



What are framework climate change laws and why are they important?

Background paper

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1. Introduction

The recent Irish Programme for Government agreed between Fianna Fáil, Fine Gael, and the Green Party in June 2020 (2020, p. 32) contained a commitment to introduce a Climate Action (Amendment) Bill in the Dáil within the first 100 days of government. The commitment in the Programme for Government to develop a new climate law builds on a similar commitment in the 2019 Climate Action Plan. A General Scheme for the Climate Action (Amendment) Bill was published in January 2020 (DCCA, 2020). If enacted, it would amend the 2015 Climate Action and Low Carbon Development Act.

The General Scheme published in January 2020 provides a solid basis on which the new government can work from, but raises important questions that ought to be addressed before enactment. An accompanying paper to this one, entitled *Options for strengthening Ireland's climate change law*, provides a detailed set of recommendations for how the General Scheme can be strengthened. This paper by contrast takes a wider view, discussing the key components typically found in framework climate laws and the rationales underpinning them.

Framework climate laws have been enacted across a growing range of countries in Europe and beyond, including the UK (2008), Scotland (2009), Austria (2011), Mexico (2012), Denmark (2014, 2019), Finland (2015), France (2015, 2019), Sweden (2017), Norway (2017), the Netherlands (2019), Germany (2019), and New Zealand (2019). In some cases, such as Ireland, France, and Denmark, first generation climate laws have been or are in the process of being amended and strengthened.

The precise design characteristics of framework climate laws vary from country to country, but many share a range of core elements (for recent overviews, see Ecologic, 2020; Nash and Steurer, 2019). Most laws include a long term quantitative target for greenhouse gas (GHG) emission reduction, often with a 2050 time horizon. Many laws also include intermediate GHG targets or mechanisms for setting such targets, provisions for government to set out policy measures to achieve those targets, and mechanisms for monitoring progress. Framework climate laws also typically provide some structured arrangements for incorporating scientific and expert advice into the policy process, usually through the establishment of a climate council, though their composition and functions vary considerably. They also to a greater or lesser extent provide opportunities for public participation in climate policymaking, though again this differs significantly from case to case (Ecologic, 2020).

The focus of both this and the accompanying paper is on climate change mitigation rather than adaptation. While Ireland’s 2015 climate law as well as many similar laws in other jurisdictions focus on both mitigation and adaptation, the proposed reforms set out in the Joint Oireachtas Committee on Climate Action (JOCCA) report and the 2019 Climate Action Plan as they pertain to climate change legislation focus heavily on mitigation. Moreover, the General Scheme published in January focused predominantly on mitigation, with just one relatively minor proposed amendment to adaptation policy planning.

The next section briefly traces the origins of the proposal to amend the 2015 Act. The rest of the paper discusses key building blocks of framework climate legislation. Each section takes an important element and outlines its rationale, drawing on relevant examples from other jurisdictions. These building blocks are: (i) long-term commitment to decarbonisation; (ii) policy stability through intermediate target-setting; (iii) incorporating expert advice; (iv) the policy planning framework; (v) monitoring, enforcement and accountability; and (vi) all-of-government, all-of-society climate action. It is hoped that the analysis below will help to inform and elucidate the recommendations set out in the accompanying paper, *Options for strengthening Ireland’s climate change law*.

2. Origins of Ireland’s Climate Action (Amendment) Bill

The proposed Climate Action (Amendment) Bill would amend the Climate Action and Low Carbon Development Act 2015. Eight years in the making, the 2015 Act was signed into law by President Higgins on 10 December 2015.¹ The proposal to amend the 2015 Act can be traced to the recommendation of the Citizens’ Assembly 2016–2018, which 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

¹¹ For a history of the process that led to the enactment of the 2015 Act, see Torney (2017) and Wagner and Ylä-Anttila (2018). 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), (Nash and Steurer, 2019), Ecologic (2020), and O’Gorman (forthcoming).

functions and powers in legislation to urgently address climate change”. (Citizens’ Assembly, 2018, p. 19)

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, p. 19).

The recommendations of the Citizens’ Assembly were considered in detail by the JOCCA, which published its own set of recommendations in March 2019 (Houses of the Oireachtas, 2019). These included a proposal to substantially overhaul of the 2015 Act, to include a net-zero economy-wide GHG emission target for 2050, provision for a 2030 target and successive five-yearly carbon budgets to be set by Statutory Instrument, and a 70% renewable energy target for 2030. The JOCCA report also recommended strengthening the existing Climate Change Advisory Council, which would be given substantial new functions in law and be renamed the Climate Action Council.

The JOCCA recommendations were, in turn, substantially incorporated into the Climate Action Plan published in June 2019, including a commitment to publish a Climate Action (Amendment) Bill in Q1 2020 (DCCAE, 2019, p. 37). On 6 January 2020, two days before the dissolution of the 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 accompanying paper, *Options for strengthening Ireland’s climate change law*, provides a detailed set of recommendations for how the January draft of the legislation can be strengthened. The rest of this paper takes a wider view, discussing in turn six building blocks of framework climate legislation.

3. Long-term commitment to decarbonisation

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 beginning now and lasting several decades. According to the Intergovernmental Panel on Climate Change, “there are there is no documented historic precedent” for the scale of such transformation (IPCC, 2018, p. 15).

As well as establishing an end goal, a long term target also serves the purpose of providing a benchmark against which intermediate 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. In other words, a long term targets allows us to determine appropriate milestones on the way to that destination. That is not to say that a chosen pathway will necessarily involve a perfectly linear trajectory from today until the end point. There may be reasons, such as delayed carbon abatement of large scale infrastructure

investment, for limited backloading of emissions reduction over the coming decade, for example. But, absent a legally enshrined long term goal, there is no benchmark against which intermediate targets can be assessed.

Most European framework climate laws have enshrined a quantitative target for GHG emissions, and a majority have chosen net zero by 2050 as this goal (Ecologic, 2020, pp. 50–51). Ireland’s 2015 Act is an outlier in this regard. Instead of a setting a quantitative 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” (3(1)). Separately, the year before the Act was passed, the government agreed a “National Policy Position” 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. Moreover, a long term quantitative target is insufficient by itself. The next section discusses the need for intermediate targets.

4. Policy stability through intermediate target-setting

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. Such targets for reducing GHG emissions need to overcome what economists call the problem of “time inconsistency”. This arises when long-term investment decisions are need by firms and individuals, such as for example investment in large renewable energy infrastructure or new energy efficient production processes in the case of firms, or a new electric vehicle or a home retrofit in the case of individuals. Such actors will want to be sure that the policy environment favouring their low-carbon investment will not be subject to change in the future. Governments in democracies will struggle to credibly commit to maintaining such policy stability over time, not least because of periodic elections where the current government can be turfed out of office.

Kydland and Prescott (1977) were the first to identify this problem of time inconsistency in the context of economic policy.² They proposed what they called commitment devices—“institutional arrangements that make it a difficult and time-consuming process to change the policy rules in all but emergency situations”—as a means of overcoming the problem of time inconsistency. Independent central banks with the power to set monetary policy are an example of this kind of commitment device.

How have framework climate laws attempted to deliver policy stability? The UK’s Climate Change Act (UK CCA) of 2008, the first of its kind worldwide and considered by some a model of best practice, took a distinctive approach. The UK CCA set quantitative GHG reduction targets for 2020 and 2050 (34% and 80% respectively, relative to 1990 levels).³ In addition, it

² For discussion of time inconsistency and credible commitment in the context of climate change policymaking, see (Helm et al., 2003; Hovi et al., 2009; Brunner et al., 2011; Torney and O’Gorman, 2020).

³ In June 2019, the Climate Change Act 2008 (2050 Target Amendment) Order 2019 amended the Climate Change Act to increase the 2050 emission reduction target from 80 to 100 percent, following advice from the Committee on Climate Change.

also created a system of legally-binding five-year “carbon budgets”—overall limits on permissible GHG emissions for a five-year period. Multi-year budgets rather than strict annual targets allow for unexpected year-to-year variability in emissions, such as for example economic recession, unexpected closure of a fossil fuel power station, or a particularly cold winter (Fankhauser et al., 2018, p. 9).

In the UK case, carbon budgets are set by government 11.5 years in advance and can only be amended for very limited, defined reasons: (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 (UK CCA, S.6). 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.

Setting legally binding carbon budgets such a distance in advance cannot, of course, be done with perfect foresight. Brunner and colleagues (2011) identify a number of uncertainties facing climate policy decisions, including the benefits of GHG emissions abatement, the cost of emissions abatement, and international climate policy. This points to potential benefits of flexibility to update policy in light of new information (Torney and O’Gorman, 2020). It must be noted that in practice more certainty over time with respect to each of these areas of uncertainty are highly likely to justify strengthening rather than weakening of GHG reduction targets. If review provisions are included, there is merit in “upward only” revision provisions to safeguard against abuse of those provisions.

In a review of the UK CCA after 10 years, Fankhauser and colleagues (2018) reported that the carbon budgets approach had transformed the UK power sector by providing a stable, long-term policy signal. However, they distinguished between certainty over the overall target and certainty over particular policies. When making investment decisions, businesses and individuals look for certainty about specific policy supports perhaps more than certainty about a broader direction of travel. In other words, carbon budgets by themselves are not sufficient. Yet, few of the experts Fankhauser and colleagues interviewed as part of their study believed that the UK CCA should be more policy prescriptive, because decarbonisation is a dynamic process requiring some amount of flexibility.

5. Incorporating expert advice

Another central element of many framework climate laws is the creation of expert bodies to input into climate change policymaking. Averchenkova and colleagues (2018, p. 2) argue that independent expert bodies can “strengthen climate governance by introducing a long-term perspective, enhancing the credibility of climate targets and ensuring more evidence-based policymaking”. They note that, to be effective, such a body needs a clear statutory mandate, strong leadership, adequate resources, and sufficient powers to hold Government to account.

A long strand of academic research on the time inconsistency problem advocates delegation of relevant policymaking functions to independent technical experts, insulating decisions from political control (e.g., an independent central bank). The design of the UK CCA draws on these insights, but adopts a novel approach. It established an independent Committee on Climate Change (CCC), which is supported by a secretariat of approximately 30 staff (Averchenkova et

al., 2018). The role of the CCA is not to set carbon budgets, as delegation theory would advocate, but rather to advise government on setting carbon budgets. However, this advisory role is strengthened by the fact that the first step in the process of formulating carbon budgets is that the CCC makes its recommendation for the carbon budget. The government is perfectly within its rights to deviate from this recommendation, but if it does so the Secretary of State must publish a statement explaining why it has done so.

The design of the UK CCA offers a novel approach to resolving the tension between, on the one hand, giving priority to incorporating scientific advice into policymaking and, on the other hand, maintaining democratic control and legitimacy of climate policy decision-making. If the sequence of events was instead that government proposed a carbon budget that was then subject to scrutiny by the CCC, it would likely be easier for government to ignore the Committee's advice. The sequence set out in the UK CCA gives greater weight to the expert input of the CCC. But, to be absolutely clear, it is government that sets the carbon budget. The wording of the relevant section is clear: "The Secretary of State must set the carbon budget for a budgetary period" (S.8(1)).

The current Irish Climate Change Advisory Council (CCAC) has advocated a different approach. In a letter to then Minister Richard Bruton in April 2020, chair of the Climate Change Advisory Council Prof. John Fitzgerald communicated the Council's "strong" recommendation that "it would be more appropriate that Government propose and set carbon budgets" that would "be reviewed by the proposed Climate Action Council for their ambition and feasibility against the national targets" (CCAC, 2020). The Council advocated this position, inter alia, on the basis that "[t]he Climate Action Council should not be in a position where it might be perceived as setting national targets to be enshrined in legislation. Moreover, the Government is better placed to engage sectors and the general public to ensure 'buy-in' and acceptance of carbon budgets". The first of these concerns could be addressed through clear drafting such as that contained in the UK CCA. The second concern could be addressed in a variety of ways. One would be to task the Climate Action Council with engaging with the public in the exercise of its functions (with corresponding increase in resources). Another option, either as an alternative or in addition, would be to enhance the government's public consultation as part of the process of setting carbon budgets.

The CCAC also argued in its 30 April 2020 letter to Minister Bruton that following the UK model would impair "the ability of the Council to independently assess carbon budgets that it originally put forward" (CCAC, 2020). That is not how the UK model works. The role of the CCC in the UK is to assess government progress towards meeting carbon budgets, but not the carbon budgets themselves. Specifically, the CCC is required to report to Parliament annually on: (i) progress made towards meeting carbon budgets and the 2050 target; (ii) any further progress needed to meet those budgets and targets; and (iii) whether those budgets and targets are likely to be met (S.36(1)). Additionally, the CCC is required in the second year after the end of a budgetary period to report on the way in which the carbon budget was or was not met (S.36(2)). Therefore, if the UK model is to be followed, it would not be the case that the Climate Action Council would be required to independently assess the carbon budgets that it put forward.

6. Policy planning framework

As well as setting out targets for various time horizons or provisions for how such targets must be set, most framework climate laws also set out various requirements on government to develop policy plans over different time horizons in order to meet those targets. A recent review of nine European framework climate laws (including Ireland’s 2015 Act) by Ecologic Institute distinguishes between long term strategic planning and shorter term policies and measures for implementation in the short to medium term (Ecologic, 2020, pp. 22–26). They note that only some climate laws (Finland, France, Spain) set specific arrangements for longer term strategic planning. All laws they studied provide arrangements for more detailed climate policy development over shorter time frames, usually a 10–15 year time horizon. These processes are typically repeated on a regular cycle of 4–5 years. Some countries, such as Denmark, also provide for annual climate policy planning in their framework climate laws.

National climate planning processes have been enshrined in the governance arrangements for the EU’s 2030 climate and energy framework. Under EU Regulation 2018/1999 on the Governance of the Energy Union and Climate Action, member states are required to submit to the European Commission ten-year ‘integrated national energy and climate plans’ (NECPs) addressing the five dimensions of the Energy Union.⁴ Member states were required to submit a draft version of their NECP by 31 December 2018, and a final version by 31 December 2019.⁵ Member states are also required to submit to the Commission by 30 June 2023 and every ten years thereafter a draft update of its latest NECP, and by 30 June 2024 and every ten years thereafter an update of its latest NECP.

Another relevant question concerns who is legally responsible for developing climate policy plans. Again, practice varies across jurisdictions. 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 State⁶ has a duty to prepare proposals and policies for meeting carbon budgets (S.13) and to report these proposals to Parliament (S.14). This report must, *inter alia*, “explain how the proposals and policies set out in the report affect different sectors of the economy” (S.14(3)), 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, 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 55% reduction relative to 1990 levels). 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, 2019; Ecologic, 2020, p. 20).

⁴ The five dimensions, set out in Recital 2, are: energy security; the internal energy market; energy efficiency; decarbonisation; and research, innovation and competitiveness.

⁵ Ireland’s final NECP has yet to be submitted to the Commission. A significant proportion of the now 6.5-month delay was a result of the general election and subsequent protracted government formation process.

⁶ 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.

While effective policy planning is an important part of the climate policy process, it needs to be complemented by robust provisions for monitoring, enforcement and accountability. These arrangements are discussed in the next section.

7. Monitoring, enforcement and accountability

Clear quantitative targets allow for robust monitoring of progress and early identification of shortcomings of existing policy measures. Annual progress monitoring is a core component of framework climate laws, though different national climate laws vary in terms of which government entity is responsible for reporting. In Sweden, Germany, and Denmark, responsibility for annual reporting lies with government, whereas in France and the Netherlands it is the scientific expert body that reports. In the UK, the CCC issues an annual report to which government must respond, and, separately, government must also issue its own report under the law annually (Ecologic, 2020, p. 27). Many national laws also require additional action in the event that monitoring exposes such a need.

Some climate laws also include specific provisions requiring development of additional measures in the event that monitoring shows that they are necessary. For example, the German Climate Protection Law breaks 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. Progress is reported by sector, and failure to meet targets can trigger short-term action plans of additional measures (Clean Energy Wire, 2019; Ecologic, 2020, p. 20).

Much is made of the fact that targets in a framework climate law are legally binding. However, as Nash and Steurer (2019) have noted in a recent study, none of the framework climate laws they studied in seven European countries contained sanctioning mechanisms. Even the UK CCA, 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 (Fankhauser et al., 2018, p. 14; Muinzer and Little, 2020, p. 434). It is interesting to note that an early proposal from Friends of the Earth UK for a climate law, published in 2005, provided for financial penalties on a Minister's wages in the case of repeated failure. Not surprisingly, this element was not incorporated into the final version of the law (Carter and Childs, 2018, p. 1000).

At first glance, this lack of sanction mechanisms seems puzzling. Nash and Steurer (2019, p. 1061) draw an analogy with road safety: "Just as it is difficult to imagine speed limits and speed cameras without accompanying penalties, it is hard to imagine how CCAs without sanctions can deliver decarbonization". This seemingly surprising observation may be a function of the type of obligations framework climate laws typically place on governments. The challenge is that the substantive (as opposed to procedural) obligations placed on governments by framework climate laws tend to be outcomes—reduction of GHG emissions—rather than specific policy actions. That outcome is only partly within the control of government. As Muinzer and Little (2020, p. 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".

Judicial review provides a potential channel for pursuing legal remedy in the case of failure to meet the targets set out in a framework climate law, but the focus on legal remedy in the event

of non-compliance is arguably 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 already failed. On the other hand, however, there is a plausible causal relationship between legal character of targets, specific obligations to meet those targets and stringency of sanctions on the one hand, and likelihood of delivery on the other. Nonetheless, this analysis emphasises the fact that a climate law by itself will be insufficient. What is required in addition is an all-of-government and all-of-society approach to climate action.

8. All-of government, all-of-society climate action

An implicit assumption is sometimes made that legally binding carbon budgets will be somehow self-enforcing merely by virtue of their legal character. As a recent review of European framework climate laws across 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” (Ecologic, 2020, p. 13). 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, who must be central to the transition, and requires a strong focus on just transition.

The Spanish Climate Change and Energy Transition Bill adopted by government and submitted to Parliament in May 2020 contained strong provisions relating to just transition. These include an obligation on government to publish a just transition strategy and to agree just transition agreements with regions affected by the move away from fossil fuels along with relevant stakeholders such as companies, trade unions and civil society groups.

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). These structures need not be stipulated in a revision of the climate law, not least because of the value of flexibility and adaptability in such structures, but it is important that a revision of Ireland’s climate law be seen in this broader perspective.

The JOCCA report, *Climate Change: A Cross-Party Consensus for Action and Climate Action Plan 2019* both proposed amending the 2015 climate law as part of a broader set of reforms of existing climate governance reforms (DCCAE, 2019, ch. 5; Houses of the Oireachtas, 2019, ch. 1). An important development in this regard was the creation of a Climate Action Delivery Board within the Department of the Taoiseach to facilitate implementation of the Climate Action Plan. The Programme for Government included a commitment to continue this model, as well as to support the establishment of a standing Joint Oireachtas Committee on Climate Action with powers similar to those of the Public Accounts Committee (Government of Ireland, 2020, p. 34).

8. Conclusion

This paper has sought to provide some background to the current discussions concerning the process to amend of Ireland's framework climate law. Drawing on relevant theoretical insights as well as the growing comparative literature on framework climate laws in other jurisdictions, the analysis has sought to explain some of the core components of such laws and why they matter. The accompanying paper, entitled *Options for strengthening Ireland's climate change law*, provides a detailed set of recommendations for how the General Scheme for the Climate Action (Amendment) Bill published in January 2020 can be strengthened.

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