

Comparative Assessment of the Climate Action and Low Carbon Development (Amendment) Act 2021

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Executive summary

Responding to climate change requires unprecedented and concerted responses across all sectors of economy and society. Framework climate laws are an increasingly common governance response to the challenge of achieving the scale of transformation required. They can provide an overarching framework to coordinate government responses to the climate crisis, send a clear signal to all sectors of economy and society about a collective commitment to climate action, and make it politically more difficult to backtrack on policy commitments. Framework climate laws have been enacted across a growing number of countries in Europe and beyond.

This report undertakes a comparative assessment of Ireland's Climate Action and Low Carbon Development (Amendment) Act 2021. It assesses the extent to which the new Climate Act delivers eight core components that have been identified in international comparative research as key features of national framework climate laws. The key findings of the assessment are as follows:

Long-term targets: The 2021 Act strengthens significantly the provisions of the 2015 Act by adding a specific decarbonisation target of climate neutrality by 2050 at the latest, with the addition of a recognition of the importance of protecting biodiversity. This brings Ireland's approach into line with the EU commitment to climate neutrality by 2050 as enshrined in the European Climate Law of 2021, and also into line with many other climate laws, although some have earlier target dates for climate neutrality.

Intermediate targets: The 2021 Act represents a significant strengthening in terms of intermediate targets relative to the 2015 Act. It introduces a system of carbon budgeting and makes provision for the setting of the first two budgets at a level consistent with the Programme for Government (PfG) commitment to reduce greenhouse gas (GHG) emissions by 51% over the course of the current decade. The amendments bring Ireland's legislative framework broadly into line with international best practice and provide for a level of decarbonisation that is extremely ambitious by international standards. The language regarding how sectoral targets are to be set and ministers' duty to comply are somewhat lacking in clarity.

Arrangements for policy planning: The 2021 Act strengthens provisions for climate mitigation policy planning. The requirement to produce an annually updated Climate Action Plan has been placed on a statutory footing, and a requirement to produce a Long Term Strategy every five years has effectively replaced the obligation under the 2015 Act to produce a National Mitigation Plan. Both the Climate Action Plan and the Long Term Strategy are required to be consistent with the carbon budget programme as well as the state's EU and international obligations. There is minimal change to adaptation policy planning. By combining requirements for long-term and short-term policy planning that is consistent with EU and international obligations, these changes place the Irish legislative framework towards the front of the pack in international terms.

Incorporation of expert advice: The 2021 Act strengthens the role of the Climate Change Advisory Council (CCAC) as both an *advisor* and a *watchdog*. The Council has been given a strong advisory role in the setting of carbon budgets, and by extension will play a stronger watchdog role in monitoring compliance with those budgets. In comparison with other jurisdictions, however, the CCAC remains an outlier regarding its composition, which could undermine its perceived independence. These concerns remain unaddressed in the 2021 Act. Concerns persist also regarding resourcing of the CCAC, potentially undermining its ability to fulfil its remit fully.

Public participation: The 2021 Act does little to change the provisions for public participation in national climate policy planning, though such provisions are somewhat stronger in respect of the preparation of local authority climate action plans. However, Climate Action Plans produced under

the Act are required to include provisions on public dialogue. The Irish legislative approach is broadly in line with other jurisdictions, as most framework climate laws do not contain strong provisions for public participation.

Institutional arrangements and responsibilities: Institutional arrangements and responsibilities under the 2021 Act represent a progression on the 2015 Act, but are still somewhat lacking in clarity. Coordination mechanisms are largely absent from the Act itself but have been significantly strengthened in recent years on a non-legislative basis. The provisions regarding responsibilities of local government have been significantly strengthened. International practice in respect of institutional arrangements varies considerably, making international benchmarking on this dimension challenging to undertake.

Progress monitoring and reporting: The 2021 Act significantly strengthens progress monitoring and reporting. Reporting by the CCAC is strengthened by virtue of the fact that it must now report on progress against the national climate objective and the carbon budgets. Ministers are now required to be accountable to a joint committee of the Oireachtas, and to respond in writing to any recommendations of the joint committee within 3 months. Additionally, the annual update to the Climate Action Plan is required to address any shortfalls in meeting the carbon budget and sectoral emissions ceiling. These changes bring the Irish legislative framework broadly into line with international best practice.

Enforcement and sanctions: The 2021 Act creates a range of new obligations on government, creating new opportunities for accountability. It does not include explicit provisions for sanctioning and enforcement in the case of failure to meet GHG reduction targets. This is partly a function of the particular types of duties imposed by climate laws in general, but is intensified by certain provisions of the Act. The absence of explicit provisions for sanctioning and enforcement is a common feature of framework climate laws internationally, and thus Ireland's legislative framework is broadly consistent with international practice in this regard.

1. Introduction

Climate change has been characterised as a "super-wicked problem" (Lazarus 2009) requiring unprecedented and concerted responses across all sectors of economy and society. According to the Special Report of the Intergovernmental Panel on Climate Change (IPCC) on *Global Warming of 1.5°C* (IPCC 2018), there is "no documented historic precedent" for the scale of transformation required to limit warming to the 1.5°C temperature threshold. The findings of the IPCC's most recent report, the contribution of Working Group I to the Sixth Assessment Report (IPCC 2021), were characterised as a "code red for humanity" by United Nations Secretary General Antonio Guterres and further emphasises the need for transformational responses.

Framework climate laws are an increasingly common governance response to the challenge of achieving the scale of transformation required. They are defined by Nash & Steurer (2019) as "framework legislation adopted by parliament that lays down general principles and obligations for climate change policymaking in a nation-state (or sub-state entity), with the explicit aim of reducing greenhouse gas (GHG) emissions in relevant sectors through specific measures to be implemented at a later stage".

Such legislation can provide an overarching framework to coordinate government responses to the climate crisis, while simultaneously sending a clear signal to all sectors of economy and society about a collective commitment to climate action (Duwe and Evans 2020b, 4). Enshrining climate commitments into law can limit the possibility of policymakers to "backtrack from earlier policy commitment ... Embedding targets in law, as opposed to setting them informally through white papers or statements, makes them more difficult to change procedurally and politically" (Averchenkova and Nachmany 2018, 110–11).

Framework climate laws have been enacted across a growing range of countries in Europe and beyond. In an assessment in late 2020, Duwe and Evans (2020b, 8) identified 19 OECD countries, including 14 European countries, that have enacted framework climate laws.¹ In addition, a European Climate Law entered into force in July 2021. A number of countries have revised or passed new framework climate laws in recent years, including Denmark, France, New Zealand, Mexico, and Germany.

This report conducts a comparative assessment of Ireland's Climate Action and Low Carbon Development (Amendment) Act 2021. It assesses the extent to which the new Climate Act delivers the components that have been identified in international comparative research as core features of national framework climate laws. This research was commissioned and funded by Friends of the Earth Ireland. The researcher retained full academic independence and editorial control throughout. The project Terms of Reference are included at the end of this report.

The next section sets the context and lays out the assessment framework that will be used in the report. The rest of the report is structured around the eight elements of the assessment report.

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¹ At the time of writing, at least one further European country – Spain – has enacted a framework climate law since Duwe and Evans conducted their assessment.

² The terms "2021 Climate Act" and "2021 Act" are used throughout this report to refer to the Climate Action and Low Carbon Development (Amendment) Act 2021. The terms "2015 Climate Act" and "2015 Act" are used to refer to the Climate Action and Low Carbon Development Act 2015.

2. Context and assessment framework

The Climate Action and Low Carbon Development (Amendment) Act 2021 amends the Climate Action and Low Carbon Development Act 2015.³ The origins of the 2021 Climate Act can be traced to the recommendations of the Citizens' Assembly 2016–2018.⁴ The recommendations of the Citizens' Assembly were considered in detail by the Joint Oireachtas Committee on Climate Action (JOCCA), which published its own set of recommendations in March 2019 (Houses of the Oireachtas 2019). The JOCCA recommendations were, in turn, substantially incorporated into an all-of-government Climate Action Plan published in June 2019, including a commitment to publish a Climate Action (Amendment) Bill (DCCAE 2019, 37). On 6 January 2020, two days before the dissolution of the 32nd Dáil, then Minister for Communications, Climate Action and Environment Richard Bruton published the General Scheme for the Climate Action (Amendment) Bill 2019, which had been approved by the cabinet at its final meeting of 2019 (DCCAE 2020).

The Programme for Government agreed between Fianna Fáil, Fine Gael, and the Green Party in June 2020 (2020, 32) contained a commitment to introduce a Climate Action (Amendment) Bill in the Dáil within the first 100 days of government. The Government published a draft of the Bill on 7 October 2020. This draft was subject to pre-legislative scrutiny by the Joint Committee on Climate Action in autumn 2020, the results of which were published in December 2020 (Houses of the Oireachtas 2020). On 23 March 2021, a revised version of the Bill was published. Over the following months, the Bill passed through the legislative process in both houses of the Oireachtas. During its passage it was subject to critical scrutiny, including by members of the Oireachtas during debates in the Dáil and Seanad and by a variety of stakeholders in wider society. Following its enactment by both Houses of the Oireachtas, President Michael D. Higgins signed the legislation into law on 23 July 2021.

This report analyses the final version of the 2021 Climate Act as enacted in an international comparative perspective. In order to do so, an assessment framework is used that draws on the comparative international literature on framework climate laws. A number of contributions to this literature have sought to identify core elements of effective framework climate laws, and it is hardly surprising that there is considerable overlap in the elements put forward (see, for example, Averchenkova, Fankhauser, and Nachmany 2018; Duwe and Evans 2020b; Muinzer 2020; Nash and Steurer 2019; World Bank 2020). The framework used in this report draws heavily on the elements set out by Matthias Duwe and Nick Evans in their 2020 report *Climate Laws in Europe*, but with some modifications. The assessment categories are as follows:

 Long-term targets: What long term climate targets, if any, are included and what is their nature and coverage?

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³ For a history of the process that led to the enactment of the 2015 Act, see Torney (2017), Wagner and Ylä-Anttila (2018), and Jackson (2020). For an insightful analysis of the climate law debate in the early 2010s including comparison of three of the draft bills that emerged during that period, see Curtin and Hanrahan (2012). For analyses of the 2015 Act, including in comparative perspective, see Kennedy (2016), Torney (2019), and O'Gorman (2020).

⁴ The Citizens' Assembly voted 97% in favour of the recommendation 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". One of those functions was: "To propose ambitious 5 year national and sectoral targets for emissions reductions to be implemented by the State, with regular review and reporting cycles" (Citizens' Assembly 2018, 19).

⁵ For the purposes of this report, the category of targets is disaggregated into long term and intermediate targets. Drawing on Muinzer (2020), an additional assessment category focused on accountability and enforcement has been added. The elements captured in Duwe and Evans's "future vision" category have been incorporated in other categories of the assessment framework here.

- Intermediate targets: What intermediate climate targets, if any, are included?
- **Arrangements for policy planning:** What requirements are in place for statutory climate policy development?
- **Incorporation of expert advice:** Through what channels is expert advice incorporated into climate policymaking?
- **Public participation:** Are there institutionalised pathways for the wider public to participate in climate policymaking?
- **Institutional arrangements and responsibilities:** How clearly are roles and responsibilities for climate policy development and implementation set out?
- **Progress monitoring and reporting:** Who is responsible for monitoring progress and how robust are these procedures?
- **Enforcement and sanctions:** What mechanisms, if any, are in place to ensure that climate commitments are met and sanctions are applied in the case of non-compliance?

The inclusion—or otherwise—of the concepts of *climate justice* and *just transition* featured prominently in debates on the 2021 Climate Act during its passage through the legislative process. While undoubtedly important elements of any approach to climate action, they do not feature prominently in the international literature on framework climate laws and are not typically included in equivalent legislation in other jurisdictions, though there are some exceptions such as in the Scottish and Spanish cases. As a result, these elements are not included as part of the assessment framework employed in this report.

It is important to note also that national administrative and political circumstances and traditions differ, and these shape the institutional context within which national framework climate laws have been developed. For this reason, it would be wrong to adopt a "one-size fits all" approach to climate legislation (Muinzer 2020). Nonetheless, while the precise design characteristics of framework climate laws vary from country to country, many share a range of the core elements identified above, and therefore it is useful to compare the recently enacted Climate Act against international practice.

The rest of this report is structured around the categories set out above. Each section introduces the core design element, explains its importance, and discusses how similar framework climate laws in other jurisdictions make provision for it. The status quo ante under the 2015 Climate Act is then presented, followed by an assessment of any changes introduced by the 2021 Climate Act.

3. Long-term targets

A central purpose of framework climate laws is to indicate a clear direction of travel towards a decarbonized economy and society. Responding to climate change in a manner consistent with the aim of the Paris Agreement to "[Hold] the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels" (Article 2.1(a)) will require radical and transformative change lasting several decades. As well as establishing an end mitigation goal, a long term target also serves the purpose of providing a benchmark against which intermediate mitigation targets can be set and assessed. Only once we know where we want to get to by some date several decades hence is it possible to assess whether targets for, e.g., 2025 or 2030 are reasonable.

GHG targets can be differentiated in a variety of ways (Hilson 2020). They can be binding or non-binding. Most, but not all, European framework climate laws have enshrined a target for GHG emissions reduction in law (Duwe and Evans 2020b, 50–51). In Sweden, for example, GHG targets are not contained in the climate law itself but rather in a separate, non-legislative "Climate Policy Framework for Sweden" (Nash and Steurer 2019; O'Gorman 2020). Targets can be inclusive—covering all GHG and all sectors—or partial. Most GHG targets set out in framework laws cover all GHGs and sectors, but New Zealand for example includes a "split gas" approach with separate targets for CO₂ and agricultural methane respectively.

GHG targets can also be expressed as absolute or net emissions reductions. Many countries are aiming for "net zero" or some variation thereof, but "what amounts to a relevant anthropogenic sink is far from clear and country reporting practice varies enormously" (Hilson 2020). The timeframe of the long-term target has emerged as an important consideration. As Hilson (2020) puts it, "Because, of course, the substantive target of net zero is itself already ambitious, the battleground over ambition has become focussed on when it should be achieved". A majority of climate laws in Europe set net zero by 2050 as a central mitigation goal (Duwe and Evans 2020b, 50–51) but there are exceptions, with Sweden and Germany (the latter under its revised climate law) pledging net zero by 2045, and Finland by 2035.

An important—and often overlooked—aspect of climate action is adaptation. Much of the literature on framework climate laws focuses substantially, if not exclusively, on mitigation. Adaptation is less amenable to quantified targets and the scale of future adaptation required will be strongly dependent on the level of temperature increase, but framework climate laws can nonetheless include overarching policy objectives. Mexico's climate law, for example, establishes a high-level objective of reducing the vulnerability of the population and ecosystems to the adverse effects of climate change (World Bank 2020).

3.1 Long term targets under the 2015 Climate Act

Ireland's 2015 Climate Act contained no quantified GHG emissions target. Instead, it set a "National Transition Objective" that was defined as follows: "the transition to a low carbon, climate resilient and environmentally sustainable economy by the end of the year 2050" (Section 3(1)). Separately, the year before the 2015 Act was passed, the Government agreed a "National Policy Position on Climate Action and Low Carbon Development" that included a commitment to "an aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors; and in parallel, an approach to carbon neutrality in the agriculture and land-use sector, including forestry, which does not compromise capacity for sustainable food production" (Government of Ireland 2014). However, this was not enshrined in the 2015 Act itself, though the 2015 Act did require the Government to have regard to "the policy of the Government on climate change" in the approval of a National Mitigation Plan and a National Adaptation Framework (Section 3(1)(b))), an indirect reference to the non-statutory National Policy Position.

3.2 Long term targets under the 2021 Climate Act

The 2021 Climate Act replaces the National Transition Objective contained in the 2015 Act with a "National Climate Objective", which is defined as follows:

"The State shall, so as to reduce the extent of further global warming, pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy." (Section 3(1))

The term "climate neutral economy" is defined in the Act as "a sustainable economy and society where greenhouse gas emissions are balanced or exceeded by the removal of greenhouse gases". This is essentially the same as "net zero", though the 2021 Act does not specify issues such as how removals are to be accounted for in the context of the 2050 National Climate Objective.

The 2021 Act strengthens significantly the provisions of the 2015 Act by adding a specific decarbonisation target of climate neutrality by 2050 at the latest, with the addition of recognition of the importance of protecting biodiversity. This brings Ireland's approach into line with the EU commitment to climate neutrality by 2050 as enshrined in the European Climate Law of 2021, and also into line with many other climate laws although some have earlier target dates for climate neutrality.

4. Intermediate targets

A long-term target, several decades away, by itself is unlikely to be sufficient to drive transformation at the scale or speed required. Intermediate targets are needed that are consistent with a trajectory to meet the long term target. Governments in democracies will struggle to credibly commit to maintaining policy stability over time, not least because of periodic elections in which the current government can be turfed out of office.⁶ One solution to this challenge is to make it difficult and time-consuming for future governments to reverse policy decisions, or to delegate policy-making functions to independent policy actors insulated from democratic control. Such institutional approaches are referred to as "commitment devices". Independent central banks with the power to set monetary policy are an example of one kind of commitment device. In the context of climate policy, setting intermediate (and indeed long-term) climate targets in law provides another such commitment device.

Some—but not all—climate laws enshrine intermediate GHG targets in law. The UK Climate Change Act of 2008 sets GHG reduction targets for 2020 and 2050, and in addition provides for a system of legally-binding five-year carbon budgets—overall limits on permissible GHG emissions for a five-year period. These are set by government at least 11.5 years in advance. Essentially, this amounts to the government of the day tying the hands of its successors, the logic being that doing so will create long term policy stability. France has also adopted a carbon budget approach in climate legislation through the Energy Transition Act of 2015 and the Energy and Climate Act of 2019 France (Duwe and Evans 2020a, 20). Germany has employed a variation on the budget approach, by breaking down a national emissions pathway to 2030 into annual values for the country as a whole and for each main sector of the economy, and assigning responsibility for achieving these targets to relevant ministers with limited flexibility allowed towards meeting them. Because it measures cumulative emissions, a carbon budget approach is more consistent with measuring warming impact than a single-year future target and is therefore preferable (Duwe and Evans 2020b, 16).

Setting legally binding carbon budgets such a distance in advance cannot, of course, be done with perfect foresight. Climate policymaking is characterised by various types of uncertainty, including evolving scientific, technological and policy dimensions (Brunner, Flachsland, and Marschinski 2011). There are potential benefits to building in flexibility to update policy in light of new information (Hilson 2020; Torney and O'Gorman 2020), though there is merit in provisions that allow only for strengthening of climate targets, to safeguard against abuse of those provisions. In

⁶ Kydland and Prescott (1977) were the first to identify this problem of time inconsistency in the context of economic policy. For discussion of time inconsistency and credible commitment in the context of climate change policymaking, see Helm, Hepburn, and Marsh (2003), Hovi, Sprinz, and Underdal (2009), Brunner, Flachsland, and Marschinski (2011), and Torney and O'Gorman (2020).

the UK Climate Change Act for example, carbon budgets can only be amended for very limited, defined reasons.⁷ The Mexican climate law allows only for revision of targets to strengthen them (World Bank 2020).

4.2 Intermediate targets under the 2015 Climate Act

The 2015 Climate Act did not contain intermediate targets (or indeed long term targets) of any kind, though the state separately has binding targets for GHG reduction under the EU climate and energy frameworks for 2020 and 2030.

4.2 Intermediate targets under the 2021 Climate Act

The 2021 Climate Act introduces a system of carbon budgeting, broadly similar to the UK Climate Change Actthough with some differences (Section 6A). Each carbon budget covers a period of five years, with a set of three sequential budget periods termed a "carbon budget programme". The first carbon budget programme covers the periods 2021-25, 2026-30, and 2031-35. Once set, the first two carbon budgets can only be altered in narrowly defined circumstances, namely if new climate obligations are imposed on the state or if there are significant developments in climate science (Section 6D). Any over- or under-performance in meeting a carbon budget must be carried over from one budget period to the next, sometimes referred to "banking" and "borrowing" (Section 6D(4)–(5)). In any given budget-setting period, the third carbon budget is published in draft form and can be revised by the Government five years hence. The effect of this is that, from the 2024 budget-setting cycle onwards and every five years hence, the draft carbon budget can be amended without limitation 5-6 years before the commencement of that budget period, following the procedure set out in Section 6B of the Act and detailed in the next paragraph below.⁸

The process for setting the carbon budgets is set out in Sections 6A and 6B of the 2021 Act as follows. First, the Climate Change Advisory Council (CCAC) submits a proposal for the carbon budget programme to the Minister for Climate Action. Second, the Minister and the Government consider the CCAC proposal and finalise the carbon budget. In doing so, they are free to depart from the CCAC's proposal, but in that case must explain their reasons for doing so. The carbon budget is submitted to both houses of the Oireachtas for approval. The Dáil may refer the carbon budget to a joint committee of the Oireachtas for consideration. The Minister is required to appear before that committee if requested, and the committee may publish a report containing its recommendations to both Houses of the Oireachtas on the carbon budget. Where the Dáil or Seanad (or both) fails to approve the carbon budget, the Minister may choose not to amend the carbon budget in response but must explain their reasons for doing so. In such circumstances, the Government ultimately can finalise a carbon budget programme without parliamentary approval.

The 2021 Act specifies that the carbon budget proposal from the CCAC for the first two budget periods, collectively covering the period 2021-30, must be such that the reduction in the year 2030 is 51% less than 2018 levels (Section 6A(5)). This corresponds to the Programme for Government commitment to "an average 7% per annum reduction in overall GHG emissions from 2021 to 2030 (a 51% reduction over the decade)" (Government of Ireland 2020, 32), though it is noteworthy that the 2021 Act mentions only the 51% figure, not the 7% per annum figure. A

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⁷ These specified circumstances are: (i) changes in scientific knowledge about climate change; (ii) changes European or international law or policy; or (iii) changes in the scope of greenhouse gases included within the target or the treatment of emissions from aviation and shipping in national targets.

⁸ For example: the carbon budget programme set in 2021 will cover the period 2021-2035. The third budget in this programme (2031-35) is published in draft form in 2021. It will fall to the Government in 2024-25 to finalise the fourth carbon budget covering the period 2036-40 but also, if it sees fit, to amend the third carbon budget from the previous carbon budget programme, i.e., the 2031-35 budget. As a result, the Government may, as late as 2025, amend the carbon budget that commences in 2031.

single-year end-point target (51% reduction by 2030) is conceptually different to a cumulative carbon budget for a ten-year period (2021–2030), and there are many alternative pathways to reach a 51% reduction that correspond to very different cumulative emissions over the course of the decade (Ó Gallachóir 2021; McMullin, Sweeney, and Jackson 2021). The 2021 Act is silent on these issues, and does not say anything for example on the proportion of total decarbonisation that should be carried out in the first versus the second carbon budget.

At the time of writing, only one country in the world—Denmark—has enshrined in law a target more ambitious than 51% over the course of a single decade. In theory the Government could deviate from this recommendation from the CCAC, but to do so it would have to ignore both the Council's advice and a core commitment in the Programme for Government (PfG), which seems implausible. Which GHGs are included in the carbon budgets and how different GHGs are accounted for are the subject of regulations that the Minister is required to make under the Act. The Minister is also required to make regulations on how GHG removals are to be accounted for in the context of the carbon budgets. Both provisions open the door for a future government to change either the coverage of GHGs or the accounting rules for removals.

Once the overall carbon budgets are set, the Minister and the Government must agree on how to divide the overall carbon budget into what are called "sectoral emissions ceilings" (Section 6C). The Act leaves unspecified how these sectors are defined, stating only that "The sectors of the economy to which each sectoral emissions ceiling shall apply shall be determined from time to time by the Government". Each minister is required, "in so far as practicable, in the performance of his or her functions, [to] comply with the sectoral emissions ceiling that applies to the sector for which that Minister of the Government has responsibility".

The 2021 Act represents a significant strengthening in terms of intermediate targets relative to the 2015 Act. It introduces a system of carbon budgeting and makes provision for the setting of the first two budgets at a level consistent with the PfG commitment to reduce GHGs by 51% over the course of the current decade, though not necessarily with the PfG commitment to an average annual reduction of 7% per annum. The amendments bring the Ireland's legislative framework broadly into line with international best practice and provide for a level of decarbonisation that is extremely ambitious by international standards. The language regarding how sectoral targets are to be set and ministers' duty to comply are somewhat lacking in clarity.

5. Arrangements for policy planning

As well as setting targets for various time horizons or provisions for how such targets must be set, framework climate laws also set out various requirements on governments to develop policy plans to meet those targets, incorporating both longer term strategies and shorter term implementation plans. Only some framework climate laws, including those of Finland, France, and Spain, set specific arrangements for longer term strategic climate policy planning. Many more framework climate laws provide arrangements for more detailed climate policy development over shorter time frames, usually a 10–15 year time horizon (Duwe and Evans 2020b). These processes are typically repeated on a regular cycle of 4–5 years, with the Finnish and Swedish framework climate laws linking these to regular electoral cycles (Nash and Steurer 2019). Some framework climate laws, such as Denmark's, also provide for annual climate policy planning in their framework climate laws. It should also be noted that the EU governance framework for climate action (EU Regulation 2018/1999) requires member states to develop long-term climate strategies with a 30-year time horizon and national energy and climate plans with a 10-year time horizon, both to be updated every five years.

Generally, requirements in framework climate laws do not extend to prescribing specific policy instruments but rather oblige governments to produce policy plans setting out the policies and measures they intend to implement to reduce emissions, though there are some exceptions. The French climate law for example includes a range of specific policies, including amendments to existing legal codes covering carbon tax, CO₂ performance standards for thermal power plants, and renovation obligations. The Spanish climate law includes a ban on the sale of combustion engine vehicles by 2040 (Duwe and Evans 2020b, 25). Some framework climate laws also make provision for climate mainstreaming and connecting the climate policy cycle with the annual budget process, including in France, Germany, and Sweden (Duwe and Evans 2020b, 26; World Bank 2020). The French climate law makes provision for mainstreaming climate action into all government policymaking. The French climate law also places climate reporting obligations on financial institutions. The UK Climate Change Act does not include specific sectoral policy measures, but in a review of the UK Climate Change Act after 10 years, Fankhauser and colleagues (2018) distinguished between certainty over the overall target and certainty over particular policies, arguing that businesses and individuals look for certainty about specific policy supports perhaps more than certainty about a broader direction of travel. Yet, few of the experts Fankhauser and colleagues interviewed as part of their study believed that the UK Climate Change Act should be more policy prescriptive, because decarbonisation is a dynamic process requiring a certain amount of flexibility.

Some framework climate laws also make provision for adaptation policy planning, including requirements to produce periodic climate risk assessments and planning frameworks for adaptation to climate change. The UK Climate Change Act requires the Government to produce five-year risk assessments and adaptation plans, as well as providing for independent evaluation of risk assessments and plans. The French climate law requires asset owners and managers to report on climate change risks (World Bank 2020). The new European Climate Law requires all member states to adopt, implement, and regularly update national adaptation strategies and plans (Article 5).

5.1 Arrangements for policy planning under the 2015 Climate Act

The 2015 Climate Act put in place parallel periodic policy planning processes for mitigation and adaptation. The Government was required to produce a National Mitigation Plan not less than once every five years (Section 4). The National Mitigation Plan was required to "specify the manner in which it is proposed to achieve the national transition objective", but the absence of long-term or intermediate targets made it less clear what exactly the National Mitigation Plan should aim for. Nonetheless, in July 2020 the Supreme Court quashed the 2017 National Mitigation Plan on the basis that it did not with sufficient clarity specify the manner in which it was proposed to achieve the national transition objective. With respect to adaptation, the 2015 Act required the Government to produce a National Adaptation Framework and to review it not less than once every five years (Section 5). In addition, relevant government ministers were required to produce Sectoral Adaptation Plans (Section 6).

5.2 Arrangements for policy planning under the 2021 Climate Act

Arrangements for climate mitigation policy planning are significantly revised under the 2021 Act. In terms of long-term strategic policy planning, the Government is required to produce a *National Long Term Climate Action Strategy* not less than once every five years (Section 4). This effectively replaces the requirement under the 2015 Act to produce a National Mitigation Plan, with the 2021 Act specifying a minimum 30-year time horizon for the long-term strategy. Similar to the National Mitigation Plan provision in the 2015 Act, the long term strategy is required to "specify the manner in which it is proposed to achieve the national climate objective" (Section 4(5)). It must also include projections for GHG emissions and sinks for a minimum 30-year time horizon, a projection of GHG reductions in relevant sectors, and an assessment of potential opportunities for achieving

reductions. The requirement in the 2021 Act to produce a National Long Term Climate Action Strategy broadly aligns with the state's obligations under the EU governance framework for climate action (EU Regulation 2018/1999) to produce a long-term strategy once every 10 years and to update it every five years.⁹

In addition to a requirement to produce a long term strategy with a 30-year time horizon, the Government is also required under the 2021 Act to produce an updated *Climate Action Plan* on an annual basis (Section 4). The time horizon of the Climate Action Plan is aligned with the carbon budget programme period in place at the time. It is required to specify the measures required for the first carbon budget period, an overview of policies and measures for the second budget period, and potential policies that may be required for third budget period (Section 4(3)). In addition, it must address any failure or projected failure to comply with the carbon budget and sectoral emissions ceilings (Section 4(2)(a)(ii)).

Both the Long Term Strategy and the Climate Action Plan are required to be consistent with the GHG limits set out in the carbon budget programme, as well as with the ultimate objective of the United Nations Framework Convention on Climate Change, ¹⁰ the state's EU climate commitments, and Articles 2 and 4(1) of the Paris Agreement, though what precisely consistency with the Paris Agreement means is open to considerably diverging interpretations. In addition, the Minister and the Government must "have regard to" a longer list of 18 matters set out in Section 4(8). This list is so long and varied that it is likely to be challenging to assess whether and to what extent a government has in fact had regard to all 18 of them. Ministers are required, "in so far as practicable", to perform their functions in a manner consistent with the Climate Action Plan and the Long Term Strategy (Section 4(11)).

The 2021 Act mostly does not specify detailed sector-specific policy measures. One exception is that the Act provides for a ban on licences for oil and gas exploration through repeal of certain provisions of the Petroleum and Other Minerals Development Act 1960 (Section 21). A proposal to provide in the Act for a ban the sale of new fossil fuel cars from 2030 and to stop the granting of NCTs from 2045 was not included in the final version.

There is minimal change to adaptation policy planning arrangements under the 2021 Act.

The 2021 Act strengthens provisions for climate mitigation policy planning. The requirement to produce an annually updated Climate Action Plan has been placed on a statutory footing, and a requirement to produce a Long Term Strategy every five years has effectively replaced the obligation under the 2015 Act to produce a National Mitigation Plan. Both the Climate Action Plan and the Long Term Strategy are required to be consistent with the carbon budget programme as well as the state's EU and international obligations. There is minimal change to adaptation policy planning. By combining requirements for long-term and short-term policy planning that is consistent with EU and international obligations, these changes place the Irish legislative framework towards the front of the pack in international terms.

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⁹ As of October 2020, the Irish Government has not yet submitted this long-term strategy, the deadline for which was 1 January 2020.

¹⁰ Article 2 states that "The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."

6. Incorporation of expert advice

Independent expert bodies can introduce a long-term perspective, enhance the credibility of climate targets, and bring expert evidence to bear on policymaking (Fankhauser, Averchenkova, and Finnegan 2018, 2). However, in contrast with other policy areas, such as monetary policy in which important policymaking functions are delegated to independent technical experts to insulate decisions from political control, independent expert bodies in climate policymaking are generally imbued with advisory rather than policy-setting powers. Evans and Duwe (2021) identify three important characteristics of independent scientific climate councils: (i) their mandate; (ii) their composition; and (iii) their capacity.

In terms of their mandates, independent scientific climate councils can play the role of *watchdog, advisor*, and *convenor* (Evans and Duwe 2021). The *watchdog* role involves producing regular independent assessments of government action or inaction (see also section 9 below). The strength of this role is conditioned by the body's available resources and also whether the government is required to formally respond to its recommendations. In Denmark, France and the UK, for example, the government is required to respond to recommendations (Evans and Duwe 2021, 36). The *advisor* role entails provision of input to climate policy formation. In the UK, the Committee on Climate Change plays an important role in providing advice on the setting of carbon budgets, which is enhanced by the fact that the Committee on Climate Change makes the first recommendation to which the Government must respond rather than the other way around. The Danish climate council is required to prepare a catalogue of possible climate policy instruments for consideration by the Government. The third role is as a *convenor*. Some climate councils engage in stakeholder outreach to varying extents. The most developed of these is the Danish climate council, which is tasked with managing a dedicated public and stakeholder dialogue mechanism.

The composition of climate advisory bodies is also important. Evans and Duwe (2021) distinguish between advisory bodies composed essentially only of scientists and other academic experts, and those composed of a wider range of stakeholders. As a general rule, independent scientific climate councils are typically composed of external experts who do not represent particular interest groups or government departments or bodies (Duwe and Evans 2020b; Evans and Duwe 2021). Such composition increases the perceived independence and objectivity of climate councils, and also enhances their role as "knowledge-brokers" by building bridges between scientific research and policymaking (Evans and Duwe 2021; Weaver, Lötjönen, and Ollikainen 2019). Some climate laws, such as the UK Climate Change Act, stipulate that the climate council should include a diversity of expertise. In a number of cases, including in Denmark, Finland, France, Sweden and Switzerland, the councils themselves self-select their members, who are then officially appointed by government with varying degrees of governmental oversight (Evans and Duwe 2021, 34).

A third important characteristic—though often not specified directly in the climate law itself—is their capacity as measured by their available resources. Effective climate councils require dedicated resources in order to cover the range of relevant areas and communicate their work effectively. Sufficient resources are not always guaranteed (Duwe and Evans 2020b, 4). Most climate councils have small secretariats of between 3 and 6 staff, but the Danish and UK climate councils have over 20 and 30 staff respectively. Annual budgets also vary widely, from €200,00–€500,000 in the case of Switzerland, Ireland and France, to €3–4 million for the UK and Danish climate councils (Evans and Duwe 2021).

6.1 Incorporation of expert advice under the 2015 Climate Act

The 2015 Climate Act established the Climate Change Advisory Council (Section 8). The CCAC's mandate was a combination of *advisor* and *watchdog*, with no *convenor* role. It was tasked with

providing advice to government on the formulation of climate policy including the National Mitigation Plan and National Adaptation Framework (Section 11). It was also tasked with producing an *Annual Review* assessing progress in the previous year in reducing GHGs and making recommendations as necessary on progress in meeting climate policy goals (Section 12). The Act also made provision for the CCAC to produce *Periodic Reviews* (Section 13). From the outset, the CCAC's watchdog role was hampered by the absence of long-term or intermediate GHG targets against which to measure progress. An independent evaluation panel tasked with considering the Council's first five-year term found that the Council's mandate "falls considerably short of best practice" and "largely requires the Council to deliver its advisory role in a reactive rather than a pace-setting manner" with no "obligations to consult in a meaningful way or explain departures from such advice and recommendations" (Tallon, Turner, and Thorgeirsson 2020, 11). The panel concluded also that "the Council may have been overly sensitive to the constraints imposed by that mandate" (Tallon, Turner, and Thorgeirsson 2020, 3).

In terms of its composition, the CCAC as established under the 2015 Act was composed of eleven members, including four ex officio members: the principals of the Environmental Protection Agency, the Sustainable Energy Authority of Ireland, the Economic and Social Research Institute and Teagasc (Section 9). International comparative studies have noted that Ireland is unique in having such ex officio members as part of the CCAC (e.g., Weaver, Lötjönen, and Ollikainen 2019). Indeed, in developing a typology of climate advisory bodies in a recent study, Evans and Duwe (2021, 27) created "one special category to account for a unique case in Ireland" that they labelled "Independent Scientific Climate Council - w/public officials". In another comparative assessment, Nash and Stuerer (2019) argued that Ireland's CCAC was "clearly less independent than the UK Committee on Climate Change, with ex officio members sitting alongside independent members". The independent review panel of the CCAC's first term zoned in specifically on the role of Teagasc on the Council, concluding that "Teagasc is ... regarded by us as representing a sectoral interest in the transition" and that agriculture is "the only sector with a seat on the Council" (Tallon, Turner, and Thorgeirsson 2020, 22, 36-37). The 2015 Act included no specifications regarding diversity of expertise or gender, and it is noteworthy that the first Council was heavily dominated by men, and by economists.

The 2015 Act contained no explicit provisions regarding the CCAC's resourcing. It was hosted by the Environmental Protection Agency, with a small secretariat of three technical and scientific employees and two administrative staff (Evans and Duwe 2021). The independent review panel concluded that the Council was "substantially under-resourced financially" and recommended that "the Council's Secretariat should be significantly strengthened in terms of its administrative and expert capacity" (Tallon, Turner, and Thorgeirsson 2020, 4).

6.2 Incorporation of expert advice under the 2021 Climate Act

The 2021 Climate Act makes important changes to the mandate of the CCAC in respect of its two principal roles. The Council's role as an *advisor* is strengthened through the role allocated to it in the setting of carbon budgets (Section 6A). As detailed in section 4 above, carbon budgets are proposed by the CCAC in the first instance. The Minister and the Government then are required to finalise the carbon budgets and are free to depart from the Council's proposal but must set out the reasons for doing so. In setting the first two carbon budgets, the Council's hands are effectively tied by the requirement that those two budgets (2021–24 and 2026–30) must be such that the reduction in the year 2030 is 51% less than 2018 levels (Section 6A(5)), though as noted in section 4.2 above, the Act does not specify how the overall effort of decarbonisation should be divided between the first and second carbon budgets. In addition, the Council must perform its functions in relation to carbon budgets in a manner consistent with the ultimate objective of the United Nations Framework Convention on Climate Change (Section 6A(9)(a)(i)) and which takes account

of a range of matters including, curiously, "relevant scientific advice, including with regard to the distinct characteristics of biogenic methane" (Section 6A(9)(a)(ii)(II)) and "in so far as practicable, the need to maximise employment, the attractiveness of the State for investment and the long term competitiveness of the economy" (Section 6A(9)(a)(ii)(IV)).

The Council's strengthened role as a *watchdog* is largely a function of the fact that it now has a clear benchmark—in the form of the 2050 national climate objective and the carbon budgets—against which to measure government action or inaction. This role is codified in the 2021 Act by the addition of a requirement that Annual Reviews must include an assessment of compliance with the carbon budget and sectoral emissions ceilings (Section 12(1)(a)(ii)) and recommendations on how to address any failures or projected failures to comply with sectoral emissions ceilings (Section 12(2)(bb)).

The composition of the Council has also been altered by the 2021 Act (Section 9). The maximum number of members has increased from 11 to 14 members (including a chairperson). The Act provides clearer guidance for selection of the Government appointees to the Council, including that they should collectively have expertise across a range of specified areas of knowledge and expertise, and that there should be gender balance (Section 9(4)). The principals of the Sustainable Energy Authority of Ireland and the Economic and Social Research Institute have been removed as *ex officio* members, but the principal of the Environmental Protection Agency and Teagasc have been retained, and the principal of Met Eireann has been added. As a result, Ireland's climate council retains its unique international status, and the concern of the independent review panel that the agriculture sector has "a seat on the Council" remains unaddressed (Tallon, Turner, and Thorgeirsson 2020, 36–37). Moreover, the appointment of a number of representatives of civil society organisations to the current Council (2021–25) arguably further confuses its status as an independent scientific climate council.

The question of capacity and resources is not dealt with in the 2021 Act. However, it is interesting to note that a leaked draft of the 2019 Climate Action Plan, dated 16 April 2019, provided that the new Climate Action Council would have "an expanded secretariat", and that its "budget will be set in three year budget cycles to ensure their independence from government". Neither of these provisions were included in the final published version of the 2019 Climate Action Plan, indicating a resistance to strengthening the resources devoted to the Council.

The 2021 Act strengthens the role of the Climate Change Advisory Council (CCAC) as both an *advisor* and a *watchdog*. The Council has been given a strong advisory role in the setting of carbon budgets, and by extension will play a stronger watchdog role in monitoring compliance with those budgets. In comparison with other jurisdictions, however, the CCAC remains an outlier regarding its composition, which could undermine its perceived independence. These concerns remain unaddressed in the 2021 Act. Concerns persist also regarding resourcing of the CCAC, potentially undermining its ability to fulfil its remit fully.

7. Public participation

Provisions for public participation in climate policymaking are arguably an underdeveloped aspect of framework climate laws. Most framework climate laws refer to public consultation in some way, but with varying levels of specificity. The Climate Change (Scotland) Act 2009, amended in 2019, incorporates significant public engagement provisions, including a requirement for the Scottish Government to produce a Public Engagement Strategy (Muinzer 2020). The Netherlands climate law includes a section dedicated to participation, but fails to specify relevant parties and therefore

provides a guiding principle rather than developing detailed mechanisms for public participation. The UK and Swedish climate laws, by contrast, contain no mention of public participation. A range of dedicated stakeholder mechanisms for climate policy have been developed in various jurisdictions, but often are not included specifically in framework laws (Duwe and Evans 2020b).

7.1 Public participation under the 2015 Climate Act

The 2015 Climate Act made relatively few provisions for public participation in climate policymaking. The only provisions of note were requirements, when producing the National Mitigation Plan, National Adaptation Framework, and Sectoral Adaptation Plans, on relevant ministers to undertake a public consultation on a draft of each of these policy documents.

7.2 Public participation under the 2021 Climate Act

The 2021 Climate Act makes limited provision for enhanced public participation in climate policymaking. Indeed, the legal requirement to undertake a public consultation on a draft of the National Mitigation Plan under the 2015 Act is not carried over to the relevant sections of the 2021 Act dealing with the preparation of the Climate Action Plan and Long-Term Strategy. However, the Minister is required to consult with "the public and such persons as he or she considers appropriate" in the preparation of the Climate Action Plan (Section 4(2)(c)(ii)) and the Long-Term Strategy (Section 4(6)(c)(ii)), and in the finalisation of the carbon budget programme (Section 6B(4)(b)). More substantively, the Climate Action Plan is required under the Act to include "measures to inform, and promote dialogue with, the public regarding the challenges and opportunities in the transition to a climate neutral economy" (Section 4(2)(b)(iii)).

There are slightly stronger provisions for public participation in the formulation of local authority climate action plans. As part of this process, each local authority is required to consult with the local Public Participation Network as well as with the wider public (Section 14B(4)(b)). Each local authority is also required to undertake a public consultation on a draft of the local authority climate action plans (Section 14B(5)).

The 2021 Act does little to change the provisions for public participation in national climate policy planning, though such provisions are somewhat stronger in respect of the preparation of local authority climate action plans. However, Climate Action Plans produced under the Act are required to include provisions on public dialogue. The Irish legislative approach is broadly in line with other jurisdictions, as most framework climate laws do not contain strong provisions for public participation.

8. Institutional arrangements and responsibilities

Further relevant questions concern who is legally responsible for developing and implementing climate policy plans, and what institutional mechanisms are put in place to facilitate cross-government coordination and mainstreaming of climate action across all government activities. These questions are important not only for implementation but also for progress monitoring and enforcement (see sections 9 and 10 below). Most climate laws assign responsibilities but fewer specify clear mechanisms for delegating among sectoral ministries or inter-departmental coordination (Duwe and Evans 2020b).

In terms of allocation of responsibility, some laws place an obligation only on the government as a whole, some on a responsible minister, and some provide more detailed cross-departmental

arrangements. In the UK, the responsible Secretary of State¹¹ has a duty to prepare proposals and policies for meeting carbon budgets and to report these proposals to Parliament. This report must, inter alia, "explain how the proposals and policies set out in the report affect different sectors of the economy", but legal responsibility is not devolved to the Secretaries of State responsible for relevant sectors of the economy.

By contrast, the German Climate Protection Law, which entered into force in December 2019 and was amended in June 2021, is much more prescriptive about responsibility for developing and delivering actions to meet targets. Rather than taking a carbon budget approach, the law sets a target for 2030 (at least 65% reduction relative to 1990 levels following the June 2021 amendment). This has been broken down into national emissions pathways for each sector of the economy, with responsibility for meeting sectoral targets assigned to the federal government ministry most responsible for that sector (Clean Energy Wire 2021; Duwe and Evans 2020b, 20). The French energy transition law specifies how emission budgets are to be distributed among relevant sectors, but this is indicative only and does not constitute a formal allocation of responsibility (Duwe and Evans 2020b, 31).

Another important aspect of institutional arrangements is the coordination (or otherwise) of policymaking across government departments and agencies. Effective coordination mechanisms can serve to mobilise resources, mainstream climate policy considerations into other policy areas, foster stakeholder engagement and buy-in, and facilitate monitoring and evaluation (Averchenkova and Nachmany 2018, 114–15). Institutional mechanisms for coordination vary widely. Kenya's climate law established a National Climate Change Council, chaired by the president. In Mexico, the climate law established an Inter-Ministerial Commission on Climate Change to coordinate among federal ministries. A Consultative Council on Climate Change provides for participation of state governments, municipal governments, and representatives of the Mexican Congress (World Bank 2020).

Multi-level governance provides an additional dimension to questions of responsibility and coordination. Climate laws vary in the degree to which they place obligations on sub-national governments to formulate and implement climate plans and policies, and of course this is conditioned by the varying allocation of competences across levels of government in different jurisdictions. Mexico's climate law, for example, requires states and municipalities to develop local decarbonization and adaptation plans. Colombia's climate law mandates regional, municipal, and district governments to incorporate climate change considerations into their development and land management plans (World Bank 2020).

8.1 Institutional arrangements and responsibilities under the 2015 Climate Act

The 2015 Climate Act placed primary responsibility on the Minister for the Environment, Community and Local Government (now the Minister for the Environment, Climate and Communications) for the development of climate policies, including the National Mitigation Plan and National Adaptation Framework, for approval by the Government (Sections 4 and 5). Other ministers can be requested by the Government to submit sectoral mitigation measures for incorporation in the National Mitigation Plan, and to develop Sectoral Adaptation Plans, for the sectors for which they are responsible. As such, the Minister for the Environment was assigned a central role in the coordination across government of climate policymaking, since they were responsible for receiving input from sectoral ministers and submitting aggregated plans to Government for approval.

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¹¹ At present this is the Secretary of State for Business, Energy and Industrial Strategy, but the responsibility has changed over time with the movement of responsibility for climate change from department to department.

8.2 Institutional arrangements and responsibilities under the 2021 Climate Act

Responsibility for compliance with the limits placed by the carbon budgets, the sectoral emissions ceilings, and the provisions of the Climate Action Plan and Long-Term Strategy, is expressed in relatively diffuse terms. The obligations are expressed in the following terms:

"A Minister of the Government, shall, in so far as practicable, perform his or her functions in a manner consistent with ... the most recent approved climate action plan and the most recent approved national long term climate action strategy / a carbon budget that has effect..." (Section 4(11) and Section 6B(13)).

"A Minister of the Government shall, in so far as practicable, in the performance of his or her functions, comply with the sectoral emissions ceiling that applies to the sector for which that Minister of the Government has responsibility" (Section 6C(9)).

In addition to the "in so far as practicable" caveats, as noted above the 2021 Act remains silent on the sectoral allocation of responsibility, stating only that "The sectors of the economy to which each sectoral emissions ceiling shall apply shall be determined from time to time by the Government" (Section 6C(2)). The challenge of allocating such responsibility is compounded by the fact that the state's GHG emissions inventories do not easily map on to the administrative divisions of responsibility between government departments, state agencies, and levels of government.

The 2021 Act does not make detailed provision for coordination mechanisms. However, significant developments have taken place outside the framework of the climate law itself. In its 2019 report, *Climate Change: A Cross-Party Consensus for Action* and *Climate Action Plan 2019*, the Joint Oireachtas Committee on Climate Action recommended the creation of a Climate Action Delivery Board within the Department of the Taoiseach to facilitate implementation of climate policies. This was implemented as part of the Climate Action Plan 2019, and the Programme for Government included a commitment to continue this model (Government of Ireland 2020, 34).

The 2021 Act also introduces new obligations for local authorities, which are required to produce *Local Authority Climate Action Plans* at least once every 5 years (Section 14B). In contrast to the climate action plans developed by most local authorities in the last cycle, the 2021 Act requires that these must cover mitigation as well as adaptation, and "in so far as practicable" must be consistent with the Climate Action Plan and National Adaptation Framework (Section 14B(3)).

Institutional arrangements and responsibilities under the 2021 Act represent a progression on the 2015 Act, but are still somewhat lacking in clarity. Coordination mechanisms are largely absent from the Act itself but have been significantly strengthened in recent years on a non-legislative basis. The provisions regarding responsibilities of local government have been significantly strengthened. International practice in respect of institutional arrangements varies considerably, making international benchmarking on this dimension challenging to undertake.

9. Progress monitoring and reporting

Progress monitoring is a core component of framework climate laws. Typically, framework climate laws provide a basis for evaluation and feedback through some combination of government reporting along with evaluation from more or less independent advisory bodies (Nash and Steurer 2019). Key questions in this regard concern which institutions are given responsibility for monitoring and reporting, and what mechanisms are in place to require a response to monitoring

reports. Different national climate laws vary in terms of which government entity is responsible for reporting. In Sweden, Germany, and Denmark, responsibility for annual progress reporting lies with government, whereas in France and the Netherlands it is the scientific expert body that reports. In the UK, both the Government and the Committee on Climate Change are required to issue annual progress reports (Duwe and Evans 2020b, 27).

National climate laws also vary in terms of what obligations the government is under to respond to progress reviews, and particularly whether and in what ways progress monitoring can trigger requirements for additional action to address shortfalls. However, Duwe and Evans (2020b) caution that such provisions can become "a formality without consequences" unless there is a clear and defined sequence of steps that must be undertaken in such circumstances (see also section 10 below). The German Climate Protection Law provides perhaps the most elaborate version of such an arrangement. As discussed in section 4 above, the country's 2030 target into national emissions pathways for each sector of the economy, with responsibility for meeting sectoral targets assigned to the ministry most responsible for that sector. The Federal Government is required to report annually on GHG emissions in each sector. If this reporting shows that emissions for the preceding year have exceeded the sectoral emissions limits set out in the Law, 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" (Clean Energy Wire 2019; Duwe and Evans 2020b, 20).

In the UK, the Government is formally required to respond to the annual reports of the Committee on Climate Change. In addition, in the event of a carbon budget not being met, the Secretary of State must explain to Parliament why the budget has not been met and set out proposals to compensate for excess emissions in future periods. In France, the Government is required to respond within six months to the scientific advisory body's annual report, and to indicate how any gaps shortfalls in emissions reduction will be addressed through additional actions. In the Netherlands, a two-yearly progress report on the climate plan can trigger additional policy actions if required. In Denmark, the Government is required to consider the need for additional measures when developing its annual climate programme (Duwe and Evans 2020b, 25).

9.1 Progress monitoring and reporting under the 2015 Climate Act

Under the 2015 Climate Act, there are two principal mechanisms for climate reporting, one involving the CCAC and the other involving the Government. As discussed in section 6 above, the CCAC is required to produce an *Annual Review* that includes an assessment of progress in the previous year on GHG reductions and recommendations on measures to reduce GHGs and to enable the state to meet its EU and international climate obligations and to meet the national transition objective (Section 12). There is no obligation on the Government to respond in any way to the Council's Annual Review.

The second element of progress reporting under the 2015 Act is a requirement on the Minister for the Environment as well as other ministers responsible for relevant sectors to provide an Annual Transition Statement to both Houses of the Oireachtas once a year (Section 14). These Annual Transition Statements are required to cover GHG emissions and projections, details of mitigation and adaptation policies, and a report on the state's compliance with EU and international climate obligations. In practice, the Annual Transition Statements have taken the form of oral statements by relevant ministers to the Dáil and Seanad along with the publication of a longer written Annual Transition Statement publication.

9.2 Progress monitoring and reporting under the 2021 Climate Act

The 2021 Climate Act strengthens both elements of climate reporting under the 2015 Act. Reporting by the CCAC through the Annual Review process is strengthened by virtue of the fact that there are now long-term and intermediate targets against which to measure progress, along with more elaborate policy planning processes through the addition of the requirement to produce an annually updated Climate Action Plan. The provisions for CCAC reporting have been amended to require the Council to review progress annually in respect of the carbon budget and each sectoral emissions ceiling (Section 12(a)).

The provisions for reporting by the Government have been substantially strengthened. The Annual Transition Statement process under the 2015 Act has been complemented by a *Climate Reporting* process (Section 14A). Under the Climate Reporting provisions, the Minister for Climate Action as well as other ministers responsible for relevant sectors are required, if invited to do so, to attend before a joint committee of the Oireachtas to give an account progress under Climate Action Plan, GHG emissions, compliance with the carbon budget including any measures envisaged to address failure to comply, and climate adaptation measures. As such, ministers are required under the 2021 Act to be accountable to both the Dáil and Seanad as a whole as well as to the relevant joint committee of the Oireachtas, providing a basis for closer scrutiny by parliament of government progress.

The 2021 Act has strengthened the monitoring and reporting requirements further by giving the Oireachtas joint committee an opportunity to make recommendations in respect of the climate reporting of a minister. In such circumstances, the relevant minister is required to provide a response in writing within 3 months. Additionally, the annually updated Climate Action Plan is "required to address any failure, or projected failure, to comply with the carbon budget and sectoral emissions ceiling" (Section 4(2)(ii)), providing a further mechanism for any shortfalls to be addressed within the policy planning process.

The 2021 Act significantly strengthens progress monitoring and reporting. Reporting by the CCAC is strengthened by virtue of the fact that it must now report on progress against the national climate objective and the carbon budgets. Ministers are now required to be accountable to a joint committee of the Oireachtas, and to respond in writing to any recommendations of the joint committee within 3 months. Additionally, the annual update to the Climate Action Plan is required to address any shortfalls in meeting the carbon budget and sectoral emissions ceiling. These changes bring the Irish legislative framework broadly into line with international best practice.

10. Enforcement and sanctions

Much is made of the fact that targets in a framework climate law are legally binding. This focus is understandable, given the increasing trend towards strategic climate litigation and key judgements by apex courts—including in Ireland—in recent years (Setzer and Higham 2021). Indeed, White and O Callaghan-White identify "a strong interventionist trend in the approach of domestic courts in Europe to the issue of climate change" and suggest that a "domino effect" in climate litigation that, they argue, will "heighten the sensitivity of policymakers and significantly increase the evaluation of government action (and inaction) on climate change" (White and O Callaghan-White 2021).

Recent high-profile successful climate litigation cases, including in the Netherlands, Ireland, and Germany, have focused on the adequacy of climate targets or the adequacy of government policy plans. This is an important avenue for citizens and environmental groups to challenge the adequacy

of government policy responses to climate change. We can think of this category of approaches as a remedy for *ex ante* non-compliance, that is to say, a pathway to challenge a government's approach to addressing climate change in advance of GHG emission reduction targets actually being missed.

However, discussion regarding enforcement and sanctions in a climate law often focus on what will happen a government if it misses an economy-wide GHG reduction target set out in such legislation—or what we might call *ex post* non-compliance. Nash and Steurer (2019) note that none of the framework climate laws they studied in seven European countries contained explicit sanctioning mechanisms. Even the UK Climate Change Act, seen as among the most robust national climate laws, specifies a variety of procedural and substantive duties but does not stipulate sanctions for non-compliance (Muinzer and Little 2020, 434; Fankhauser, Averchenkova, and Finnegan 2018, 14).

In addition, there are at least three difficulties that a legal challenge in the event of failure to achieve an economy-wide GHG reduction target (*ex post* non-compliance)—as distinct from a failure to produce a compliant climate policy plan (*ex ante* non-compliance)—would face. The first is that GHG emissions reduction targets are an unusual type of legal obligation: they are an *outcome* obligation rather than an obligation on government to enact specific policies. The difficulty is that this outcome is only partly within the control of government (Reid 2012). As Muinzer and Little (2020, 435) put it, "a result or outcome must be attained even though a broad range of other actors not directly subject to the duty will have to do significant things if it is to be achieved".

A second challenge is that a duty set out in national law to reduce GHG emissions is a duty owed to the public in general. Writing about the UK Climate Change Act, Macrory and Muinzer argue that as a result it is unlikely that specific individuals could claim compensation as a result of noncompliance and that remedy through the courts would likely be limited to "declaratory relief", i.e., a court declaration that there has been a breach of the law in question (Macrory and Muinzer 2020). While perhaps symbolically, important, this would be of limited value because such information—in the form of GHG emissions inventories—would already be in the public domain and self-evident to anyone interested in the topic (Reid 2012). A third challenge relates to timing. Because such a declaration of non-compliance could only come once the relevant target date has passed, it would be quite literally too late because the GHG emissions would already have been emitted. As Reid (2012) puts it, "[a] fter the due date has passed, would enforcing the duties have any meaning?". This challenge could be overcome by carrying any such deficits forward, but in such circumstances there may be nothing to prevent such deficits being carried into the future indefinitely.

The focus on legal remedy in the event of failure to meet GHG emissions targets is perhaps somewhat misplaced. The purpose of a framework climate law is to drive a sustained process of economy- and society-wide decarbonisation at sufficient scale and speed. If, at some point in the future, the courts are asked to adjudicate on alleged non-compliance, then the system as designed has arguably already failed. Moreover, as Reid (2012) argues in the case of the UK Climate Change Act, the requirements for government to report to parliament are the primary mechanism for enforcement within that law.

10.1 Enforcement and sanctions under the 2015 Climate Act

As discussed in sections 3 and 4 above, the 2015 Climate Act does not contain long-term or intermediate targets, and so the question of *ex post* compliance with GHG emissions reduction commitments does not apply.

As discussed in section 5 above, the 2015 Act places a range of policy planning obligations on the Government, including a requirement to develop a National Mitigation Plan, a National Adaptation Framework, and Sectoral Adaptation Plans. The Government's fulfilment of its obligation to

produce a National Mitigation Plan in compliance with the 2015 Act was a central element of the challenge brought by Friends of the Irish Environment. The Government argued in the case that the National Mitigation Plan was non-justiciable, and the High Court agreed with this position, finding that government enjoys a wide degree of latitude in the development of policy. The Supreme Court disagreed with this position and held that a compliant plan required a sufficient level of specificity to enable a reasonable and interested person to judge whether the plan was realistic and whether they agree with the policy options for achieving the national transition objective, and that "[w]hat might once have been policy has become law by virtue of the enactment of the 2015 Act". As such, the Supreme Court quashed the National Mitigation Plan on substantive rather than purely procedural grounds (Kelleher 2021). 12

10.2 Enforcement and sanctions under the 2021 Climate Act

The significantly enhanced obligations placed on the Government under the Climate Act 2021—particularly the obligation to set carbon budgets and to produce an annually updated Climate Action Plan—create more opportunities than under the 2015 Act for accountability, whether through the courts, through parliamentary scrutiny, or otherwise. Moreover, there are a range of requirements for consistency among the various policy planning elements, as discussed in section 5, including a requirement that the Long Term Strategy and the Climate Action Plan are consistent with the carbon budget programme. A perceived failure to comply with any of these obligations would be open to legal challenge.

Legal remedy in the case of non-compliance with GHG reduction targets is more limited. This is partly a function of the characteristics of such obligations, as discussed above. In addition, the requirement for ministers to comply with the sectoral emissions ceiling is expressed in qualified language ("in so far as practicable"), as discussed in section 4 above. In addition, the 2021 Act includes the following provision:

"For the avoidance of doubt no remedy or relief by way of damages or compensation is available with respect to or arising out of any failure, of whatever kind, to comply with any provision of this Act or any obligation or duty created thereunder." (Section 2A)

However, for the reasons discussed above, such remedy may not be available in any case. Moreover, there is a limit to what litigation can plausibly deliver. It can be used to compel government to write stronger climate plans. It is less likely that litigation can be used successfully to force a recalcitrant government to actually implement climate policies if they are determined not to do so.

The 2021 Act creates a range of new obligations on government, creating new opportunities for accountability. It does not include explicit provisions for sanctioning and enforcement in the case of failure to meet GHG reduction targets. This is partly a function of the particular types of duties imposed by climate laws in general, but is intensified by certain provisions of the Act. The absence of explicit provisions for sanctioning and enforcement is a common feature of framework climate laws internationally, and thus Ireland's legislative framework is broadly consistent with international practice in this regard.

¹² For further discussion on the Supreme Court judgement, including critical commentary, see Kelleher (2021), Adelmant, Alston, and Blainey (2021), and Renglet (2020).

11. Conclusion

This report set out to assess in a comparative perspective Ireland's Climate Action and Low Carbon Development (Amendment) Act 2021. It has analysed the extent to which the 2021 Climate Act delivers eight core components that have been identified in international comparative research as key features of national framework climate laws.

In respect of all eight of these elements, the 2021 Act strengthens Ireland's legislative framework for climate action. In some respects, this was not a particularly tall order, since the 2015 Act was widely recognised as weak by international standards (Torney 2017; Jackson 2020). When benchmarked against international best practice, the conclusion of this assessment is favourable overall. In respect of many of the core design elements, the 2021 revisions place Ireland broadly in the realm of international best practice, though there are some exceptions and some remaining shortcomings.

More broadly, it is important to note that the Climate Act is not an end in itself. As Duwe and Evans (2020a, 13) put it, "[a] climate law cannot by itself replace the political will that needs to exist; it only supports the process of climate policy-making with structure and direction". This emphasises two important and related points. First, climate action at the scale and speed required to meet the state's international obligations is much more than a technocratic exercise. It requires sustained cross-party consensus on the direction and speed of travel, though of course parties may well continue to disagree on specific policy details. It also needs buy-in from societal stakeholders and citizens. Second and related, it is important to view a framework climate law as part of the broader landscape of climate governance that includes both strong top-down direction from the centre as well as room for bottom-up experimentation and learning (Torney 2018; Devaney and Torney 2019). Importantly, structures and processes are needed to facilitate collaboration between actors and to enable the aggregation and dissemination of learning within and between sectors (NESC 2019).

While it represents an important development, the Climate Action and Low Carbon Development (Amendment) Act 2021 should be viewed as the beginning—and only the beginning—of a new chapter in the story of Ireland's climate action.

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Project terms of reference

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"The project will involve an analysis of Ireland's Climate Action and Low Carbon Development (Amendment) Act 2021 in a comparative perspective, assessing the extent to which the Act delivers the components that have been identified as core features of national climate laws in other countries. It will not undertake a formal quantitative ranking (e.g. 7/10 on X, 5/10 on Y, etc.) but will undertake a qualitative assessment of core features. It will build on relevant research on climate laws, including the Principal Investigator's own past research as well as international comparative research. The report will be approximately 10 pages in length and will include an executive summary. A draft will be shared with Friends of the Earth Ireland in advance of finalisation. This will be to check that it covers all aspects envisaged by Friends of the Earth Ireland rather than to give Friends of the Earth Ireland editorial control over the analysis and conclusions. DCU will retain full academic independence and editorial control throughout. The finalised report will be published online under DCU branding. The report will include an acknowledgement of funding from Friends of the Earth Ireland that specifies that DCU conducted the research independently with no editorial control exercised by Friends of the Earth Ireland."