approve a Just Transition Strategy with the participation of the Autonomous Communities and social agents. Within its framework, just transition agreements will be developed in each area, with the aim of promoting economic activity and employability in the territory, especially in cases of closure or conversion of facilities."

⁴ http://files.nesc.ie/nesc_secretariat_papers/No_19_vulnerable_workers.pdf

⁵ <https://president.ie/en/diary/details/president-gives-keynote-address-at-conference-on-just-transition>

There is no reason why similar provisions could not be included in the current Irish bill.

In addition, it is also critical that the Bill sets out a clear and viable definition of Just Transition, one that specifically references and has regard to the key ILO Guidelines.

This can be arrived at by amending and updating the Just Transition text contained in the 2018 Just Transition Bill originated by the Green Party and supported by Congress.

The amended version of Just Transition therefore reads:

“Just Transition means the bringing together of workers and their trade unions, communities, employers and government in Social Dialogue to develop, agree and drive the concrete plans, policies and investments needed for a fast and fair transformation to a low carbon economy; to ensure the establishment of appropriate training and reskilling programmes for affected workers and the creation of new and replacement jobs based on the principles of Decent Work, jobs that are of at least the same quality as those that have been lost.

“Any such process should be based on and draw from the comprehensive International Labour Organisation Guidelines on Just Transition.”

It is the view of Congress that the current Bill would be immeasurably strengthened by the addition of the proposed text above.

Thank you for your time.

ENDS



TASC short submission to the Oireachtas Committee on Climate Action

Opinion on Just Transition and the Climate Action and Low Carbon Development (Amendment) Bill 2020

22th October 2020

On October 20th, 2020 the Oireachtas Joint Committee on Climate Action requested that TASC provide short written input regarding how Just Transition could be reflected in the draft Climate Action and Low Carbon Development (Amendment) Bill 2020 and what definition of just transition could be used. TASC recommends the draft bill is revised to:

1. Include a Just Transition principles and requirements to operationalise

In committing to the Paris Agreement, the Irish government agreed to, when dealing climate action, take into account “the imperatives of a Just Transition of the workforce and the creation of decent work and quality jobs.” This commitment was reaffirmed at COP 24 in 2018 with the signing of the Silesia Declaration on Solidarity and Just Transition. As such, the Bill should reflect this commitment by including a commitment to ensuring a Just Transition and should define a set of Just Transition Principles. These should be adopted from the principles in Scotland’s world-leading Climate Change (Emissions Reduction Targets) (Scotland) Act 2019¹ as follows:

“In this Act, the “just transition principles” are the importance of taking action to reduce net Scottish emissions of greenhouse gases in a way which—

- a) supports environmentally and socially sustainable jobs,*
- b) supports low-carbon investment and infrastructure,*
- c) develops and maintains social consensus through engagement with workers, trade unions, communities, non-governmental organisations, representatives of the interests of business and industry and such other persons as the Scottish Ministers consider appropriate,*
- d) creates decent, fair and high-value work in a way which does not negatively affect the current workforce and overall economy,*
- e) contributes to resource efficient and sustainable economic approaches which help to address inequality and poverty.”*

With principles along the lines of the above defined by the Bill, it should then require relevant actors to explain how all policies, plans and proposals set out under the bill will:

- a) affect different sectors of the Irish economy and different regions in Ireland, including how they are expected to affect employment in those sectors and regions,
- b) set out the proposals and policies for supporting the workforce, employers and communities in those sectors and regions.

¹ Act available at: <https://www.legislation.gov.uk/asp/2019/15/enacted>

2. Legislate for a new body, a Just Transition Commission, to replace the Just Transition Commissioner, and set out the roles and responsibilities of that Commission.

To ensure positive social outcomes from climate action and ensure that the transition is as inclusive and cohesive as possible, the role of Just Transition Commissioner should be expanded to a four-person commission in the bill. The Commission's responsibilities should be set out to complement the role of the Climate Change Advisory Council by advising on the social and labour implications of policies and proposals such as carbon budgets. Beyond the immediate need for Just Transition planning for the midlands, as is the focus of the Just Transition Commissioner's mandate, this body would also consider social justice outcomes, labour transitions, agriculture transitions and community outcomes across the whole country. Recommendations of the Just Transition Commission should support climate action that will: maximise the economic and social opportunities; build on Ireland's existing strengths and assets; and understand and mitigate risks that could arise in relation to regional cohesion, equalities, poverty (including fuel poverty), and a sustainable and inclusive labour market

3. Link a climate action to sustainable development and climate justice

At present, the bill does not clearly or effectively articulate the linkages between climate action and social outcomes and how it contributes to the realisation of sustainable development. Strengthening these will increase the likelihood that a Just Transition can be realised. This can be remedied by:

- a) Defining climate justice. Currently the reference to climate justice is of little consequence as, like in the 2015 Act, it is undefined. There are numerous ways to define climate justice, however the government should again look to the Scottish Climate Change Act and adopt the definition for climate justice given there² and requiring policies and plans to explain how they will advance climate justice through their implementation.
- b) Requiring the Climate Action Plan, and other appropriate policies and plans mandated under this bill, to explain how their implementation is expected to contribute to the achievement of sustainable development, including the achievement of the United Nations Sustainable Development Goals.
- c) Requiring coherence between climate action and Ireland's commitments under the United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention)³, particularly with regard to public participation in developing climate action which is insufficiently conceived in the current draft.

4. Set interim targets

Climate targets that are too distant increase the risk of delaying policy decisions, setting unambitious short-term targets, and foregoing necessary actions that may risk negative public response. The result, in turn, could be unplanned and unjust transitions. Setting ambitious interim targets for 2030 and 2040, in addition to the 2050 target, will be important to ensure a planned and equitable transition. To this end, a target of 65% emission reductions targets by 2030 (vs 1990 levels) and 90% by 2040 (vs 1990 levels) are advised.

² The "climate justice principle" is the importance of taking action to reduce global emissions of greenhouse gases and to adapt to the effects of climate change in ways which (a) support the people who are most affected by climate change but who have done the least to cause it and are the least equipped to adapt to its effects, and (b) help to address inequality.

³ Text of the convention available at: <https://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf>

Joint Committee on Climate Action
Pre-Legislative Scrutiny of the Climate Action and Low Carbon Development
(Amendment) Bill 2020

Follow-up Submission

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Introduction

[1] This follow-up submission elaborates on a number of points that surfaced during the session at which I appeared as a witness before the Committee on 15 October 2020.

[2] I begin by reiterating that the publication of the Climate Action and Low Carbon Development (Amendment) Bill 2020 is very welcome. The importance of the pre-legislative scrutiny phase is clear. It is essential that the draft text is examined closely and is strengthened, as appropriate. The legislation that emerges at the end of this process must provide a robust legal framework that will enable Ireland to meet its climate obligations.

[3] In response to questions from Committee members during the session on 15 October 2020, I mentioned recent legislative developments in the State of Vermont. The [Vermont Global Warming Solutions Act of 2020](#) sets binding targets and timetables for greenhouse gas reductions in every sector and provides for a right to go to court to enforce them.¹ It also establishes the Vermont Climate Council which is

¹ I am grateful to [Professor Patrick Parenteau](#), Vermont Law School, for bringing this recent legislation to my attention.

required to develop a Climate Action Plan. The Council has a diverse membership and a wide range of expertise and experience including, for example, a representative of rural communities and a youth member. The Council also has a range of Subcommittees including, for example, a Rural Resilience and Adaptation Subcommittee and a Just Transition Subcommittee.

[4] Public participation in the development of climate law and policy emerged as a key theme during the session on 15 October 2020. Questions from Committee members made reference to the [Aarhus Convention](#).² The Convention guarantees certain environmental human rights and sets minimum standards for public participation. As regards models of best practice for public participation, I refer the Committee to a particularly useful resource: [Maastricht Recommendations on Promoting Effective Public Participation in Decision-making in Environmental Matters](#) (UN ECE, 2015). It is also important to be aware of the recent [Statement on the application of the Aarhus Convention during the COVID-19 pandemic and the economic recovery phase](#) adopted by the Aarhus Convention Compliance Committee on 2 September 2020.

[5] It is also important to recall here the significance that the Supreme Court attached to the principles of public participation and transparency in its ruling in ‘Climate Case Ireland’: *Friends of the Irish Environment v Government of Ireland* [2020] IESC 49.

[6] How the Bill addresses the question of the independence of the Climate Change Advisory Council also surfaced during the session on 15 October 2020. The process by which members are appointed to an independent public body is very significant in this context. In my view, there is a strong case to be made for a transparent appointment process, where positions on the Council would be advertised and filled after an open competition, with clear criteria specified for the role of Chairperson and ordinary member.

² Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (1998).

[7] As regards Council membership, gender balance and an appropriate range of expertise, and the necessary resources to deliver its functions effectively, are obviously key concerns here. It is important that the Council reflects a diversity of expertise and that it can draw on different perspectives that are based on a wide range of experience. The Council must have the necessary scientific expertise at its disposal. Furthermore, I suggest that consideration be given to including among the Council's membership a lawyer with appropriate qualifications and experience. Following the example of the Vermont climate legislation, consideration could also be given to adding a member who would bring the experience and perspective of young people to the Council's deliberations. The Green Schools and Green Campus initiatives, among other things, have supported students to become well-informed, engaged and active citizens with a particular interest in environmental matters, including climate action.

[8] Finally, it is essential in my view that the new climate legislation provides for legal accountability. In my Opening Statement to the Committee on 15 October 2020, I drew attention to a specific recommendation made by the Citizens' Assembly to the effect that:

To ensure climate change is at the centre of policy-making in Ireland, as a matter of urgency a new or existing independent body should be resourced appropriately, operate in an open and transparent manner, and be given a broad range of new functions and powers in legislation to urgently address climate change.³

The Assembly recommended that the functions and powers to be vested in this new or existing body should include:

To pursue the State in legal proceedings to ensure that the State lives up to its obligations relating to climate change.⁴

³ *Third Report and Recommendations of the Citizens' Assembly: How the State can make Ireland a leader in tackling climate change* (18 April 2018), p20.

⁴ *Third Report and Recommendations of the Citizens' Assembly: How the State can make Ireland a leader in tackling climate change* (18 April 2018), p20. See also the discussion around the drafting and revisions to this question at pp16-20.

[9] It is notable that the Assembly did not go on to specify what body should be assigned this function. Rather, the report refers, in general terms, to ‘a new or existing independent body’ having this role.

[10] I urge the Committee to give further consideration to the Assembly’s recommendation regarding legal accountability.

[11] To conclude, the Bill provides the opportunity to deliver robust, workable climate legislation that supports a just transition and protects human rights. An independent Climate Change Advisory Council, with the requisite expertise and resources; early and effective public participation in the elaboration of climate law and policy; and appropriate legal accountability mechanisms must be essential elements of this legislation.

6 November 2020

Joint Committee on Climate Action

Pre-legislative scrutiny of the Climate Action and Low Carbon Development (Amendment) Bill 2020

Additional comments of

Dr. Andrew Jackson

UCD Sutherland School of Law

6 November 2020

1. Please find my additional comments below, which should be read in the context of and in addition to my [opening statement](#) delivered before the Joint Committee on 21 October 2020.

Interim targets

2. During the question and answer session before the Joint Committee on 14 October 2020, the Assistant Secretary General of the Department of the Environment, Climate and Communications stated that an interim target(s) had not been included in the Bill because, he argued, where there is an existing obligation under EU law it would not be “appropriate” to enshrine the same obligation in domestic law.
3. While I do not follow (or agree with) this argument, it is important to note that even on its own terms the argument would not prevent the Government legislating to include some other interim target(s) in the Bill. For example, while the Programme for Government’s commitment to an average 7% per annum reduction in overall greenhouse gas emissions over the decade to 2030 (equating to a 51% reduction over the decade) falls well short of what is required pursuant to the UNFCCC and the Paris Agreement, there is nothing

in the Assistant Secretary General's reasoning that would prevent, say, the Programme for Government commitment (or ideally some other more ambitious figure) being included as an interim target for 2030: the Programme for Government commitment is of course not an obligation under EU law.

Justiciability

4. During the question and answer session at the Joint Committee meeting I attended on 21 October, Deputy Bruton asked, in the context of the general absence of legal accountability in the Bill, whether a provision along the lines of the following from the New Zealand Climate Act ought to be included in the Bill:

"5ZM Effect of failure to meet 2050 target and emissions budgets

(1) No remedy or relief is available for failure to meet the 2050 target or an emissions budget, and the 2050 target and emissions budgets are not enforceable in a court of law, except as set out in this section.

(2) If the 2050 target or an emissions budget is not met, a court may make a declaration to that effect, together with an award of costs.

(3) If a declaration is made and becomes final after all appeals or rights of appeal expire or are disposed of, the Minister must, as soon as practicable, present to the House of Representatives a document that –

(a) brings the declaration to the attention of the House of Representatives; and

(b) contains advice on the Government's response to the declaration."

5. I would simply note that the constitutional contexts in Ireland and New Zealand are of course very different. Any future climate litigation in Ireland would most likely be based *inter alia* on alleged infringements of constitutional and/or human rights. The provision from the New Zealand Act seeks to restrict the remedies available for failures to comply with targets and budgets in that Act. Any attempt to restrict by way of legislation the remedies available for, say, infringement of Irish constitutional rights and/or rights pursuant to the

European Convention on Human Rights would raise constitutional/ECHR issues that are not present in the New Zealand context.

6. More generally, any attempt to render provisions of the Climate Act 2015 “non-justiciable” by expressly purporting to oust the courts’ jurisdiction would in my view be vulnerable to a successful legal challenge.
7. Many of those who appeared before the Joint Committee reflected on the lack of legal accountability provided by the Bill. For example, new obligations relating to the preparation and revision of climate action plans in s.4 are peppered with language (e.g. “in the minister’s opinion”, “in the opinion of the Government”) designed to tell the courts “hands off”. These “in the opinion” of phrases should in my view be removed from the Bill/ Act.
8. It would appear to me that the Bill’s drafters have gone out of their way to ensure the revised Climate Act has no teeth. In my view this is both futile, because the Government cannot “litigation proof” the Climate Act to avoid a case based on fundamental rights, and counterproductive, because a weak framework will not spur action, and effective action is the only thing that will avert litigation.

2050 is too late for decarbonisation

9. As I and others argued before the Joint Committee, 2050 is much too late for Ireland to decarbonise on the basis of equity.
10. Having already contributed disproportionately to the climate crisis, we are set to consume much more than our fair share of the remaining global carbon budget for 1.5°C. In fact, on the basis of current emissions we are set to exceed our fair share [about 5 years from now](#).
11. Excluding speculative CO₂ removal technologies, Professor Kevin Anderson suggested to the Joint Committee a minimum 80% cut in Ireland’s energy-

based CO₂ emissions is needed by 2030, and complete decarbonisation of Ireland's entire energy system (including aviation and shipping) by 2035-2040. Yet even this is based on a global carbon budget that gives only a 33% chance of staying below 1.5°C: see the [paper](#) cited by Professor Anderson.

12. If we truly want to play our part in averting the catastrophic impacts of heating of 1.5°C and above, we should in my view aim for complete decarbonisation by 2030. To put this another way: in short order a 2050 target will look completely insufficient and out of step. See [this analysis](#) by Sean McCabe of NASC for examples of other European countries that are already setting earlier years for decarbonisation than the 2050 date proposed in the Bill.

13. Hitting “neutrality” only by the end of 2050 as planned also means exceeding the carbon budget for 1.5°C in the meantime. As such, this goal assumes the deployment post-2050 of massive-scale CO₂ removal technologies that are subject to “multiple feasibility and sustainability constraints” according to the IPCC in its special report on 1.5°C. We have no plan for this, and it would in my view be deeply unjust for us to bestow this legacy - a moonshot - in order that we can continue to emit greenhouse gases today. This would be the very essence of [“predatory delay”](#).

Ratcheting mechanism

14. Amending the national climate objective to refer to 2050 “at the latest” would in my view be a highly unsatisfactory way - legally and practically - to address the fact that Ireland ought to be decarbonising much earlier than 2050. In practice this would seem to pay lip service to decarbonising by an earlier date.

15. A much better solution, in my view, would be to draw inspiration from the Scottish Act, which provides in [sections A1](#) and [2A](#) simple mechanisms allowing the Scottish Ministers, by way of secondary legislation, to substitute an earlier year for complete decarbonisation and to substitute higher interim

targets for those currently in the Scottish Act. These provisions are subject to strict safeguards and criteria to prevent backsliding and to ensure a science and equity-based approach. Our constitutional set-up is different, of course, with the [Supreme Court \(at para 103\)](#) describing the general position as follows: *“To allow primary legislation to be amended by secondary legislation is not permissible, even where it seems that the primary legislation has specifically allowed it.”* This said, the Government could achieve the same end result in a way that represents a permissible delegation of power. For example, the Bill could specify, say, a range of target years within which ultimate decarbonisation must be achieved, and a percentage reduction range for any interim targets, with the Bill giving the Minister power to make secondary legislation specifying the precise decarbonisation year and interim targets, within the permitted ranges. The Bill would need to specify clear criteria to guide the selection of the decarbonisation year and interim targets (here the Scottish Act’s [“target-setting criteria”](#) may prove useful) and would need to protect against backsliding.

16. The advantages of this over simply inserting “at the latest” into the national climate objective would be considerable. As it is, primary legislation would be needed to amend the 2050 “net zero” date (and any interim targets that may in due course be inserted before the Bill becomes law). Providing for a ratcheting up of ambition by way of secondary legislation, within the bounds of what may permissibly be delegated, would allow the government of the day to respond much more rapidly/easily when it comes to changing the ultimate decarbonisation date and any interim targets, as required.

International aviation and shipping

17. At present our Climate Act 2015 does not address international aviation and shipping at all, nor (as far as I can see) does the EPA include such emissions in its regular reporting/projections. Professor Kevin Anderson in his appearance before the Joint Committee made repeated references to the need to consider and reduce such emissions.

18. The need to address such emissions is the subject of ongoing discussions in the UK. [Section 30](#) of the UK's Climate Act and [section 16](#) of Scotland's Climate Act contain provisions relating to international aviation and shipping that the Joint Committee could usefully examine as part of its considerations.
19. As the UK's equivalent of our Climate Change Advisory Council (CCAC) noted in a [recent briefing](#):
- "Interim carbon budgets and the end goal are set factoring in the UK share of international aviation and shipping emissions, but these emissions fall out of the scope of current carbon budget accounting under the Act. While the Government has accepted that they must be covered by the UK's 2050 Net Zero target they have not yet formally set out how they will be included in UK climate targets."*
20. In my view the Climate Bill represents an opportune moment to consider how to take account of emissions from international aviation and shipping in our targets and budgets, rather than our making this Bill now - representing our second-generation climate law - only to find that it is almost immediately out of step with leading climate laws elsewhere.

Consumption emissions

21. It would be very useful if the EPA, as part of its regular emissions-reporting function, could be tasked with monitoring and reporting on our "consumption emissions" in addition to our territorial emissions. This is the practice in the UK (see the UK Committee on Climate Change's recent [annual progress reports](#)) and seems a very useful approach.
22. As the Committee on Climate Change [explains](#): "Accounting for greenhouse gas (GHG) emissions under the Climate Change Act is done on a 'territorial' basis, meaning that a country has responsibility for all emissions produced within its borders. This is consistent with the internationally-agreed approach to GHG emissions

accounting under the Paris Agreement, in which all countries are required to make (nationally determined) commitments to reduce the emissions produced domestically.

An alternative perspective associates emissions caused during the production of goods and services with the country that is the final consumer of those goods and services independent of where in the world those emissions occurred.

[...]

These [consumption emissions] are important to ensure that action to decarbonise UK-based activities does not result in emissions moving offshore and to track progress in decarbonisation of imports to the UK, which in turn can inform future policy (e.g. border carbon adjustments)."

"Consistent with" obligations

23. In my opening statement before the Joint Committee I suggested splitting the long list of matters to which regard must be had (new s.3(3)), with certain matters being made subject to a stronger obligation: that the relevant public body must act "consistently with" such matters.

24. If the Joint Committee is minded to make a recommendation along these lines, in my view it would be important to ensure that "consistent with" obligations are applied *not only* at the level of the Climate Change Advisory Council when it is, for example, proposing carbon budgets. Instead, such "consistent with" obligations should also in my view apply to the Government, Ministers and local authorities when they are, for example, adopting/revising carbon budgets, climate action plans, long-term strategies, adaptation frameworks and sectoral adaptation plans.

Climate justice, just transition, and biodiversity should not simply be matters to which "regard must be had"

25. The list of matters to which regard must be had, as set out in new s.3(3), has been described as an "alphabet soup". The list has likely become so long, in my view, precisely because "have regard to" is such a weak obligation legally:

anything can be added to the list. For example, as I described in my evidence before the Joint Committee, in Climate Case Ireland the State sought to defend having “had regard to” climate justice on the basis of a single reference to “common but differentiated responsibilities” in the National Mitigation Plan, despite the fact that Plan allowed emissions to continue rising.

26. Simply adding additional matters, such as climate justice, just transition, and biodiversity (even if defined), to the long list of matters in s.3(3) will in my view be totally ineffective in ensuring these matters are meaningfully taken into account in future climate policy.
27. Much better in my view would be to take inspiration from the Scottish Act’s approach to just transition, which requires (at [s.35\(24\)](#)) each climate action plan in Scotland to explain the extent to which it takes account of the “just transition principles”, which are given a detailed definition (at [s.35C](#)). Such duties to explain could usefully be adopted in our Bill in the context of just transition, climate justice *and* biodiversity.
28. In considering how “climate justice” ought to be addressed in the Bill, the Joint Committee could also in my view usefully consider responsibility for [“loss and damage”](#), which is likely to come to the fore in the coming years as the impacts of climate change further materialise.

Biodiversity

29. In respect of biodiversity specifically, in my view the Bill ought to impose *specific obligations on specific institutions*. A vague requirement to “have regard to” biodiversity will make no meaningful difference.
30. Rather, the Government/Minister and local authorities could all, for example, be required - in adopting (respectively) carbon budgets, climate action plans, long term strategies, adaptation frameworks, and sectoral adaptation plans - to

explain how they have acted consistently with and furthered the objectives of the National Biodiversity Action Plan. Equally, these bodies could be required to explain how the policy instrument in question has taken account of the need to promote nature-based mitigation and adaptation solutions that enhance biodiversity.

31. Similarly, the Climate Change Advisory Council (CCAC) could for example usefully be required, in fulfilling its functions under revised s.11 of the Act, to consider recommending nature-based solutions that enhance biodiversity, and to explain which such solutions it has considered in each case, and why it has recommended or discounted particular nature-based solutions. The CCAC could also be required, for example, to include a section in each of its annual and periodic reports relating to such nature-based solutions, and to report on how best to avoid any negative impacts on biodiversity in pursuing climate action.

32. My essential idea here is that specific institutions should be specifically required by the Bill to consider, explain and report regularly on biodiversity and nature-based solutions that enhance biodiversity in the context of climate action. This should result in meaningful and tangible outputs being produced regularly, and would hopefully over time lead to increased implementation of such solutions on the ground.

Confusing drafting regarding matters to which CCAC must “have regard” in proposing carbon budgets

33. As a final point, I would simply note that the obligations on CCAC when it comes to carbon budgeting seem very confusingly drafted at present. In particular, CCAC must have regard to two matters under s.6A(6) when it comes to preparing its proposed carbon budgets and proposing amendments to provisional budgets, but *in addition* must have regard to a totally separate list of matters in proposing carbon budgets (and advising on sector specific actions and sectoral adaptation frameworks) by way of s.11(2A). To assist CCAC in

fulfilling its roles, and to aid public understanding of the law, in my view the matters to which CCAC must have regard (or act consistently with) should be brought together and simplified in one place in the Act.



Supplementary submission to Oireachtas Joint Committee on Climate Action

Pre-Legislative Scrutiny of the Climate Action and Low Carbon Development (Amendment) Bill 2020

6 November 2020

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1. Introduction

During my appearance before the Oireachtas Joint Committee on Climate Action on 15 October 2020, members of the committee asked a number of questions for which I undertook to provide supplementary replies. This document sets out responses to those questions. This should be read in conjunction with the opening statement I delivered on 15 October 2020.² For a broader overview of the topic of framework climate change laws, readers may wish to consult a background paper I published to contextualise the process of revising the 2015 Climate Action and Low Carbon Development Act, entitled *What are framework climate change laws and why are they important?*³

This supplementary submission is organised according to the topics on which I undertook to provide further material: (i) consequences and sanctions (raised by Deputy Richard Bruton); (ii) the independence and role of Climate Change Advisory Council (raised by Senator Alice-Mary Higgins); (iii) the use of offsets (raised by Senator Lynn Boylan); (iv) poverty proofing, social justice and just transition (raised by Senator Pauline O'Reilly and Deputy Cormac Devlin); biodiversity (raised by Senator Alice-Mary Higgins); and the UN Sustainable Development Goals (raised by Senator Alice-Mary Higgins).

¹ I am very grateful for research assistance in preparing this submission to a number of current and former students on DCU's MSc in Climate Change: Policy, Media and Society: Caroline Moran, Sinead Loughran, Anna Pringle, Theresa O'Donohoe, and Sadhbh O'Flynn. This submission represents my own position and is not necessarily representative of the views of those who assisted in its preparation.

² https://data.oireachtas.ie/ie/oireachtas/committee/dail/33/joint_committee_on_climate_action/submissions/2020/2020-10-15_opening-statement-dr-diarmuid-torney-associate-professor-school-of-law-and-government-dublin-city-university_en.pdf

³ <https://diarmuidtorneyorg.files.wordpress.com/2020/07/what-are-framework-climate-change-laws-july-2020.pdf>.

2. Consequences and sanctions

Deputy Richard Bruton asked about examples of legislation in other jurisdictions that include consequences or sanctions for non-compliance. The German Federal Climate Change Act (Bundes-Klimaschutzgesetz)⁴ provides a particularly robust version of a system of consequences for deviation from emissions targets. The German Act defines “permissible annual emission budgets” for six sectors of the economy.⁵ The federal government is required to report annually on greenhouse gas emissions in each sector. If this reporting shows that emissions for the preceding year have exceeded the sectoral emissions limits set out in the Act, the responsible government ministry is required, within three months, to present an “immediate action programme for the relevant sector” that “shall ensure compliance with the annual sectoral emission budgets in the subsequent years” (S.8(1)). In addition, the existing climate action programme is required to be updated to include measures specified in the immediate action programme.

Under the UK Climate Change Act, in the event of a carbon budget not being met, the relevant Secretary of State must lay before parliament a statement explaining why the budget has not been met, and must also lay before parliament a report setting out proposals and policies to compensate for excess emissions in future periods (S.18 and S.19).

3. Independence and role of Climate Change Advisory Council

Senator Alice-Mary Higgins posed questions regarding the Climate Change Advisory Council. The current Council consists of eleven members, including four *ex-officio* members: the heads of the Environmental Protection Agency, the Sustainable Energy Authority of Ireland, the Economic and Social Research Institute and Teagasc. The Draft Bill provides for the removal of the heads of the Sustainable Energy Authority of Ireland and the Economic and Social Research Institute, and the addition of the director of Met Éireann as an additional *ex officio* member. This would leave the Council with three *ex officio* members.

Senator Higgins posed a question about the independence of the Council. Perceptions of the Council’s independence, rightly or wrongly, are partly a function of its composition. According to a recent study published by the Finnish Climate Panel, Ireland is unique internationally in including such *ex officio* members as part of its national climate change advisory body.⁶ All of the bodies whose heads are proposed to sit as *ex officio* members on the new Council are statutory bodies reporting to, or indeed in the case of Met Éireann a line division of, government departments. The amendments contained within the Draft Bill expand the range of expertise to be included in the Council, which is to be welcomed. Consideration should be given to removing the remaining *ex officio* members and providing

⁴ English translation available at:

https://www.bmu.de/fileadmin/Daten_BMU/Download_PDF/Gesetze/ksg_final_en_bf.pdf.

⁵ These are: energy; industry; transport; buildings; agriculture; and waste and others.

⁶ <https://www.ilmastopaneeli.fi/wp-content/uploads/2019/05/Overview-of-national-CCCs.pdf>

for a transparent public appointments process to appoint members to the Council. Doing so could help to alleviate concerns about the Council's independence.

Senator Higgins also questioned whether the Council should have a role in advising on the setting of sectoral decarbonisation ranges as well as on the overall carbon budgets. In my judgement, this task more appropriately falls within the remit of the executive. In practice, the Council would be likely to indicate the basis on which it arrived at its overall recommendation for a carbon budget, including sectoral analysis. Therefore, the Council would be likely to either implicitly or explicitly suggest a sectoral division of mitigation effort.

Senator Higgins further questioned whether the Council should be required to “have regard to” “the policy of the Government on climate change” in performance of its functions (S.3(3)(b)). I do not consider this to be problematic. As other expert contributors to the Committee's scrutiny of the Draft Bill have noted, “have regard to” constitutes a relatively weak legal obligation. It seems appropriate to me that the Council ought to have regard to government policy on climate change but that it may depart from this in its recommendations if it sees fit.

4. Use of offsets

Senator Lynn Boylan posed a question regarding the possibility of limiting the use of offsets in the mitigation effort. As Senator Boylan suggested during the Committee hearing, the Scottish Climate Change Act of 2009, amended in 2019, provides detailed arrangements for carbon accounting, including restrictions on the use of offsets.

The Draft Bill is silent on the specific question of offsets, but it appears that offsets cannot be used in calculating the state's compliance with emissions targets set under the Bill. The term “climate neutral” contained within the National 2050 Climate Objective is defined in the Bill as follows: “greenhouse gas emissions are balanced or exceeded by the removal of greenhouse gases”. Carbon budgets are defined as “in relation to one or more greenhouse gases, the total amount of greenhouse gas emissions that are permitted during the budget period”. The term “emissions” is defined as “in relation to greenhouse gases, emissions of those gases into the earth's atmosphere attributable to industrial, agricultural, energy or other anthropogenic activities, *in the State*” (all definitions from S.2(a), emphasis added). The consequence of this definition of “emissions” would appear to be that offsets cannot be counted as part of the state's compliance with either carbon budgets or the 2050 objective.

5. Poverty proofing, social justice and just transition

Senator Pauline O'Reilly questioned how priorities around poverty proofing, social justice and just transition could be incorporated into the Draft Bill and the extent to which these matters should be elaborated in the Bill versus being better dealt with through policy. The aim of legislation such as the Draft Bill is to provide a framework to guide climate action

rather than specifying every last detail, and there is a balance to be struck in terms of including essential principles while avoiding over-prescription.

Nonetheless, there is merit to further elaborating such concepts in the Draft Bill. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019,⁷ which amended the Climate Change (Scotland) Act 2009,⁸ provides a useful elaboration of the principles of climate justice and just transition and how they should shape policymaking. It requires the government, when developing a climate action plan (once every five years), to have regard to the “just transition principles” and the “climate justice principle”. Moreover, the climate action plan is required to (“must”):

“(a) explain how the proposals and policies set out in the plan are expected to affect different sectors of the Scottish economy and different regions in Scotland, including how they are expected to affect employment in those sectors and regions, and

(b) set out the Scottish Ministers’ proposals and policies for supporting the workforce, employers and communities in those sectors and regions.” (S.35(20))

The climate justice principle is defined as:

“the importance of taking action to reduce global emissions of greenhouse gases and to adapt to the effects of climate change in ways which—

(a) support the people who are most affected by climate change but who have done the least to cause it and are the least equipped to adapt to its effects, and

(b) help to address inequality.” (S.25(33))

The just transition principles are defined as:

“the importance of taking action to reduce net Scottish emissions of greenhouse gases in a way which—

(a) supports environmentally and socially sustainable jobs,

(b) supports low-carbon investment and infrastructure,

(c) develops and maintains social consensus through engagement with workers, trade unions, communities, non-governmental organisations, representatives of the interests of business and industry and such other persons as the Scottish Ministers consider appropriate,

⁷ https://www.legislation.gov.uk/asp/2019/15/pdfs/asp_20190015_en.pdf

⁸ https://www.legislation.gov.uk/asp/2009/12/pdfs/asp_20090012_en.pdf

(d) creates decent, fair and high-value work in a way which does not negatively affect the current workforce and overall economy,

(e) contributes to resource efficient and sustainable economic approaches which help to address inequality and poverty.” (S.35C(1))

6. Biodiversity

Both Senator Alice-Mary Higgins and Senator Lynn Boylan raised the question of how protection of biodiversity could be incorporated into the Draft Bill. This is somewhat beyond my immediate area of expertise. I note that, since my appearance before the Committee, Prof. Yvonne Buckley of Trinity College Dublin has also appeared as an expert witness. I would defer to her expertise on this topic and, having reviewed her opening statement, support the recommendations she made therein.⁹

7. Sustainable Development Goals

Senator Alice-Mary Higgins asked how the importance of the UN Sustainable Development Goals could be reflected Draft Bill. The current draft lists “the need to promote sustainable development” as one of the 25 items which government must “have regard to” in carrying out the activities specified in sections 4, 5 and 6 of the Draft Bill (S.3(3)(k)). “Sustainable development” is not defined in the Bill, undermining the effectiveness of the provision. In order to provide greater specificity, this term could either be changed to “the 2030 Agenda for Sustainable Development”, or “sustainable development” could be defined in more detail elsewhere in the Bill.

The duties on government in respect of sustainable development and the UN Sustainable Development Goals could be strengthened. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019¹⁰ requires climate action plans developed under the Act to explain “how the implementation of the plan is expected to contribute to the achievement of sustainable development, including the achievement of the United Nations sustainable development goals” (S.35(20)). A similar requirement could be enshrined in the Bill. The Bill could also, under the proposed Section 11 (“Climate reporting”), require Ministers to report annually on progress towards achieving the UN Sustainable Development Goals.

⁹ https://data.oireachtas.ie/ie/oireachtas/committee/dail/33/joint_committee_on_climate_action/submissions/2020/2020-10-29_opening-statement-professor-yvonne-buckley-professor-of-zoology-trinity-college-dublin_en.pdf

¹⁰ https://www.legislation.gov.uk/asp/2019/15/pdfs/asp_20190015_en.pdf

Submission to Joint Committee on Climate Action, Committee for Pre-Legislative Scrutiny of the Climate Action and Low Carbon Development (Amendment) Bill 2020.

- Professor Yvonne Buckley

Executive summary

- We are in the midst of a climate and biodiversity crisis.
- Intact biodiversity leads to healthy, functioning ecosystems, without which climate change will have much worse impacts on agriculture, food security, the economy and people's wellbeing.
- Biodiversity is an inextricable component of the Earth system that regulates climate and which supports life on this planet. If we do not protect and restore biodiversity we will not meet our long term climate goals.
- Active restoration of biodiversity is a nature-based solution that, if done well, reduces emissions of greenhouse gases, enables carbon capture and storage and ensures the resilience to the disruptive effects of climate change of our land- and sea-scapes, and the critical ecosystem services they provide.

Summary of recommendations

- All policy instruments resulting from this Bill and the Principal Act should comply with, and actively support, the implementation of the National Biodiversity Action Plan.
 - The purposes for which moneys may be paid out of the Climate Action Fund should include (in addition to implementation of nature-based solutions) research on both the implementation of nature-based solutions for climate action and their efficacy in order to inform carbon budgets and the projections of greenhouse gas emissions, storage and sequestration.
 - Appropriate definitions of biodiversity and nature-based solutions be included in the Bill.
1. My expertise lies in ecology, the distribution, abundance and function of natural and human modified ecosystems. I am Professor of Zoology at Trinity College Dublin, a Member of the Royal Irish Academy, Irish Research Council Laureate and Co-Director of Nature+: the Trinity Centre for Biodiversity and Sustainable Nature Based Solutions. I was appointed by the Minister with responsibility for Heritage 2015 to serve as Chair of the National Biodiversity Forum. The Forum provides independent monitoring of progress on implementation of the National Biodiversity Action plan, ensures ongoing input into the development of national strategies to promote biodiversity conservation, works towards sectoral integration of biodiversity planning, improves stakeholder awareness and understanding of biodiversity, promotes North/South cooperation on biodiversity and provides progress reports to the Minister.
 2. I give my scientific opinion on the role of nature-based solutions in carbon reduction and the intersection with biodiversity within the Climate Action and Low Carbon Development (Amendment) Bill 2020.
 3. The first of seven objectives in The National Biodiversity Action Plan¹ is to "Mainstream biodiversity into decision-making across all sectors" so I am very glad to have this

¹ Department of Culture, Heritage and the Gaeltacht. 2017. National Biodiversity Action Plan 2017-2021. <https://www.npws.ie/sites/default/files/publications/pdf/National%20Biodiversity%20Action%20Plan%20English.pdf>

opportunity to present a submission on the importance of biodiversity and nature-based solutions to this committee. It is well recognised that we cannot tackle climate change without a consideration of the contributions of biodiversity to both climate change mitigation and adaptation². It is also well recognised that we are in the midst of a biodiversity crisis that threatens an estimated 1 million species with extinction over the coming decades. This matters for climate change because biodiversity, a component of our natural capital, provides climate regulating services for the planet and provides us with the resilience we need in order for people, our economies and society to withstand the climate change shocks that we are already locked into.

4. Biodiversity is the living element of natural capital which also includes water, atmosphere, rocks and soil that together underpin our survival and wellbeing. Intact biodiversity leads to healthy, functioning ecosystems, without which climate change will have much worse impacts on agriculture, food security, the economy and people's wellbeing².
5. Biodiversity and the deployment of targeted nature-based solutions can provide some of the solutions we need to achieve the global, European and national targets set to keep our planet liveable and maintain our wellbeing. Biodiversity provides solutions for both mitigation of climate change through its climate regulation ecosystem service, as well as the means of adaptation across many sectors to the impacts of climate change. Biodiversity is threatened by some of the same drivers that cause climate change and biodiversity is also under threat from climate change². Biodiversity is an inextricable component of the Earth system that regulates climate and which supports life on this planet. If we do not protect and restore biodiversity we will fail to meet our climate goals.
6. By reducing greenhouse gas emissions, as this Bill aims to do, we will be putting in place important future protection for biodiversity; and by managing some of the shared drivers of biodiversity loss and climate change we will gain some co-benefits for biodiversity. However, there is a risk that deployment of actions to reduce emissions and adapt to climate change may worsen existing drivers of biodiversity loss and introduce new drivers. We need more than passive benefits to biodiversity from climate change action to ensure that we maximise the contribution of biodiversity to climate change mitigation and adaptation. Active protection and restoration of biodiversity is a nature-based solution that, if done well, reduces emissions of greenhouse gases, enables carbon capture and storage and ensures the resilience to the disruptive effects of climate change of our land- and sea-scapes, and the critical ecosystem services they provide.
7. **I recommend** that the integral role of biodiversity in regulating the climate and ensuring long-term resilience to climate change be recognised explicitly in this Bill and that all policy instruments resulting from this Bill and the Principal Act comply with, and actively support, the implementation of the National Biodiversity Action Plan.
8. Biodiversity is only mentioned twice in the current Bill and not at all in the original 2015 Act. Natural systems and ecosystems are mentioned in relation to their role in adaptation and sinks (Principal Act, section 1).
9. **I recommend** that a definition of biodiversity be included in the amendment of section 1 of the Principal Act. The Convention on Biological Diversity (CBD) defines biodiversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine

² IPBES The global assessment report on biodiversity and ecosystem services. Summary for policymakers. https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf

and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems.”³

10. **I recommend** that the definition of nature-based solutions be included in the amendment of section 1 of the Principal Act. The EU Commission defines nature-based solutions as: “Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions.” Nature-based solutions must therefore benefit biodiversity and support the delivery of a range of ecosystem services⁴
11. The first explicit mention of biodiversity in the Bill is to ensure that expertise in biodiversity is present on the Advisory Council which is absolutely necessary and I am glad to see this specified. The second mention of biodiversity is in an amendment to the National Oil Reserves Agency (Amendment) and Provision of Central Treasury Services Act 2020 which provides for that fund to be used to “support projects that seek to increase the removal of greenhouse gases, particularly nature based solutions that enhance biodiversity”. It is useful to have the roles of biodiversity and nature-based solutions explicitly recognised here. However, I have some further recommendations for the wording of this and subsequent sections.
12. **I recommend** that instead of “enhance biodiversity”, which is somewhat vague and open to interpretation, that the national biodiversity strategy should be explicitly referenced. Much work goes into the national strategy and it should be the touchstone for all biodiversity related recommendations across the state’s remit. Implementation of the national strategy is key to achieving our national vision “That biodiversity and ecosystems in Ireland are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally.”
13. Nature-based solutions such as restoration of carbon rich ecosystems including (but not limited to) native forest, saltmarsh, peatlands and semi-natural grasslands can act to remove greenhouse gases from the atmosphere. This function of ecosystems is often referred to as “negative emissions”⁵ and there is the capacity to implement research and on-ground projects to maximise the benefits to both the climate and biodiversity from these examples of biodiversity restoration projects. It is excellent to see recognition of the importance of nature based solutions and biodiversity in the National Oil Reserves Agency (Amendment)...Act 2020, however it can be strengthened in the following ways:
14. **I recommend** that every reference to “increase the removal of greenhouse gases” in the National Oil Reserves Agency (Amendment)... Act 2020 include reference to biodiversity & nature-based solutions for consistency between supporting “projects” and supporting “research”. The efficiency and benefits from nature based solutions projects can be increased through targeted research as well as through implementation of existing solutions.
15. **I recommend** that references to preventing the emissions of greenhouse gases in the Bill through amendment of the National Oil Reserves Agency (Amendment) ... Act 2020 also reference biodiversity and nature-based solutions. Land degradation is responsible for an

³ Convention on Biological Diversity, UNEP/CBD/94/1.

⁴ https://ec.europa.eu/info/research-and-innovation/research-area/environment/nature-based-solutions_en

⁵ McMullin, Jones, McGeever, Price & Rice. (accessed 27/10/2020) Potential for Negative Emissions.

Environmental Protection Agency, Ireland <http://erc.epa.ie/safer/iso19115/displayISO19115.jsp?isoID=3149>

estimated 23% of global greenhouse gas emissions⁶. By putting in place nature-based measures to slow down and stop land degradation processes we can mitigate some of the effects of climate change. For example basic rewetting of degraded peatlands can reduce emissions that we are currently locked into due to previous peat extraction which has disrupted the ability of the peatlands to sequester carbon. Rewetting will also protect the remaining carbon store, preventing future emissions. Research is urgently needed to determine how best to actively manage the hydrology and revegetate rewetted peatlands in order to turn a greenhouse gas source into a greenhouse gas sink.

16. To demonstrate the efficacy of nature-based solutions and get recognised value from their implementation we need to measure and validate impact as well as monitor effectiveness, over short to longer timescales. For example, urgent remediation of degraded peatlands will be needed to prevent emissions that will become part of our carbon balance sheet.
17. **I recommend** that provision be made in the Bill through amendment of the National Oil Reserves Agency (Amendment) ... Act 2020 for support of research into adequate measurement and monitoring of the effectiveness of nature-based solutions which are implemented. These data are critical for setting carbon budgets and projecting future carbon emissions, storage and capture.
18. Nature cannot provide all of the solutions to climate change, but without consideration of nature we will fail to mitigate and adapt to climate change. We absolutely need the reductions in greenhouse gas emissions across the many sectors that this Bill seeks to enable. However, explicit recognition of the role that biodiversity and nature-based solutions can play in mitigating and adapting to climate change will ensure that climate actions we take will be win-win for both climate and biodiversity rather than trading biodiversity off to service climate action. Side-lining biodiversity in efforts to mitigate and adapt to climate change will undermine the systems that give us the long term resilience we need to get through this crisis.

⁶ IPCC, 2019: Summary for Policymakers. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.- O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press. https://www.ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM_Updated-Jan20.pdf

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MaREI

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Oireachtas Committee Pre-Legislative Scrutiny of the Climate
Action and Low Carbon Development (Amendment) Bill 2020:

Citizen Engagement and Dialogue

November 6th 2020

*Brian Ó Gallachóir, Clare Watson, Alexandra Revez, Evan Boyle, Connor McGookin, Aoife Deane, Ed Byrne,
Clodagh Harris, Ian Hughes, Fionn Rogan, Niall Dunphy and Ger Mullally*

HOST INSTITUTION



PARTNER INSTITUTIONS



OPENING

- *Dr. James Glynn from MaREI presented evidence on carbon capture and offsetting to the Committee on October 29th 2020. He acknowledged in his evidence (point 17) ‘the role of early dialogue and societal buy in. Behaviour change and demand reduction will be required. The national objective is unlikely to be met by technological means alone.’*
- *During the discussion with Committee Members, a number of questions focussed on citizen engagement and dialogue and the Committee requested further information from MaREI on these topics.*
- ***This submission responds to the Committee request***, summarising insights from recent MaREI research on the societal dimensions of the energy transition, with a particular focus on citizen engagement and dialogue. *There is an urgent need for a more strategic approach to stakeholder and citizen engagement with a focus on inclusion, participation, deliberative methods, collaboration, and activation.*
- *More detail on the points raised here are added as an accompanying set of appendices.*
- ***MaREI would welcome the opportunity to present this to the Committee in the new year, should the opportunity arise.***

KEY POLICY INSIGHTS FROM RESEARCH

- 1) The role of communities is seen as **essential** in the energy transition, and yet it is **poorly understood**. Drawing on a three year MaREI research project¹ engaging with Irish energy communities, some key **insights** emerge:
 - a) Energy citizenship is an accepted ambition, but **energy communities are struggling** to operate and to upscale their activities.
 - b) Communities are very diverse with **different needs and capacities** (e.g. rural dispersed, urban high density, age profile, socio-economic profile, gender, ethnicity, etc.)
 - c) There is significant **untapped potential within intermediary groups** (e.g. tidy towns groups) that are not directly associated with the energy transition.
 - d) We **expect a lot** from volunteers. They need to be supported and adequately resourced.
 - e) **Core funding** for the employment of **skilled staff and for administrative costs** in communities is lacking and this needs to be addressed.
 - f) A lot can be learnt from an **evaluation** of the community energy experience.
 - g) Approaches to support community energy should be developed that respond to the **varied capacities** of different communities.
 - h) Evaluating community energy projects should include evaluating **societal capacity development**, alongside evaluating CO2 savings.
 - i) **Practical support** should be provided for intermediary organisations, such as Tidy Towns, if their role is to be maximised.
 - j) Community energy does **not guarantee** community acceptance, however, more transparent and inclusive decision-making processes can help ease tensions.

- 2) MaREI hosted a workshop in 2019 with community engagement practitioners (co-funded by the National Dialogue on Climate Action) entitled *How do we Engage Communities in Climate Action? Practical Learnings from the Coal Face*². The key insights were
 - a) **People are at different stages of the climate action spectrum** - Some are aware of climate change and many are already acting or ready to act, others are still unconcerned and hard to motivate.
 - b) **We need to begin each engagement from 'where people are at'** - This will allow us to support the 'converted' to continue acting, while also encouraging those who show little interest to get involved.
 - c) **Move from awareness raising to action** - Participate in active honest engagement. When people say what they want, focus on what they can do about it. Don't just organise public meetings.
 - d) **Get the messaging right** - Messages need to be tailored to the particular audience (e.g. rural, urban, age, gender, socio-economic group). How they are communicated, and by whom, is critical.
 - e) **Target key community leaders and tap into existing groups** - Work with leaders who are respected by the community. Go to people rather than expecting them to come to you.
 - f) **Engage young people** - Involve and enable young people in decision-making. Ask them what they think are the solutions, and how they can be implemented. It is their future.
 - g) **Communities need support, capacity building and resources** - People are time poor, so there needs to be a shift beyond volunteerism. Realistic resources need to be provided by state agencies to support local people in taking action. Existing barriers to local climate action need to be identified and removed.
- 3) A second workshop in 2019, organised by the Imagining 2050 project team, drew on the practical experience of researchers in the field of community engagement in climate action. Entitled *Innovative-Methods of Community Engagement*³,
 - a) the key message lies in demonstrating and communicating the value of engaging communities **within a greater network** of activities, techniques and groups.
 - b) additionally a number of strategies emerged to **reach out to more alienated** or disengaged groups and these included the value of intermediaries and partnerships, promoting peer-to-peer learning and strengthening strategies through resourcing.
- 4) Climate justice remains a priority for Ireland and across Europe that needs development, in particular⁴ (based on scoping analysis of key research), adequate tools to assess the social impacts of climate policies for different groups as well as develop an intergenerational approach to climate justice.
- 5) Our Imagining 2050 project (short video [here](#)) has given us new insights into citizen engagement on climate action, drawing on our engagements in [Ballincollig](#) and in [Athlone](#). In addition we've gained a perspective on [why we need a technological dialogue around climate change](#).
- 6) Language used is important. Research drawing on citizens perceptions across Europe suggests the emphasis should be placed on **the energy citizen not energy consumer**. The citizen is 'owner' of their energy supply, and has an ability to actively participate in the energy market as well as important decision-making processes⁵.

- 7) Concepts such as 'energy citizen' tend to ignore crucial questions of unequal agency and access to resources. Energy citizenship needs to be reconceptualised to incorporate **more collective and inclusive contexts for action**⁶.
- 8) The [Dingle Peninsula 2030](#) project (short video available [here](#)) is a very innovative rural energy community transition to a low carbon future. It is providing very interesting insights into the **diffusion of sustainability**, with many more insights available in early 2021.
 - a) **collaboration and trust building are critical to success.** The Dingle Peninsula 2030⁷ project brings together Dingle Creativity and Innovation Hub, ESB Networks, North East West Kerry Development, and MaREI in a very novel partnership.
 - b) MaREI supported the development of the Dingle Sustainable Energy Community's [Energy Master Plan](#) and has drawn out the lessons learned⁸. Financing can be challenging, the survey proved time intensive with low response rate, barriers were identified in accessing data and challenges can arise if consultants do not have community engagement skills.
 - c) MaREI is developing an energy and emissions web portal for Ireland at county level. This can be a significant resource for Local Authorities and Sustainable Energy Communities.
 - d) Some insights are emerging relating to individual events (for example a **LED bulb swap**⁹ short video [here](#)) e.g. people are generally interested in improving the energy efficiency of their homes but may be unable or unwilling to make the significant investment that may be required for a retrofit
 - e) The **Dingle Secondary School Climate Hack**¹⁰ (short video [here](#)) pointed us to focussing on developing an idea rather than calculating CO₂ savings or a cost estimate. The most important element of the event is to give young people an opportunity to make suggestions. The climate hack has informed our engagement with the Department of Education on how climate action might be integrated into the maths curriculum.
- 9) MaREI's DIIS (Deep Institutional Change for Sustainability and Well-Being) project (short video [here](#)) aims to critique and re-imagine the foundational social institutions in society in order to examine how they can be better configured to address the existential challenges we face. With regard to democracy, inclusive citizen participation and community engagement in co-designing policy the preliminary findings¹¹ of the DIIS project include:
 - a) Democratic institutions **need to be more inclusive, participatory and deliberative**, in order to resist the threat of 'democratic decline' and tackle global threats, including the climate crisis.
 - b) Ireland has '**blazed a trail**' internationally in its use of Citizens' Assemblies to decide on matters of constitutional reform as well as 'wicked problems' such as climate change. They, and more recently the Climate Assembly UK and the French Convention Citoyenne pour le Climate, have demonstrated the feasibility of new democratic practices that empower citizens and influence policy. They have been welcome developments but are, at the end of the day, **only the tip of the iceberg** in terms of inclusive citizen and community participation on climate action.
 - c) **New spaces for citizens and communities** to revisit the meaning of democracy itself in our era of deep transformation are needed to tackle intractable policy challenges that require long term solutions but are impervious to short term electoral cycles. These spaces should **emphasise fact, future and other** regarding approaches and recommendations.

- d) These new participatory and deliberative spaces should invite citizens, communities, civil society organisations, policy makers etc., to work together and separately to **revisit and reimagine the form of democracy, sustainability** and human flourishing that is best for Ireland. It would involve deciding the core values and principles that should underpin and guide our response to the climate (and other) crisis(es).
 - e) These spaces should also deliberate on our role as citizens and communities in collectively shaping sustainable futures in Ireland and how Ireland can contribute to democracy, **sustainability and climate justice** internationally.
 - f) The DIIS project aims to further re-imagine democracy based on principles of citizen participation, the inclusion of marginalized voices, including children, young people and those of future generations and climate justice.
- 10) MaREI is also undertaking collaborative research with community engagement practitioners in eight **public bodies** in Ireland to develop some good practice guidelines for community engagement processes. While a flexible approach to engagement must be taken due to the diverse forms which communities take, some universal good practices are emerging:
- a) build a **profile of the community** as a first step. Review other projects- map out the area and identify any groups previously engaged with. This is **time intensive but essential**.
 - b) engage with a wide range of local stakeholders, early in the project. Build **early relationship** with those with strong opinions.
 - c) Parameters should be made **clear** from the outset. **Transparency** is a vital factor for successful engagement. Be clear about what's open for consultation and what's not.
 - d) **Pulse checks** throughout the engagement process. Reasons for moving from one step to another throughout the consultative process must be justified and understood within the community
 - e) Consultation reports should show where and how **feedback has been used**.

RECOMMENDATIONS FOR 2020 CLIMATE BILL

We warmly welcome this bill, but have a number of recommendations

- 1) We suggest strengthening, throughout the Bill, the role of **early dialogue, citizen engagement and the societal dimensions of climate action**. Section 3 subsection 3 may be an appropriate place to capture this.
- 2) We also suggest incorporating the **principles of citizen participation**, the inclusion of **marginalized voices**. Section 3 subsection 3 may be an appropriate place to capture this.
- 3) The Bill should expand on **measures to achieve climate justice** by including the need to create tools to assess and address climate justice for different groups (including **children, young people** and those of **future generations**) and to establish an intergenerational approach to climate justice issues.
- 4) It appears confusing to have the sections (6A-6D) on 'carbon budgets' as sub-sections of a section (6) on sectoral adaptation plans. These are **very distinct**. We suggest **moving** sections 6A-6D to a new section 7 focussing on carbon budgets.

- 5) It is crucial that the preparation of the local authority climate action plans (in section 14A) involves a **meaningful and purposeful dialogue with citizens**. In this regard, existing practices (as used during the drafting of County Development Plans or Local Area Plans) should be enhanced to include **deliberative discussions** bringing together key stakeholders such as; planners, citizens, business leaders, non-profit organisations, etc. We further suggest the Bill opens an opportunity to explore, at local authority level, the opportunities for community based / grass roots approaches, e.g. **participatory carbon budgeting**.
- 6) While not to suggest prescribing community engagement approaches, the development of some **good practice guidelines** at policy level can assist **public bodies** and organisations (section 15) in developing their own engagement procedures.

ACKNOWLEDGEMENTS

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Climate Change Advisory Council

Appendix to Letter re: Climate Action and Low Carbon Development (Amendment) Bill 2020

18th November 2020

1. Background

This Appendix discusses and offers advice on the recently published draft Climate Action and Low Carbon Development (Amendment) Bill 2020 ('the Bill'). The Bill (once enacted) will amend the Climate Action and Low Carbon Development Act 2015 ('the 2015 Act'). The Bill also amends the "National Oil Reserves Agency Act 2007".

2. Discussion

This section considers a number of key themes from the Bill, discussing their potential implications and makes recommendations where appropriate.

2.1 General comments

The final text of amendments to the Act would benefit from editing to be more concise and purposeful. Much of the draft text might be included in the preamble and explanatory texts and given mandate through more concise text in the actual legislation. Some specificities might be more appropriately omitted or addressed in secondary legislation. For example, Section 12(1)(a) provides that the Advisory Council shall conduct the Annual Review by 15 September in each year of the progress made during the "immediately preceding year".

While there may be benefits to stipulating a date or indeed suggesting an earlier one, it must also reflect that some of the core data necessary for timely and relevant analysis and review is not available until mid-April.

It is noted that there are also areas, however, where more detail or clarity is required on important issues.

The final Act will need to be flexible to be able to reflect developments at International and EU level to avoid the need to revisit the legislation at a later date. Ireland has the ability to



define its own emissions reduction target which should be ambitious and in line with best available science and our status as a developed economy, but at a minimum we must meet our obligations under EU law, which are likely to be revised through negotiations under the more ambitious emissions reduction targets to 2030 proposed by the EU Commission.

2.2 Climate governance

During the discussion at the Oireachtas Committee it has been noted that the Bill appears to weaken the commitment to achieve the overarching climate objectives. The language changes from “**to pursue, and achieve,**” to simply “pursue”.

*“The State shall **pursue** the transition to a climate resilient and climate neutral economy by the end of the year 2050 (in this Act referred to as the ‘national 2050 climate objective’).”*

The Council recommends the language with regard to the new 2050 objective should retain a similar level of commitment conveyed in the “to pursue, and achieve” language adopted in the Act.

The proposals with respect to the Climate Action Plan would appear to create a weaker instrument than the National Mitigation Plan. The mandated reporting is weaker. It is not clear whether the Plan is subject to the same public consultation and the requirements of the SEA and Habitats Directives. The Climate Action Plan is defined explicitly as a roadmap to the long-term goal rather than a plan as such (despite its title).

The existing Climate Action Plan 2019 is more than a roadmap, and as such overachieves what would be required under the Bill. The Bill only requires “updates” to the Climate Action Plan, and it is unclear what legislative status an update would have. The Council believes, following the Supreme Court decision in Appeal No 205/19 (31 July 2020), that future Climate Action Plans should maintain the existing legislative provisions for National Mitigation Plans while adopting the enhanced action, and governance and implementation structures, seen in the Climate Action Plan 2019. Climate resilience is part of the proposed national 2050 climate objective, but closer consideration should be given to how adaptation and the 5 year National Adaptation Framework process links to the long term strategies and particularly the annual climate action plans. It remains important that adaptation is mainstreamed in the other plans, processes and climate governance. The long-term strategy and annual climate plans, as presented, only relate to the mitigation element of the 2050 objective.

2.3 Carbon budgets

Carbon budgets need to be grounded in solid, thorough, research and analysis, so sufficient resources need to be given to the task, along with sufficient time, particularly for the first set of three carbon budgets.

The level of detail and nature of the carbon budgets is unclear. The Bill outlines that the Minister will set sectoral decarbonisation ranges. It may be that the Bill envisages that the Council only prepares a very high-level carbon budget for the whole economy while the Minister does the detailed work of allocating the budget by sector in each five-year budget period. However, to determine the appropriate time-path for decarbonisation, to be embodied in the carbon budgets, it would be necessary to consider the effects of such a time path on different sectors, the cost of compliance and the benefits arising from earlier action. Thus, the research necessary to undertake even a high-level budget allocation would also be an essential underpinning for the decisions on allocating the carbon budget across sectors. This means that it would not be easy to separate decisions on the high-level carbon budgets from decisions on how the budget would be allocated across sectors.

Value for money/net benefits to society is not on the list of criteria for the Council in developing a budget proposal, while it is on the list of criteria for the Minister in setting the budget and in the subsequent process of setting sectoral decarbonisation target ranges. If this is the intention, then the detailed carbon budget and sectoral decarbonisation target ranges should be considered by the Council - something that is not envisaged in the Bill.

When comparing the mandated list of criteria for the Council to consider in developing carbon budgets S. 3(3)(a)-(d) and 6A(6)(a)-(b) to the list of criteria S.3(3)(a)-(y) which the Minister shall use to decide on a carbon budget to put to the Oireachtas, it could be suggested that the Minister has 21 potential reasons to reject the Council budgets. This may lead one to question the value of the Council preparing carbon budgets.

The list of criteria for the Council to take into account when developing proposed budgets excludes considerations of feasibility and cost which are included in the Minister's list of criteria. This constraint on Council deliberations may make it more likely that budgets proposed by the Council would not be accepted by the Minister. For example, how could the Council propose a budget without consideration of whether Carbon Capture and Storage is or is not a feasible technology in the timeframe under consideration? Furthermore, cost is an

important issue to consider in setting budgets, taking into account external costs such as air quality synergies or trade-offs; how costs impact on different segments of the population etc. A useful consideration of just transition or climate justice is hard to conceive without having a proper analysis of the costs implied in different carbon budget levels.

The designation that the 3rd budget period and subsequent 'new' budgets as 'provisional' for 5 years is very unusual in carbon budget law. There are general provisions in the Bill for revisions of budgets in response to changes in science, changes in international obligations and due to use of banking/borrowing – this is common practice internationally. However, as drafted, provisional budgets could be subject to change for any reason or none. This reduces the policy certainty that a 15 year budget cycle is supposed to create (reducing the policy certainty down to 10 years or less). The Council is not aware of any other climate law which makes this distinction between carbon budgets.

A number of the criteria set down in the Bill are not defined. For example, it is difficult to consider how to take climate justice (as required under S.3(3)(c)) into account in setting carbon budgets without being provided a definition.

Drawing up robust carbon budgets requires working with detailed models of different sectors of the economy, to be able to explore the implications of different pathways, scenarios and policy interventions. The Council does not have access to these models at present and this would be a prerequisite for the Council to perform this statutory duty.

The timelines for development of carbon budgets proposed in the Bill is impractical. If we look at other jurisdictions, Councils/Committees were given in excess of a year to develop the first set of carbon budgets. In this case, the Council is being given less than three months from the publication of the heads of the Bill, without knowing what the final text of the Act will contain. Other timelines in the Bill for consultation of the Minister with the Council are also incredibly short. If a carbon budget is not accepted by both Houses of the Oireachtas, the Minister must within 2 months; consult with other Ministers, consult with the Council and either amend and resubmit the carbon budget to the Oireachtas or outline reasons for not amending. The practical implications for the Council to respond to such an important and potentially complex request in a very short time frame will be hard to manage.

It is difficult to determine the final resource requirement, particularly while awaiting the final amendment text. The practical implications of the incredibly short time-frame, determining



resource requirements and then requesting and securing those resources severely impacts on the Council's ability to deliver this work package within the outlined timeframe.

Council Recommendation: If the Council is mandated to develop economy-wide carbon budgets, the Council recommends that it should be mandated to take into account cost and feasibility in different sectors in developing those budgets. The Council also recommends that no budget for any period should be designated as provisional. The Council recommends that the timelines be reconsidered as the Council will require at least a year, from enactment of the Bill and allocation of appropriate resource, to develop the first set of three carbon budgets.

Sectoral decarbonisation target ranges

The Council is concerned about the proposal in the Bill to adopt sectoral decarbonisation target ranges in order to implement carbon budgeting. The 'decarbonisation target range' means the target range of greenhouse gas emissions that are permitted in different sectors of the economy within the limits specified in the carbon budget. It is important that this approach includes measures to ensure accountability. While clearly the carbon budgeting process needs to be sufficiently flexible to take new circumstances into account, it is important that the minimum ambition level for each sector sum to the carbon budget set for the whole economy.

Council recommendation: The Council recommends that it should be consulted on sectoral decarbonisation target ranges prior to their adoption by Government.

2.4 Climate Change Advisory Council

The text is very specific in places. This may constrain the Council in both its operations and procedures. A number of areas in which this occurs are outlined below.

For example, the Council is required to advise on the preparation of a Climate Action Plan (S. 11(1)a). But there is no requirement on the Minister to prepare a Climate Action Plan under the amended Act, only to update the existing Climate Action Plan. Greater clarity on the proposed functions of the Council would be useful.

For example, the Act setting up the New Zealand Climate Change Commission begins the relevant section as follows:

The purposes of the Commission are:



- (a) to provide independent, expert advice to the Government on mitigating climate change (including through reducing emissions of greenhouse gases) and adapting to the effects of climate change; and*
- (b) to monitor and review the Government's progress towards its emissions reduction and adaptation goals.*

Council recommendation: The Council recommends that a general statement of the functions of the Council be included in Section 11.

2.4.1 Governance

The Bill under S.9(14B) and S.9(14C) would appear to impose a simple majority voting procedure for 'Every question at a meeting of the Advisory Council'. While, the intention of the proposed legislation is to provide structure to the procedures of the Council, in practice this may have adverse impact on how the Council would operate.

The mandate for majority voting on "every question at a meeting" appears in many statutes and similar documents (such as standing orders) and it means the matters which are for decision by the Advisory Council, which will usually be set out in the board papers circulated in advance of meetings. However, this mandate runs counter to the current approach of Council which seeks to achieve consensus on issues in the first instance. Obliging a formal vote undermines this and may discourage discussion and consideration of minority opinion on the Council and engender division rather than coalescing of views.

Where specific questions are voted upon, it is unclear whether the intent is that the vote of each member present is recorded. This could be problematic as it would undermine the authority of Council advice and may lead to targeting of individual Council members by lobbyists or special interest groups who may disagree with positions taken.

Council recommendation: The procedures of Council meetings should be open and transparent, but the Council recommends that it not be imposed in legislation.

2.4.2 Membership

The Council welcomes the proposal to introduce a greater level of diversity into the membership of the Council. However, the listed expertise required of Council members in S.9(4) under the Bill could be exclusionary as currently drafted. It makes no reference to



expertise in adaptation and resilience, or to engineering disciplines or practices. The Bill does not recognise expertise beyond academic or policy arenas.

There was discussion at the Oireachtas Committee to include 'representation' from diverse stakeholders e.g. youth and trade unions, on the Council. The Council believes the role of a representative advisory body is different from that of an expert advisory body. The Climate Change Advisory Council should comprise people with a range of different expertise.

The Council has found it valuable to have international expertise at the table and the Bill should not exclude this possibility.

Council recommendation: The Council recognises the need for appropriate expertise on the Council but recommends less specific wording in the legislation to avoid exclusion of possible important areas of expertise.

2.4.3 Deliverables

There are a number of additional tasks implied in the Bill that could overload the Council and dilute the impact of its work. These are not necessarily something that additional resourcing can address, as they also raise practical issues around timelines. Adopting a less prescriptive approach to consultation in the Bill may assist with this.

For example, while acknowledging the importance of early consultation with the Council, the Bill requires, in practice, the Minister and then separately, the Government, to consult with the Council on the update of the Climate Action Plan every year. While at the same time the Council is also required to review the most recently approved Climate Action Plan in its Annual Review. This effectively would be three rounds of Council deliberation on the same Plan, which could be burdensome without necessarily adding value.

Furthermore, the requirement for the Council to consider the latest approved Climate Action Plan in the Annual Review (on the basis the 25 criteria set out in S.3(3)(a)-(y)), alongside existing mandated elements and the addition of reporting progress in carbon budgets may make the process of developing the Annual Review very unwieldy.

A practical concern is that in providing advice on any topic, the Council will be required to demonstrate (probably through documentation) how it addressed each of the 25 criteria and the result. Otherwise, the Council could be exposed to judicial review as not meeting its legislated mandate.

The existing Act (S.11) is unclear as to circumstances and procedures by which the Government, Minister, and Ministers shall seek advice of the Council during the development of climate policy. The Amendment Bill is an opportunity to resolve these questions.

Council recommendation: The Council believes that the list of criteria is too long. Council recommends that its deliberations should be based on a set of principles rather than a long mandatory list of criteria. The Council recommends that consultation by Government with the Council should be streamlined so that the Council is afforded sufficient time for its deliberations. Only one ex ante consultation on a given policy or plan should be mandated.

2.5 Biogenic methane

The underlying concept for criteria S.3(3)(y) as regards consideration of biogenic methane is sound, i.e. the scientific consensus which has emerged with respect to the requirement for a reduction in global methane emissions, and the role of biogenic methane in this effort.

However, the explicit reference to the IPCC 1.5 report is not valid, as the report does not make reference to biogenic methane, this actually appears in the IPCC AR5 2013.

It is very unclear how biogenic methane should be treated by Government, Minister(s) and the Council in their deliberations on carbon budgets, policy development and annual review of progress.

In 2019 the Council recommended a separate target for methane. Discussion at the Oireachtas Committee suggests that the language in the Bill leaves open the option for a separate target for biogenic methane. However, this is not explicit in the Bill, and requires a very close reading of a number separate provisions to take this view, specifically;

- section 3(3)(b) policy of the government on climate change (which could in future include a target for biogenic methane)
- section 3(3)(y) the distinct characteristics of biogenic methane
- section 2 (a) the definition of climate neutral economy *means a sustainable economy, where greenhouse gas emissions are **balanced** or exceeded by the removal of greenhouse gases*; this could be interpreted as either a balance of accounted emissions or of the climate impact of those emissions (e.g. temperature)
- section 2 (a) the definition of carbon budget *means, in relation to **one** or more greenhouse gases, the total amount of greenhouse gas emissions that are permitted during the budget period*;

These provisions could be read as a very tenuous justification for the Council or a Minister to develop a separate approach to budgeting for biogenic methane. The Council believes the New Zealand Climate Act provides a useful template on how to legislate on biogenic methane.¹

Council recommendation: The Council reiterates its advice to clearly legislate for an approach to carbon budgeting which includes a separate ambitious 2050 target for reduction in emissions of biogenic methane. Provision should also be made for the Council to provide advice on the appropriateness of the target for biogenic methane in the context of future climate action.

2.6 Climate neutral economy

In the draft text a 'climate neutral economy' is defined as "a sustainable economy, where greenhouse gas emissions are balanced or exceeded by the removal of greenhouse gases". This definition does not make clear the scope of emissions included in an assessment of the economy.

It is not clear whether only emissions occurring in Ireland are to be balanced. It is also not clear whether emissions arising from international aviation and maritime activities, which service the Irish economy, are included. More generally, should assessment include emissions associated with the production and distribution of goods and services imported from outside the State. It is worth noting that the Programme for Government, June 2019, includes a commitment to undertake an assessment of greenhouse gas emissions based on consumption.

It is not clear whether the balance is to be achieved by domestic action only nor under what circumstances Ireland could avail of extra-territorial removals generated within the EU or in other countries. It is worth noting that intra-EU trading of removals is proposed under the EU Climate Plan on the basis of certified removals.

The draft Bill does not consider non-territorial emissions or removals associated with consumption in Ireland nor support for climate action in other countries. The Council notes that the recent Danish climate law contains provisions in this regard. A part of the climate act focusing on reducing emissions outside of Ireland's borders could contain the framework

¹ <https://www.mfe.govt.nz/climate-change/zero-carbon-amendment-act>

for a strategy which seeks to reduce global emissions of greenhouse gases, both through domestic initiatives, such as technological development and reduced consumption of imported goods with large climate footprints, or through initiatives in other countries, such as assistance to developing countries.

The greenhouse gases to be covered are not defined. The metrics for aggregating different greenhouse gases are not defined. The greenhouse gases and activities covered under EU processes are clearly defined. It is not clear if it is intended to establish these as the reference gases and adopted metrics agreed at EU level.

The Council should be given the mandate to advise on the rules that will apply to measure progress towards meeting emissions budgets and the 2050 target.

Council recommendation: The Council recommends that the Bill should require the achievement of the 2050 objective. The emissions and removals to be accounted towards the 2050 objective should be clarified.

2.7 Carbon leakage

The definition of Carbon Leakage proposed in the text is not appropriate in the context of national emissions across all sectors. The text appears to be based on a definition in EU policy in the context of the Emissions Trading System.² The IPCC offer more generic text which may be adapted to an Irish context: Carbon leakage can be defined as the ratio of emissions increase from a specific sector outside the country (as a result of a policy affecting that sector in the country) over the emission reductions in the sector (again, as the result of the environmental policy).³

An alternative definition might read:

Carbon leakage can be defined as the emissions increase from a specific sector outside the State as a result of a policy affecting that sector, compared to the emission reductions in the sector within the State.

² 'Carbon leakage refers to the situation that may occur if, for reasons of costs related to climate policies, businesses were to transfer production to other countries with laxer emission constraints. This could lead to an increase in their total emissions.'

https://ec.europa.eu/clima/policies/ets/allowances/leakage_en

³ Reinaud, J., (2008), "Issues behind Competitiveness and Carbon Leakage. Focus on Heavy Industries". IEA information paper.

Council recommendation: The Council recommends that the definition in the Bill should be revised to more appropriately reflect the concerns in this area.

2.8 Offsetting

The Bill does not contain any provisions for offsetting in the event of failure to meet carbon budget limits. The Council advice on this topic was that carbon budgets should be feasible such that offsets are not anticipated to be required. The recent EU Climate Plan published by the European Commission envisages a continued role for emissions trading within the EU to meet the EU 2050 objective of climate neutrality. The possibility of trading is ignored in the Bill.

Other jurisdictions allow offsetting or trading to meet national carbon budgets with special oversight mechanisms/approvals required. The Council notes that a requirement to purchase offsets in the event of not meeting a sector target or carbon budget may act as an incentive for compliance.

Council recommendation: The Council recommends that the Bill should allow for consistency and potential interaction with any future EU regulated trading mechanisms for achievement of the EU climate objective.