

Impacts of climate framework laws Lessons from Germany, Ireland and New Zealand

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Policy report

March 2024



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Acknowledgements

This work was made possible with a grant from the European Climate Foundation. The authors also acknowledge support from the Grantham Foundation for the Protection of the Environment and the Economic and Social Research Council.

The report would not have been possible without the interviewees who shared their fascinating insights and to whom the authors are tremendously grateful for their generous contributions. The authors also thank Leo Mercer, Prue Taylor, Sharon Turner, Joana Setzer, Erica Hope, Charlotte Billingham, Nimali Samarasinha, Donal Mac Fhearraigh and Zoltan Massay Kosubek for their helpful review comments on the report, and Anirudh Sridhar, Anna Vafiadou, Apostol Dyankov, Catilin McIlhennon, Diarmuid Torney, Lara Lázaro-Touza, Nick Evans, Susana Militao and Vesselina Haralampieva for their valuable insights contributed at a workshop informing the research. They are also thankful for comments on the study provided by members of the European Climate Governance Hub.

Georgina Kyriacou edited the report. Natalie Pearson produced the graphics.

The views expressed in this report represent those of the authors and do not necessarily represent those of the host institutions or funders. Any errors and omissions remain those of the authors. The authors declare no other relationships or activities that could appear to have influenced the submitted work.

This report was first published in March 2024 by the Grantham Research Institute on Climate Change and the Environment.

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Suggested citation: Averchenkova A, Higham C, Chan T, Keuschnigg I (2024) Impacts of Climate Framework Laws: lessons from Germany, Ireland and New Zealand, London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

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Summary

Nearly 60 countries around the world have introduced climate change framework laws, which establish the strategic direction for national climate change policy and often the institutional arrangements for climate action too. As the global stock of climate framework laws increases, it is critical to understand the impacts of such legislation. This report analyses the impact of climate framework laws in three countries, Germany, Ireland and New Zealand, based on evidence from 73 expert interviews and desk research.

Main research findings from Germany, Ireland and New Zealand

Climate framework legislation is delivering on several key expectations that are associated with the objectives of such all-encompassing laws. The laws in the three case study countries are helping to strengthen climate governance and political debate on climate change. They are also impacting on policies, plans and associated processes, and on attitudes of citizens and civil society, in ways that are positive for climate action. The ultimate impacts on society and the climate itself (including on greenhouse gas emissions and climate adaptation outcomes), are harder to assess, but initial impacts can be seen in enabling a just transition in Ireland, and in helping shift financial flows for climate action in all three countries.

Climate framework legislation is helping address governance challenges and build effective institutional frameworks and processes on climate change. There is evidence from the three countries that the legislation can deliver on its primary purpose of enabling the reform of national governance systems and be an effective tool for addressing the main climate governance challenges such as weak cross-sectoral coordination and integration, short-termism and piecemeal approaches in policy planning, and weak accountability for implementation.

Debate around the adoption of climate framework laws can help consolidate political consensus on climate change, while implementation requires sustained political pressure and public participation. Adopting a law with cross-party consensus enables the debate to focus on how to implement agreed climate objectives. This highlights the importance of investing political effort and time in building such consensus from the outset rather than rushing to adopt a law that may be more vulnerable to political change. The laws can help prevent backsliding on long-term goals, but interim targets and implementation measures need to be better protected through sustained political pressure by civil society and building broader-based support among the general public through stronger engagement and public participation processes.

Climate framework laws can contribute indirectly to enhancing public awareness and support for climate action, but this requires explicit provisions on public participation and targeted communication and engagement efforts. The consultative processes leading to the passage of climate laws, as well as provisions in the laws themselves, can strengthen public participation. However, such participation is still nascent. Our case studies show that having explicit provisions requiring public participation at the important stages of the policy process could help address current shortcomings in this respect. There is also a need to communicate the objectives and impacts of climate laws to the public in an accessible way that is relevant to citizens' everyday lives.

Shortcomings in legislative design and changes in political commitment to climate action can weaken the effectiveness of climate legislation. Scepticism about the impacts of the legislation was most frequently framed in our interviews as the legislation failing to live up to its intended impact or to achieve changes as rapidly as required. While this was often caused by implementation issues or due to shortcomings in the legislative design, more commonly it was attributed to changes in the political environment. This illustrates the key limitation of climate change legislation: laws cannot themselves ensure effectiveness if the political commitment to deliver is either not present or is weakened, and the resources needed to implement actions are not available. It also highlights the importance of including explicit provisions on consequences or penalties for failing to comply with the law.

Climate framework laws strengthen the basis for civil society to campaign for climate action, but there is also a risk of legislation weakening climate movements or being used as an excuse for inaction. The laws can provide clearer reference points for civil society to campaign around and facilitate penetration of climate change into related campaign agendas such as social justice. The three case studies showed that campaigning around the passage of the climate legislation has helped consolidate the climate movement in those countries.

How climate framework laws create impacts: wider lessons

Climate framework laws drive change in different ways and we have identified nine channels of influence. The first four channels are directly created by provisions forming the core building blocks of climate laws and led to the most significant reported impacts in the case study countries. They should be carefully considered and addressed in the design of national climate governance systems and when adopting new or amending existing climate laws. These building blocks are:

- Targets and carbon budgets
- Provisions on planning and policy processes
- Public sector mandates and new institutions (particularly independent advisory bodies)
- Requirements for reporting, assessment and review of progress.

The other channels are less directly connected to the laws and their impacts are typically more diffused. They are:

- Institutional capacity created to implement the climate laws in the public sector and beyond
- Requirements under subsequent legislation inspired by the climate laws
- Litigation that drives accountability through judicial scrutiny and helps address noncompliance or inadequate ambition in implementation or in the framework law itself
- Policy signalling to the private and public sectors
- Campaigning run by civil society organisations around implementation.

Summary recommendations

Overarching recommendation

1. Countries that currently have no climate framework law should consider adopting such a law, to help strengthen national climate governance and enable more ambitious climate action.

Designing new climate framework laws or amending existing laws

- 2. Legislators and policymakers should ensure that legislation includes provisions on or makes a reference to provisions already established elsewhere, including:
 - A long-term net zero target, interim targets or carbon budgets consistent with the Paris Agreement, latest developments in scientific knowledge and national circumstances. They should also include clear mechanisms for defining sectoral targets or alternative ways to facilitate the integration of climate priorities into the mandates of sectoral ministries.
 - A requirement for the iterative development of climate action plans and policies to meet those targets, subject to ongoing oversight by cross-sectoral inter-agency bodies. Policymaking processes should be required to assess and address distributional impacts of climate measures, incorporating the principles of a just transition.
 - A requirement for public bodies to carry out their functions in a manner aligned with climate goals, including where relevant subnational governments, state-owned companies and local authorities.
 - Requirements for regular reporting by all agencies responsible for delivery, and assessment and review of progress, with clarity on who is required to provide reports and responses to reviews and at what point in the policy process; and a requirement for regular assessment of progress and advice on policy shortcomings by independent advisory bodies, with an obligation for government to respond to such advice.

- **Provisions to enable judicial oversight of government action**; however, careful consideration of the consequences for missed targets on the part of sectoral ministries or the government as a whole is required.
- 3. Governments should create new institutions for coordination and accountability, or strengthen the mandates of existing ones. Anchoring these institutions in the law helps protect against political change. This includes:
 - Establishing or strengthening existing inter-ministerial coordination mechanisms, at the ministerial and administrative levels, defining their mandate, composition and role in the policy process.
 - Establishing or strengthening independent advisory bodies on climate change, ensuring they have a clear mandate to advise on targets and sufficient plans to meet them, and that they provide an independent assessment of progress in implementation.
 - Integrating public participation into critical stages of decision-making on climate change, focusing on the development of policies and on decisions around sectoral trade-offs; and communicating the rationale and need for climate change law and ensuring the public is brought along.
- 4. Campaigners, advocacy groups and civil society should incorporate the most impactful building blocks of climate legislation as above into campaigns for governance reforms, and should:
 - Be aware of the risk that ambitious law coupled with poor implementation may create a false sense of comfort that action is being taken, reducing the sense of urgency.
 - Actively seek to develop a cross-party coalition when campaigning for climate legislation. This may be achieved by focusing initially on the core building blocks in the legislative architecture, rather than on specific policies. This coalition should engage with and develop coalitions with stakeholders working in the highest emitting sectors.
 - Be aware that after the adoption of a law, mobilising support for improving the existing legislation and its implementation is more challenging than campaigning for the need to pass a law in the first place. It requires greater technical sophistication and focus.

Implementation of climate framework legislation

- 5. Governments, civil society and commentators should make concerted efforts to increase public awareness of the purpose of legislation and climate action more broadly, emphasising national ownership and the benefits of transition.
- 6. Governments should:
 - Ensure that measures to meet targets and other obligations under the climate framework law are communicated in an accessible way to citizens and include an explanation upfront of how social and distributional concerns will be addressed.
 - **Promote inclusive public participation processes** to strengthen implementation support, focusing where possible on specific questions, measures and policy trade-offs.
- 7. Campaigners should:
 - Work to maintain momentum around the development, assessment and delivery of policies and plans; a focus on just transition can help mobilise support.
 - Carefully consider how to best leverage the accountability mechanisms built into law, including parliamentary oversight and assessments by independent advisory bodies.
 - Assess potential risks around the use of litigation as a tool to raise ambition or enforce implementation, such as the weakening of provisions in the climate framework law (e.g. limitations on remedies), societal or political backlash, and tying up of limited resources.
 - Be careful not to discourage sectors that are delivering on their targets or budgets in the countries where a sectoral approach is taken in legislation.

1. Introduction

Successful implementation of the Paris Agreement requires strong climate governance at the national level. Nearly 60 countries have adopted domestic climate framework laws and this number continues to increase (Climate Change Laws of the World, 2023). Climate framework laws establish the strategic direction for national climate change policy and often contain medium- and long-term objectives or targets, institutional arrangements and accountability mechanisms (Averchenkova et al., 2017; Higham et al., 2021; Duwe and Evans, 2020). The common feature among climate framework laws is that they are 'overarching', 'unifying' or 'comprehensive' in their nature and they seek to provide a coherent legal basis for climate action in the respective jurisdiction.

There are notable studies by academic and policy experts looking at key elements of climate governance and climate laws (Muinzer, 2020; Dubash, 2021; Nash et al., 2021). The growth of climate framework laws around the world demonstrates a building acceptance in the policy community that framework laws can be an effective tool for enhancing climate governance. As yet, however, there is little empirical evidence available on the impact of such laws or how they might differ across socioeconomic and political contexts.

This report provides evidence on the impacts of climate framework legislation in Germany, Ireland and New Zealand, and offers practical insights into challenges with implementation and how these can be overcome. It is based on 73 expert interviews and desk research (see Appendix 1).

These countries were chosen as each has had its climate framework law in place for several years and has gone through at least one substantive amendment, enabling us to explore changing perceptions of the laws' impacts as they have evolved. We focus on the following three climate laws: Germany's Federal Climate Change Act, the Bundes-Klimaschutzgesetz (KSG), amended in 2021; Ireland's Climate Action and Low Carbon Development Act (CALCDA), amended in 2021; and New Zealand's Climate Change Response Act (CCRA), amended by the Climate Change Response (Zero Carbon) Amendment Act (ZCA) in 2019 (see Box 1.1 below for a further introduction to these laws).

The Irish and New Zealand legislation includes specific requirements around climate change adaptation (in Germany adaptation is not included in the KSG). As such, we anticipated that specific adaptation and resilience outcomes would be at least partially attributed to the legislation in both countries but this was generally not the case. The evidence suggests that when judging effectiveness of such laws the policy community is currently focusing on mitigation and this is reflected in the report.

Report data sources and structure

We developed the analytical framework by drawing on existing literature, including a 2018 study on the impact of the UK's Climate Change Act (Averchenkova et al., 2021), the views from an expert workshop with leading climate legislation and policy experts, and over 70 semi-structured interviews with experts and key stakeholders who were actively engaged in each of the case study countries' climate debates before and/or after the enactment of the relevant climate framework law.

Section 2 discusses how climate laws drive change. It explains how impacts may be created through 'channels of influence' and summarises the key institutions and requirements in the case study countries identified as the most important channels through which impacts have been created.

Section 3 provides a summary of the analysis on the five substantive areas of impact of climate laws, including impacts on (1) climate governance; (2) political debate; (3) climate change policies; (4) citizens and civil society; and (5) the society and climate. We provide more detailed discussion and supplementary evidence for each of these impacts in a separate technical annex, 'Supplemental evidence on the impacts of climate framework laws'.

Section 4 concludes with cross-cutting policy recommendations.

Box 1.1. Introducing our case studies

Germany

- Germany adopted its climate framework law, the Federal Climate Change Act or *Bundes-Klimaschutzgesetz* (KSG), in December 2019.
- Just prior to this, the Climate Action Programme 2030 was adopted.
- In June 2021, the KSG was significantly amended by the *Klimaschutznovelle*. This was in part in response to the landmark ruling in the climate litigation case *Neubauer* et al. v. Germany.
- The law establishes an independent advisory body, the Council of Experts on Climate Change or *Expertenrat für Klimafragen* (ERK).
- The law also requires the federal government to prepare climate action programmes.
- (CPP) or *Klimaschutzprogramme*. The most recent CPP was adopted in October 2023.
- There is ongoing political debate about amending the legislation at the time of publication.
- In this report, KSG means the *Bundes-Klimaschutzgesetz*, Federal Climate Change Act of 12 December 2019 (Federal Law Gazette I, p. 2513), as last amended by Article 1 of the Act of 18 August 2021 (Federal Law Gazette I, p. 3905).

Ireland

- Ireland adopted its climate framework law, the Climate Action and Low Carbon Development Act (CALCDA), in December 2015.
- The law established an independent advisory body, the Climate Change Advisory Council (CCAC).
- The law was significantly amended in July 2021 by the Climate Action and Low Carbon Development (Amendment) Act 2021. This amendment was partly in response to an important climate litigation case, *Friends of the Irish Environment v. Ireland*.
- Under the law, the government must prepare Climate Action Plans (CAPs) and a National Adaptation Framework. The most recent CAP was adopted in December 2023 and the National Adaptation Framework was last reviewed in October 2022.
- In this report, CALCDA means the Climate Action and Low Carbon Development Act 2015 as amended by the Climate Action and Low Carbon Development (Amendment) Act 2021.

New Zealand

- New Zealand adopted its climate framework law, the Climate Change Response Act (CCRA), in November 2002.
- Amendments in September 2008, June 2009 and December 2009 introduced and updated the Emissions Trading Scheme (NZ ETS).
- The CCRA was then significantly amended in November 2019 by the Climate Change Response (Zero Carbon) Amendment Act. As a result, the law is now commonly referred to as the Zero Carbon Act (ZCA).
- The Zero Carbon Act formally created an independent advisory body, the Climate Change Commission (NZ CCC).
- Under the law, the government must produce Emissions Reduction Plans (ERPs) and National Adaptation Plans. The most recent ERP and National Adaptation Plan were adopted in May and August 2022 respectively.
- In this report, CCRA means the Climate Change Response Act 2002, and the ZCA means the CCRA as amended by the Zero Carbon Act.

Appendix 2 shows timelines of key events related to the climate framework legislation in Germany, Ireland and New Zealand.

2. How climate framework laws drive change

Strong institutional frameworks and practices linking together sectors and governance scales are needed for effective climate action (Dubash, 2021; Zwar et al., 2023). Climate framework laws are seen as a key tool for developing and embedding credible institutions and processes to advance climate action into broader domestic governance frameworks (Mcilhennon and Brennan, 2023). These laws are also expected to help strengthen political consensus and support for ambitious climate action (Averchenkova et al., 2021). Adoption of a climate framework law should ultimately enable the country to reduce greenhouse gas emissions and, where the law addresses adaptation to climate change impacts, enhance adaptation and resilience outcomes.

There are different ways in which climate laws can drive change: *directly* through the requirements established under the law itself (e.g. a requirement for the government to prepare carbon budgets), or *indirectly* through processes connected to the legislation but not required under it (e.g. climate litigation). Figure 2.1 represents nine channels of influence through which climate framework laws can lead to impacts, which we have identified based on existing literature, feedback from an expert workshop and on our interviews in our case study countries of Germany, Ireland and New Zealand.



Figure 2.1. Channels of influence through which climate framework laws exert impact

Direct channels of influence – through provisions of the legislation

In all the country case studies, four channels of influence that lead to the clearest and most direct impacts were directly created by the provisions of the legislation. While the countries differ in the structure of their climate laws and the institutional architecture they establish or link to, several common building blocks of climate laws were consistently mentioned in the interviews as linking to the laws' impact – see the figure above and Table 2.1. These should be considered by countries when designing new or reforming existing framework climate change laws.

Table 2.1. Core building blocks of climate laws that lead to the strongest impacts

	Climate framework law		
Targets and carbon budgets	Provisions of the legislation that establish long-term and short-term emissions reduction targets or ceilings.		
Planning and policy processes	Requirements on the government to create plans and policies to meet those targets, often within specified timeframes.		
Public sector mandates and new institutions	Requirements that existing institutions consider climate goals and plans in their decision-making, or provisions creating new institutions such as independent expert advisory bodies.		
Reporting, assessment and review	Requirements around the creation of a shared knowledge base for understanding progress and gaps.		

Note: according to most frequent mentions by interviewees in our case studies in terms of their respective laws' impacts.

Long-term and short-term emission reduction targets, carbon budgets and sectoral targets are among the most impactful legislative elements in all three countries (see Table 2.2 for a summary of relevant provisions). In Ireland, the introduction of such targets was a critical part of the evolution of CALCDA between 2015 and 2021 and impacted on coordination, political debate and accountability, according to most of the interviewees. However, a minority saw the focus on setting carbon budgets and the negotiations around the sectoral emissions ceilings as overly time-consuming.

In New Zealand, the introduction of the long-term 2050 targets in 2019 was noted as creating a step change in levels of engagement with climate action across government. The split gas target, which treats carbon dioxide and biogenic methane separately, attracted significant commentary. The target was introduced to reflect the importance of agriculture, the major contributor to methane emissions, to New Zealand's economy. Some viewed it as having positive impacts on the political debate by recognising social and scientific differences between agriculture and other sectors. Several interviewees were also critical of the lack of a requirement for consistency between domestic action and international commitments under the Paris Agreement, arguing that the wording of the legislation had added to public confusion on this matter.

In Germany, many interviewees felt that both the long-term targets and the sectoral targets were crucial and innovative parts of the law in defining political accountability and creating a reference point for the political debate. However, there is currently a debate about whether such targets should be amended and a sense that while this sectoral approach has improved transparency, it may have contributed to challenges around coordination. (For a summary of the proposed amendments see Box 3.3 in the technical annex.)

Requirements to publish climate action plans and start policy processes that set a regular timetable and outline the process for preparation and implementation of the plans led to strengthening the whole-of-government approach to climate action and better coordination in Ireland and New Zealand.

In Ireland, 11 of the 16 interviewees who described positive impacts of climate laws on governance did so in the context of climate action planning requirements (see Table 2.3), while in New Zealand, eight of 11 interviewees who highlighted governance did the same. The picture in Germany was more complex. The legislative design that prioritises sector-specific actions was highlighted as having led to increased transparency around climate action, but it was not considered to have improved centralised coordination processes between ministries, partially due to the lack of requirements for coordination in the law.

Changes to public sector mandates and the creation of independent expert advisory bodies under all three laws were highlighted as significant channels of influence. Such changes may include creation or strengthening of the inter-ministerial coordination mechanism on climate change or designation

of bodies in charge of preparation of the key action plans and policies. In some cases, new institutions for inter-ministerial coordination of the national climate response are created outside of the actual provisions of the climate legislation (see Table 2.6 and discussion on indirect channels of influence below).

Each of the three countries have provisions focused on how existing public bodies should consider the climate law or plans flowing from it in the exercise of their functions (see Table 2.4). There is a marked difference in the extent that those provisions mandate the respective institutions to take climate change into consideration in their decisions and functions, which according to the case studies is having noticeable bearing on climate governance outcomes.

In Ireland, the strong language requiring decisions by public bodies to be "consistent with" the climate action plan was associated with significant impacts on strengthening accountability and engagement from the key sectors. A few interviewees also commented on the fact that several provisions of the law require Ministers to carry out their functions in a manner consistent with the goals of the Paris Agreement, but they noted that the influence of these provisions has yet to be tested. In New Zealand and Germany, there were similar provisions but both the language in the laws and the associated impacts were considerably weaker. One New Zealand civil society interviewee described this type of provision as a "transmission mechanism" for ensuring that responsibility for implementing climate action and meeting climate targets is passed on to all public bodies, which, in the absence of such a mechanism, might take decisions that are fundamentally inconsistent with climate goals. The same person thought that the weakness of the drafting in New Zealand meant that the relevant provision failed to achieve this outcome. This provision has been subject to litigation, in which the New Zealand courts have confirmed that the law does not impose a duty to consider the goals of the climate legislation in all public sector decisions.¹

	Climate framework law			
Germany	 Section 3: sets targets of 65% reduction of greenhouse gas emissions on 1990 levels by 2030, 88% by 2040, and greenhouse gas neutrality by 2045. Section 3a: sets out minimum contributions for the land use, land use change and forestry (LULUCF) sector by 2030, 2040 and 2045. Section 4: Requires annual emissions budgets and mitigation targets to be set for each sector. The annual emission budgets up to 2030 are specified in Annex 2 of the KSG. 			
Ireland	 Section 3: sets a 2050 climate neutrality target. Section 6A: Government must approve five-yearly carbon budgets, proposed by the Climate Change Advisory Council. Section 6C: The Minister for the Environment, Climate and Communications must prepare the maximum amount of emissions permitted in each sector (referred to as 'sectoral emission ceilings'). 			
New Zealand	 Section 5Q: sets targets of net zero emissions by 2050 except biogenic methane, and 24–47% reduction in biogenic methane by 2050. Section 5X: The Minister of Climate Change must set five-yearly emissions budgets. 			

Table 2.2. Emission reduction targets, carbon budgets and sectoral targets

Note: Section numbers in this table and the following tables refer to the respective framework laws. See Box 1.1 in the Introduction for abbreviations related to the three laws.

See Students for Climate Solutions Inc v. Minister of Energy and Resources, [2022] NZHC 2116

Table 2.3. Requirements for government to create plans

Climate framework law			
Germany	 Section 9: Adopt a Climate Action Programme (CPP) at least after each update of the climate action plan required under the EU Governance Regulation and the Paris Agreement. This provision reflects the pre-existing Climate Action Programme 2030 (CPP 2030), adopted in 2019 alongside the original 2019 KSG. If annual targets are missed, the existing programme must be updated to include measures adopted under Section 8. Each programme must specify measures to achieve the sectoral targets. 		
	Section 8: If the annual emission budgets for sectors are exceeded, the responsible Ministry must present an immediate action programme for the relevant sector.		
Ireland	Section 4: Prepare an annual update to the Climate Action Plan 2019 (CAP19) and a national long-term climate action strategy at least once every five years.		
	 The Climate Action Plan must set out a roadmap of: Sector-specific actions required to comply with the carbon budget and sectoral emissions ceiling (or actions to address any failure or projected failure to comply with the budget and ceilings). Other actions and measures that are reasonably necessary to support government policy on climate change. 		
New Zealand	Section 5ZG: Prepare an Emissions Reduction Plan (ERP) for each five-year budget period, setting out the policies and strategies for meeting the budget.		
	 ERPs must include: Sector-specific policies to reduce emissions and increase removals. Multi-sector strategy to meet budgets and improve the ability of sectors to adapt to the effects of climate change. A strategy to mitigate the impacts that reducing emissions and increasing removals will have on communities. Any other policies or strategies that the Minister considers necessary. 		

Note: In this table and report, we have focused on the requirements to prepare and implement climate mitigation plans, as this is what interviewees discussed as most impactful. However, we note that in Ireland under the CALCDA, there is a requirement to prepare a National Adaptation Framework and sectoral adaptation plans. In New Zealand under the CCRA, there is a requirement to prepare a national climate change risk assessment and National Adaptation Plan. In Germany, adaptation is addressed through a separate federal climate adaptation law, the Bundes-Klimaanpassungsgesetz.

These findings demonstrate the importance for the domestic governance frameworks, either through a framework climate law or through another legal instrument most relevant in the country context, to set a requirement for public bodies, including where relevant, state-owned companies, and local authorities, to carry out their functions in a manner aligned with climate goals and policies. Clear language requiring consistency with the national climate targets and objectives should be preferred to language making climate goals and policies a permissive consideration.

Independent advisory bodies, tasked with either proposing carbon budgets, undertaking assessments of policies and/or conducting independent reviews of progress, were among the most important institutions created by the legislation across all three country case studies. A detailed comparison of the three bodies' mandates, composition and reporting requirements is set out in Table 2.1 in the technical annex. Overall, these bodies were reported to play a key role in creating a common and trusted information basis for policy development and political debate on climate change.

However, provisions setting out public sector mandates are far from the only mechanisms that play a role in the transmission of responsibility between and across public institutions. For example, the targets and policy processes described above in Tables 2.2 and 2.3 also play an important role.

Table 2.4. Public sector mandates

	Climate framework law
Germany	 Section 4(4): Responsibility for ensuring compliance with annual emissions budgets lies with the federal ministry in charge of that sector. Section 13: Bodies discharging public duties shall "give due consideration" to the purpose of the KSG and the targets set for its implementation. Section 14: Federation-Länder cooperation states that "without prejudice to compatibility with federal law, the Länder may enact their own legislation on climate change" and existing Länder laws can continue to apply without prejudice to their compatibility with federal law.
Ireland	 Section 15: Requires public bodies and prescribed bodies^a to ensure that decisions are "consistent with" the climate action plan, national long-term climate action strategy, national adaptation framework and sectoral adaptation plans, the national climate objective, and the objective of mitigating emissions and adapting to the effects of climate change. Section 6B: A minister of the government shall, in so far as practicable, perform their functions in a manner consistent with a carbon budget. Section 6C(9): A minister of the government shall, in so far as practicable, comply with the sectoral emissions ceiling that applies to the sector for which they have responsibility for.^b Section 14B: Local authorities must prepare climate action plans every five years, covering both mitigation and adaptation measures. The plans must be "consistent with" the national climate action plan. Section 14B(4): Local authorities must consult and cooperate with adjoining local authorities, and consider any significant effects on adjoining local authorities.
New Zealand	 Section 5X: The Minister of Climate Change^c must ensure that the net accounting emissions do not exceed the emissions budget for the relevant budget period.^d Section 5ZN: Bodies exercising or performing public functions may take the 2050 targets, emissions budgets and emissions reduction plan into account "if they think fit".

Notes: *a.* Defined under the Freedom of Information Act 2014. *b.* The responsibility for compliance with the budgets and ceilings is left vague in the CALCDA 2021. For further analysis, see Torney (2021). *c.* Technically, the CCRA defines the Minister as the Minister who is, under the authority of any warrant or under the authority of the Prime Minister, responsible for the administration of this Act. The Minister for Climate Change is stated to be responsible for the CCRA on the Ministry for the Environment website here. *d.* "Net accounting emissions" is defined under the CCRA as the total of gross emissions and emissions from land use, land-use change, and forestry, less removals (including from LULUCF) and offshore mitigation.

Requirements on reporting, assessment and review, such as annual government progress reports on emissions in Germany and Ireland, and the requirements for an assessment of progress by the independent advisory bodies, were described by interviewees as critical to increasing transparency for climate action. Table 2.5 below summarises the reporting requirements across the three countries. In Germany, the 'projection report' on future emissions pathways is driving political debate and guiding policymaking from the top down. In Ireland, although not required under CALCDA, interviewees also noted quarterly progress reports prepared by the Taoiseach's office [Prime Minister's office] as important reports flowing from the law.² In New Zealand, in the absence of an obligation for the government to prepare its own report on progress, the requirement to respond to the assessment of progress made by the Climate Change Commission prevents such reports from simply being ignored and is therefore crucial for accountability.

Table 2.5. Reporting, assessment and review requirements by government or independent advisory bodies

	Climate framework law
Germany	 Section 10(1): Government must produce an annual progress report, including an assessment of progress of the implementation of climate action programmes and immediate action programmes, to be submitted to parliament. Section 10(2): Every two years government must produce a 'projection report' looking into future emissions pathways. Section 12(3): The Council of Experts on Climate Change (ERK) provides an opinion regarding the underlying assumptions on emissions reduction before the federal government alters or sets annual emissions budgets, updates the Climate Action Plan, and adopts climate action programmes. Section 12(4): Every two years, the ERK presents parliament and the government with an assessment of developments in emissions, trends in relation to emissions budgets, and the effectiveness of measures with regard to achieving targets.
Ireland	 Section 14: The Minister must provide an annual transition statement to both Houses of the Oireachtas (bicameral parliament). Section 14A: At the request of a joint parliamentary committee, the Minister will attend to give an account of progress under the Climate Action Plan, compliance with the carbon budget and other matters. Section 12: The Climate Change Advisory Council (CCAC) provides an annual review on progress on reducing emissions. Section 13: The CCAC may conduct periodic reviews on mitigation and adaptation matters, at any time it considers appropriate.
New Zealand	 Section 5ZK: Annual progress reports to be provided by the Climate Change Commission (CCC), which should include an assessment of the measures in the ERP and recommendations for new emissions reduction opportunities. Section 5ZL: The CCC provides a report at the end of each emissions budget period. The Minister must respond to the CCC annual progress reports and emissions budget period reports.

Indirect channels of influence of the climate framework laws

As well as impacts flowing directly from explicit provisions and requirements within the laws, they have also led to changes indirectly. The most significant of these indirect channels have been changes in institutional capacity in government resulting from the legislation. Interviewees also described the legislation creating impacts through four other channels, often involving significant interventions from non-state actors. These were: requirements under subsequent legislation or policy that are introduced or amended to ensure consistency with the goals of the climate law; litigation relating to the law; signals for investment and alignment of policies created by the legislation; and civil society and political campaigning around implementation (or amendment) of the legislation.

² As of January 2024, the Department of the Taoiseach has published three Progress Reports, starting in 2023.

Institutional capacity

Climate framework legislation may increase institutional capacity to work on climate-related issues even when not directly required by the provisions of the law. Reported responses to the need for implementation of climate laws in the three countries ranged from creating new or strengthening existing inter-ministerial coordination mechanisms or putting climate change on the agenda of the existing high-level governance bodies, to increasing human and financial resources dedicated to working on climate-related policies across the government.

In New Zealand and Ireland, institutions introduced to ensure cross-departmental and interministerial coordination were closely linked to the development and implementation of the Emissions Reduction Plans and Climate Action Plans, and have facilitated a whole-of-government approach to climate action. In Germany an inter-ministerial coordination body had a role in the development of the legislation but has since ceased to function. This was highlighted as detrimental to national climate governance by a public sector interviewee, who also noted that in this context having a requirement for a functioning inter-ministerial coordination mechanism as part of the provisions of the legislation could help protect this essential mechanism against potential political change.

Table 2.6 explains the status of relevant institutions across the three countries.

	Cross-departmental institutions
Germany	The Climate Cabinet (<i>Klimakabinett</i>) was formed in March 2019 and informed the development of the KSG but is not currently active.
	There is a separate coordination secretariat, the KKB (<i>Koordinierungsstelle Klimaneutrale Bundesverwaltung</i>), which is responsible for coordinating the federal administration's internal goal of becoming a climate-neutral organisation by 2030. This goal is set out in Section 15(1) of the KSG.
Ireland	The Climate Action Delivery Board (CADB) is jointly chaired by the Department of the Taoiseach and the Department of the Environment, Climate and Communications. The CADB consists of Secretaries General of Government Departments with key roles in delivering climate action and was established through the Climate Action Plan published in June 2019 (CAP19), pursuant to CALCDA 2015, in order to "hold each department and public body accountable for the delivery of actions set out in the Climate Action Plan" (p.37).
	Underneath the CADB there are various cross-departmental taskforces that have been established to effectively implement a particular policy objective or action under the CAPs. For example, the Offshore Wind Delivery Taskforce was convened to address the extensive list of measures listed in the Annex of Actions to the Climate Action Plan 2021 (CAP21), which related to the development of offshore renewables in Ireland. The Cabinet Committee on the Environment and Climate Change prepares reports for Cabinet and assists government in carrying out its responsibilities.
New Zealand	The Climate Response Ministerial Group (CRMG) and the Climate Change Executive Board (CE Board) are referenced in the Emissions Reduction Plan (p.24), published in May 2022, and the National Adaptation Plan (p.175), published in August 2022.
	The CE Board was formally created in July 2022 under the Public Service (Climate Change Chief Executives Board) Order 2022. By January 2024, the CE Board had published two progress reports, covering July 2022 to June 2023.
	The Cabinet established the CRMG in 2020. It consists of key Ministers who meet to progress and direct the climate change work programme.

Table 2.6. Cross-departmental institutions created or designated to implement the law

Linked to the increased cross-departmental coordination, climate legislation was viewed as having led to significant expansion in resourcing across government departments, particularly an increase in the number of climate-relevant roles in government departments and shifts in spending on staff, by several interviewees (see Box 2.1). Interviewees who discussed the increased public sector capacity ascribed this to the legislation for two reasons: first, having the climate law gives departments a stronger justification to ask for increased funding from the government budget; and second, the 'stick' of having legal obligations puts pressure on heads of department to allocate more to those in charge of meeting the targets, preparing plans and so on. This increase in capacity is closely linked to the increase in public spending flowing from the legislation (see Table 6.1 in the technical annex).

Box 2.1. Increased public sector staffing and capacity to deliver climate action

A significant expansion in public sector resourcing for climate action was reported in all three countries. In Ireland, interviewees highlighted increased capacity at the subnational level in particular. As one subnational government interviewee said, "Funding came to the local authorities to set up climate action teams. Before 2021, there was nobody in any local authority in Ireland working in climate action, but then roles were created across all the local authorities." One research/advisory interviewee thought that the civil service has increased engagement overall because of legal obligations on government: "Once it is in legislation, civil servants then react." In New Zealand, the Ministry for Environment and Ministry of Transport were highlighted as examples of teams that have grown rapidly. A public sector interviewee noted that the framework law "provided the momentum for that". In Germany, some interviewees referred to an increase in climate roles, with one research/advisory interviewee commenting: "We have an army of people working on climate policy."

Climate legislation was also seen as driving budget decisions. As a research/advisory interviewee in New Zealand put it: "So if you're the chief executive of the government department, and you say, okay, well, I've got a limited budget, where does my work programme go and how do I allocate resources? Typically, one thing that they first do is [ask], what are my legal obligations? What are the things that I must do by law?" A public sector interviewee confirmed that "going through the budget process agencies asking for money can say it's delivering on this thing that you have committed to [in the law] and we need more resourcing to make it happen."

Despite increased resourcing, challenges in capacity for delivery of climate action persist. In Ireland, this has been acknowledged by government: the CADB has requested a review to assess the capacity and capability of the civil service to address climate change (see p.125 of the most recent Climate Action Plan 2024). In New Zealand, interviewees referred to difficulties in retaining climate experts within government, as some may move to the independent Climate Change Commission or private sector, which leaves limited internal capacity to deliver on the ERP. Furthermore, the new government has requested a 6.5% or 7.5% reduction in headcount, according to media reports (RNZ, 2024). In Germany, several interviewees also mentioned that capacity issues are impeding effective implementation, such as a lack of trained employees to handle complicated impact assessments.

Subsequent legislation, litigation, signalling and campaigning

Our literature review and evidence from interviews also highlighted at least four other channels through which the impacts of climate legislation could manifest:

• **Requirements under subsequent legislation.** Climate legislation can enable adoption of new laws or reforms of existing laws that take account of climate objectives and contribute to implementation of the ultimate objectives of reducing emissions and adapting to climate impacts. For example, a previous study of Mexico's climate law highlighted the fact that more ambitious energy laws were passed in order to achieve long-term climate objectives, which might not have been possible in the absence of the climate framework law (Averchenkova and Guzman Luna, 2018). Climate legislation can also enable changes in the spatial planning

systems (see Box 3.4 in Section 3 below). For example, several interviewees in Ireland referred to amendments to planning and environmental laws that they thought unlikely to have been made without the climate legislation.

- Litigation relating to the law. Climate framework laws can provide a stronger basis for litigation (Higham et al., 2022), which can impact the "outcomes and ambition" of climate governance (IPCC, 2022). This was confirmed by many interviewees who saw litigation as an important channel for driving accountability through judicial scrutiny, to address non-compliance, to push for more ambition in governmental actions and to drive legislative reforms. Many interviewees described litigation as having a significant impact on raising public awareness, and in some cases as helping to create the political momentum required for improvements to the legislation itself.
- Signals for investment and alignment of policies. Climate laws send signals about the direction of travel, and many interviewees thought climate laws contribute to climate policy evolution and create policy certainty for actors both within and outside of government. These signals cause others to align their activities with climate objectives even when not directly required by the legislation. The 'signalling' power of climate framework legislation was highlighted in all three countries as being particularly important for the private sector, and to some extent for creating impacts on subnational governments. A key example of this was New Zealand's introduction of mandatory climate disclosure requirements for corporations, which occurred in parallel with the passage of amendments to the climate law. In Ireland, a progress report by Business in the Community Ireland also shows a close connection between the national-level targets and goals and action by businesses (Business in the Community Ireland, 2023). This policy signalling function of the climate laws is consistent with the findings of an earlier case study of the UK (Averchenkova et al., 2021).
- Campaigning around implementation. Civil society actors play an important role in increasing ambition on climate action and strengthening accountability for implementation of political promises through exerting social pressure on governments and the private sector. According to the interviewees, campaigning and coalition-building by environmental and business NGOs has been a crucial enabler for the passage and reform of the climate change legislation in all three countries. Furthermore, campaigning around the passage of and amendments to the climate legislation has helped consolidate the climate movement, raise public awareness, and align political debate around common objectives. However, multiple interviewees noted the challenges around running campaigns and generating public interest in the technical elements of implementing the mechanics of a climate framework law once it has been adopted (see further Section 3 below).

Importance of national context

Climate framework legislation must be understood in the political, cultural and economic contexts of the country in which it is enacted. Six types of contextual factors were raised repeatedly during interviews as other important reasons for some of the impacts we describe in the following section. These are: political culture and electoral cycles (e.g. the effects of having the Green Party in government in Ireland); climate protests and youth movements (e.g. Fridays for Future in Germany and globally); global trends and events (e.g. the war in Ukraine and energy security); historical context and culture (e.g. the cultural significance of agriculture in Ireland and New Zealand); supranational laws and international agreements (e.g. the Paris Agreement); and extreme weather events and other natural disasters (e.g. the cyclones that struck New Zealand in 2023).

3. Main areas of impact from climate framework laws

Based on existing literature and on our interviews in Germany, Ireland and New Zealand, we have identified five main areas of impact from climate framework legislation, as illustrated in Figure 3.1.



Figure 3.1. Main areas of impact from climate framework laws

This section discusses these areas of impact.³ In brief, their scope covers:

- i) Impacts on climate governance how climate framework legislation can address strategic governance challenges (Zwar et al., 2023; Sridhar et al., 2022). Climate laws aim to create institutional structures and processes to enable governments to address strategic challenges in implementing climate policy. These challenges include administrative, political and legal accountability for climate action, cross-sectoral coordination and multi-sector integration, alignment with subnational action, and creating a credible evidence base for decisionmaking.
- ii) Impacts on political debate the quality and frequency of political discourse among politically active stakeholders, the level of political consensus on climate change, the ability of the law to protect against political backsliding and, in broad terms, the way climate framework legislation may affect the institutional parameters within which the climate debate takes place (Averchenkova et al., 2021; Nash and Steurer, 2021).
- iii) Impacts on climate change policies changes to the development and evolution of climate policy and increased integration of climate concerns across policy areas (Matti et al., 2021; Inderberg and Bailey, 2022).

³ We provide more detailed discussion and supplemental evidence on each of these impacts in the technical annex.

- iv) Impacts on citizens and civil society impacts on public awareness, engagement, participation and support for climate action (Orsini et al., 2021).
- v) Impacts on society and climate the first four impacts above should ultimately lead to changes in the society and in the level of emissions. Interviewees spoke about impacts on emissions and on increases in financial flows, but few mentioned clear social impacts.

The five areas of impact are interlinked and have significant overlap. The impact areas are also mutually reinforcing. For example, we see evidence of improved integration of climate concerns into decision-making across government under 'governance', but questions of integration are also relevant when discussing concrete policies resulting from the legislation. Similarly, impacts on governance, particularly discussions around accountability of ministers and the risk of backsliding on political commitments made under the law, can also be seen as impacts on the wider political debate on climate.

Below we highlight the points discussed under each area of impact most prominently by our interviewees in the three countries, so this is a representative rather than exhaustive list of impacts.

i) Impacts on climate governance

Most interviewees in Germany and Ireland and close to half in New Zealand perceived positive impacts on governance. However, it is important to note that governance is a broad impact area and not all interviewees identified the same types of governance impacts in each country. Climate laws are having impacts across key dimensions of climate governance, including coordination, subnational action, provision of credible information, accountability and oversight.

Climate framework laws can improve cross-sectoral coordination and multi-sector integration, if designed well

"[The law] has had a really powerful role in embedding the idea across government that emissions reductions actually have to happen, and that this is part of every agency's responsibility." (Research/advisory interviewee, New Zealand)

Climate laws can help improve horizontal coordination between government departments and integration of climate issues into the work of relevant ministries, including those not traditionally having a climate focus. This applies to both ministerial-level coordination and improved cooperation at the administrative level. However, we saw significant variation between the country case studies, in part due to differences in legislative design and national context.

In New Zealand and Ireland, Climate Action Plans and sectoral emissions ceilings were seen to contribute to "a whole of government approach" to climate action at both the ministerial and the administrative levels, improving collaboration, systems thinking and consideration of trade-offs. These impacts are stronger where coordinating institutions have clear mandates and timelines, and have strong cross-ministerial buy-in. For example, although the ZCA placed the primary responsibilities for action on the Minister for Climate Change, many New Zealand interviewees felt that the improvement in coordination flowed from the requirement to create an Emissions Reduction Plan (ERP), which must include sectoral policies and plans for achieving the targets.

The design of Germany's climate law prioritises independent action by key sectoral ministries rather than coordination and cross-cutting measures. The strong integration of climate objectives into the mandates of line ministries has increased transparency, yet progress in implementing climate policies varies significantly between sectors. Some interviewees suggested that stronger inter-agency and inter-ministerial coordination bodies, for example an ongoing inter-ministerial working group similar to the former Climate Cabinet, could introduce new accountability levers to improve the performance of the sectors that are falling behind.

Lessons for policy practice

When designing new or reforming existing climate laws it is important to consider the need for establishing or strengthening existing inter-ministerial coordination mechanisms within the law, at both the ministerial and administrative levels. This should include clarity on how coordination of the development and delivery of climate action plans and policies take place, and requirements around timelines and the minimum number of meetings and engagements that coordination bodies must hold. Consideration should be given to establishing clear mechanisms for defining sectoral targets or alternative mechanisms to facilitate the integration of climate priorities into the mandates of sectoral ministries and bringing all sectors into the debate. Care should be taken around the approach to emissions removals and the land use sector. Where scientific baselines remain unclear, countries should not place heavy reliance on removals from this sector to meet emissions targets. Instead, countries should consider treating removals targets for the sector as separate from and additional to emissions reduction efforts within other sectors when developing scenarios and plans to implement net zero.

Climate framework laws can enable subnational action and improve vertical coordination

"For a local authority to do something, it has to be underpinned by legislation in Ireland. ... [2021 CALCDA] brought local authorities to work on mitigation." (Subnational government interviewee, Ireland)

Targets in national climate laws can guide ambitious changes to subnational climate legislation: climate laws can increase the climate ambition of subnational actors, improve alignment and coordination between national and subnational levels, but these impacts are stronger where the law explicitly contains provisions addressing action at the subnational level and vertical coordination.

In Germany, despite a lack of clarity about the degree to which the Länder are required to align their climate action with the goals of Germany's climate law, some subnational governments thought the national law provided an important signalling function and is being used as a reference point for target-setting at the state level.

Ireland's law provides a clear mandate for local authorities to act consistently with the goals of the national climate law and requires them to produce local climate action plans aligned with nationallevel plans. Interviewees thought this had dramatically improved local authorities' engagement with the climate action agenda and also pointed to improvements in coordination between local authorities and between the local and national levels, and improved mainstreaming of climate action and alignment with national objectives.

In New Zealand, the climate law does not contain provisions creating a framework for subnational action. While there was an indication that the law does send important policy signals to local authorities, overall there was a sense that the lack of explicit provisions to support vertical integration was a missed opportunity to simplify a complex landscape of competing policy processes.

Independent expert advisory bodies are providing a credible information basis and are expected to help drive ambition

"[The ERK] is one of the biggest successful elements within the law that we currently see." (Civil society interviewee, Germany)

The creation and strengthening of the independent expert advisory bodies on climate change through the framework legislation were among the major impacts mentioned in all three countries. The independent advisory bodies have a strong authoritative voice. Through provision of depoliticised and credible information, and assessment of progress and advice, they help improve the quality of the political debate, policymaking and accountability. However, the relative impacts of these bodies vary. This variation is influenced by the scope and clarity of their mandates, resourcing and capacity, and the strength of the statutory requirements on government to consider and respond to their advice (see Box 3.1, and for further details Table 2.1 in the technical annex).

In Ireland, the Climate Change Advisory Council (CCAC) has played a key role in driving policy innovation and enhancing accountability. However, the case study highlights the importance of adequate resourcing and political independence. Evidence points to the drawbacks of trying to combine the function of providing independent expert advice with stakeholder consultation through *ex-officio* membership for some institutions, particularly representatives from high-emitting sectors like agriculture.

Box 3.1. Designing climate framework laws to empower independent expert advisory bodies

Across all three countries, it is evident that providing clear mandates to both scrutinise and advise government and incorporating a requirement for the government to respond is essential to making independent advisory bodies as effective as possible. As one research/advisory interviewee in Germany said, "we have one clear voice, independent voice in this whole process which is widely heard and clearly stating that Germany has to do more". Advisory bodies have also prompted increased engagement with challenging policy issues, for example contributing to advancing debates on emissions from agriculture in Ireland and New Zealand. One private sector interviewee in New Zealand described the Climate Change Commission as addressing "issues that politically aren't possible... that would never get signed off from a government department". However, interviewees in all three countries emphasised the need to embed safeguards for independence within the appointments process, and to provide adequate resources for these institutions to operate truly independently.

In New Zealand, the Climate Change Commission (CCC) was viewed as having also had major impacts on the political debate and policy processes, not least due to the requirement for the government to respond to the advice and a recent litigation case that questioned the adequacy of the follow-up by the government. However, interviewees also raised challenges around perceptions of the Commission's independence.

In Germany, the Council of Experts on Climate Change (ERK) was recognised for its positive impacts on creating a shared understanding of progress, but so too was its lack of clear mandate to provide recommendations to government and no requirement for the government to respond to the advice has hampered its effectiveness.

Lessons for policy practice

Reforms to national climate governance systems and climate legislation should consider establishing and/or strengthening the independent advisory bodies on climate change, including through a clear mandate to provide advice on emissions targets (and adaptation where relevant under the law), sufficiency of policies to implement those targets, and an independent assessment of progress on their implementation. These provisions should result in a high level of technical expertise, a balance of thematic expertise and gender, political independence, and adequate resourcing. They should also include a requirement for the government to respond to the advice provided by the bodies.

Climate framework laws play a key role in strengthening administrative and political accountability for climate action

"The clear sectoral responsibilities allow civil society and the public, as well as other politicians, to point fingers at the ministries that are not complying." (Civil society interviewee, Germany)

"We see decentralised accountability for actions, and you hear the Minister of Climate Change... talk about [how] every minister is a climate minister now." (Public sector interviewee, New Zealand)

Through requirements for regular reporting on performance against carbon budgets and emission reduction targets, as well as through clarifying the institutional mandates, climate laws strengthen accountability for climate action. Establishing shared responsibility for climate action among public bodies through climate laws, as discussed in Section 2, is helping to create shared accountability for the outcomes. Making sectoral line ministries responsible for delivering action can also increase transparency.

In Germany, interviewees noted increased accountability due to the requirement to submit annual progress reports; this was largely echoed in Ireland and New Zealand. Interviewees in New Zealand and Ireland attributed positive impacts on accountability mostly to the architecture of targets and budgets introduced in the more recent editions of the CCRA and CALCDA.

Accountability can be strengthened by ensuring that bodies with an oversight role, such as parliamentary committees and independent advisory bodies, have sufficient expertise and capacity to provide a detailed and authoritative assessment of evidence.

Climate framework laws provide opportunities for judicial oversight, which can increase implementation and enhance ambition

"[Non-compliance] is not good for democracy ... the public doesn't understand it: 'Why do I have to adhere to the law when the minister doesn't?'" (Research/advisory interviewee, Germany)

Judicial oversight can play an important role where administrative and political accountability are insufficient. Judicial scrutiny can lead to increased ambition and transparency in climate action (see Box 3.2), but litigation should be used as a last resort. High-profile challenges such as *Neubauer et al. v. Germany and Climate Case Ireland* can contribute to increased public debate on climate action and to improvements to the governance frameworks and specific targets. Litigation can also challenge insufficient implementation and non-compliance. In Germany, litigation has been successfully used to challenge sectoral policy programmes that are insufficiently concrete to achieve their stated goals, and in Ireland to challenge projects that are inconsistent with the objectives of the climate law. However, litigation does not always lead to positive outcomes, can be costly, and may

Box 3.2. Creating the potential for judicial oversight

More than half of the interviewees in Germany and Ireland raised the example of a single successful climate litigation case as a key impact of their legislation, respectively *Neubauer et al. v. Germany* and *Friends of the Irish Environment v. Ireland* (or 'Climate Case Ireland').* In both cases, although the underlying legislation was considered insufficient to ensure ambitious climate action, the fact that the law existed provided what an Irish interviewee called the "statutory hook" needed for judicial scrutiny of government progress and commitments. Interviewees in both countries also described how litigation has helped create the political momentum required for improvements to the legislation itself (the 2021 amendments to the KSG and CALCDA respectively).

In New Zealand, although around two-thirds of the interviewees mentioned the potential for judicial oversight as a key impact of the legislation, views on how effective this might be were more varied. However, multiple interviewees did refer to the successful case of *Lawyers for Climate Action v. Minister for Climate Change*, which resulted in the Cabinet accepting that it should follow the Climate Change Commission's advice on price settings for the Emissions Trading Scheme.

These cases highlight the way in which different institutions and channels of influence created by the climate legislation can and should interact to increase overall accountability for ambitious climate action.

*For a definition of climate change litigation and discussion of these cases, see Setzer and Higham (2021).

sometimes constitute a distraction that delays the delivery of policy programmes. A lack of consequences for non-compliance in climate laws can pose risks to the credibility of climate action and for broader democratic norms.

Lessons for policy practice

When designing and reforming climate laws and national climate governance systems it is important to ensure that provision is made for a range of accountability mechanisms and these are incorporated into the climate framework legislation or another legal framework as appropriate in the national context. These provisions should include requirements for regular reporting on the part of all agencies responsible for delivery, an assessment by independent advisory bodies, and for government to respond to the recommendations of such assessments, including who in the government is required to provide reports and responses to reviews and at what point in the policy process this should take place. Clear timelines should also be introduced for reporting to parliamentary bodies, ideally committees with climate-specific mandates, with time and expertise to conduct in-depth progress reviews.

Finally, provisions should be made to enable judicial oversight of government action, but careful consideration of the consequences for missed targets on the part of sectoral ministries or the government as a whole is required.

ii) Impacts on political debate

"[The law] protects to a certain extent against political regression because it is justiciable and relevant court decisions can usually be taken to heart." (Subnational government interviewee, Germany)

Through setting clear targets and creating checks and balances for government climate action or inaction, climate laws contribute to increasing the frequency of political debate on climate action and focusing it on specific policies to reach the targets. They also help increase public attention to implementation of policies and strengthen protection against political backsliding. Interviewees across the three countries noted positive impacts on the political debate on climate change and linked them to the core provisions of the laws, such as targets, carbon budgets, independent advisory bodies and, in the case of Germany and Ireland, sectoral emission reduction targets. A minority of interviewees remained cautious about attributing causation for the above impacts solely to the climate law.

Interviewees raised three main types of impacts, described below.

Climate framework laws have increased the political focus on climate action

Political debate on climate action is now more frequent and focused on measures to meet agreed climate targets. Climate issues are more visible in the political debate and more focused on actions necessary to achieve the targets because of the legislation. In all three countries the credible information base created by reporting requirements and independent advisory bodies means that the debate is better informed and focused on policy choices and progress with implementation. In New Zealand, however, concerns were raised that the focus on five-year planning cycles means that the debate is overly focused on the short term. A minority of interviewees felt that climate laws with ambitious targets can create complacency among politicians, giving the illusion that progress is being made even when implementation is unsatisfactory.

Climate framework laws have created more discussion around problematic sectors, but do not on their own alleviate disagreement over how to meet targets

By shifting the political debate away from questions on whether climate action should be a priority to the types of implementing measures that are necessary to tackle the problem, climate laws have helped to improve the quality of the debate on sectors that are difficult to address, such as

agriculture. In Ireland and New Zealand, the question of reducing agricultural emissions has been the subject of significant controversy both before and since the passage of the climate framework laws. Most interviewees in both countries thought that the ZCA and CALCDA had successfully pushed more debate around transparency on how the agricultural sector plans to meet budgets, but agreeing specific implementation measures to reduce emissions in this sector remains a heavily contentious topic. The introduction of stronger climate laws and long-term targets has forced stakeholders to confront the issues and start working towards solutions.

The laws can help prevent backsliding on long-term goals, but interim targets and implementation measures need to be better protected through sustained political pressure

An ambitious climate law, particularly one adopted with cross-party support, creates public and private sector expectations, making it politically difficult to reverse. In all three countries, interviewees thought that to some extent the climate law can help protect against significant backsliding on long-term targets (see Box 3.3). This is due to the difficulties in administrative and political hurdles involved in amending provisions enshrined in the laws, including the political cost of abolishing previous party support for the laws, challenges of going against citizen and private sector expectations created by the law, and the risk of litigation. In Ireland and Germany, some interviewees attributed part of this shift in public expectations to the European Union's regulatory framework, including the 2030 and 2050 emissions targets. One research/advisory interviewee noted that the EU context "box[es] Ireland into a tighter corner", and a civil society interviewee said it would "look ridiculous... and be very difficult to wriggle out of [EU] commitments".

Although administrative hurdles and the risk of litigation can provide some protection, without political will, backsliding on specific policies and measures can still occur. This sentiment was particularly strong in Germany where there are currently proposals to amend the law that weaken the focus on annual sectoral targets. In Ireland, there was a sense that the question of backsliding had not yet been fully tested, but that narratives that put climate action in opposition to meeting people's basic needs were proliferating and might be used to justify backsliding.

Thus, across the three countries it was clear that a climate law alone cannot prevent backsliding but can help create the foundations to provide sustained political pressure. Reliance on the legislation by the private sector and the threat of litigation by civil society groups are among the most important factors that may work against backsliding. For EU Member States, there is scope for pressure to come from supranational and national legislation.

Box 3.3. Climate framework laws can help protect against backsliding on the long-term direction of climate policy

The climate framework laws were seen to have shifted public and private sector expectations in all three countries. This reassured interviewees that their governments would be less likely to backslide on the overall direction of travel for climate policy, given the potential public backlash. In Germany, of the 13 interviewees that stated a view on this, 10 thought the law provided some protection against backsliding on long-term targets. In New Zealand, of the 12 interviewees that stated a clear view on whether the ZCA helps protects against political backsliding, 11 thought it did. However, in Ireland, only four of the nine interviewees that stated a view said the law provided some level of protection, with others finding it difficult to tell and saying it would depend on the outcome of the next elections. Unlike Germany and New Zealand, Ireland has not experienced a significant change in government since the passing of CALCDA 2021.

iii) Impacts on policies

The development and evolution of climate policy is one of the most important areas in which climate change legislation is expected to have an impact (Averchenkova et al., 2021; Matti et al., 2021; Inderberg and Bailey, 2022). Climate laws have contributed to intensified policymaking and attention

to the climate agenda in policies across different sectors in all the case study countries. Interviewees described three main types of impact.

Climate framework laws lead to the development of new policies

Cross-sectoral plans and policies can provide opportunities for innovation and may prompt necessary law reform in other areas. The creation of new cross-sectoral climate policies and plans was highlighted as among key positive developments stemming from the Acts. Such plans may act as anchors for mainstreaming climate (i.e. integrating climate considerations across traditionally nonenvironmental sectors) and cross-sectoral coordination across both political and administrative processes (see also Inderberg and Bailey, 2022), and as a key element of the new accountability systems instituted by the Act. Requirements to create such plans can also lead to innovations in climate policy, bringing new policy issues onto the national agenda or prompting spatial planning reforms, as noted by many interviewees in Ireland and New Zealand and a few in Germany (see Box 3.4). Another key outcome highlighted by civil society and public sector interviewees was the promise to establish a National Just Transition Commission introduced during the process of developing the Climate Action Plans required by the legislation.

Box 3.4. Climate laws driving spatial planning reforms – examples from Ireland and New Zealand

Interviewees particularly in Ireland and New Zealand commented on both the challenges and opportunities presented by links between climate policy and spatial planning laws.

For example, interviewees in Ireland viewed the planning system as a significant obstacle to the development of onshore wind projects. These rules are now to be revised. Evidence from our interviews and government documents clearly indicates that challenges in implementing the Climate Action Plan were a significant factor in driving the proposed changes.

Similarly, interviewees in New Zealand linked massive reforms to spatial planning systems to the need to overcome the misalignment between planning laws and climate change imperatives. However, interviewees also noted that the lasting impact of these reforms was far from certain, as the changes had been introduced close to the end of the government's term and had mostly not yet entered into force.

Climate framework laws improve the integration of climate objectives into sector-specific policies and policy decisions

Sectoral instruments introduced to comply with the three climate laws have had positive impacts on issues such as encouraging uptake of electric vehicles. However, there is significant variance in the levels of success between sectors and the three countries. For example, in New Zealand, many interviewees cited a policy on electric vehicles known as the Clean Car Discount scheme, for which the ERP was described by a public sector interviewee as a "substantive trigger". Nearly half the interviewees in Ireland commented on changes in transport policy flowing from its Act. These include major changes to the way public bodies manage their own transport fleets: a significant programme of purchasing new hydrogen and electric buses, and a small but growing increase in the uptake of zero emissions vehicles. In Germany one of the most frequently discussed policy measures flowing from its law was the introduction of new legislation, the Buildings Energy Act, approved by parliament in September 2023 to phase out fossil fuel heating systems in buildings. However, the approved measure was significantly less ambitious than its original form due to major political opposition to the proposals.

Climate framework laws send signals about the direction of travel and improve policy certainty

The climate laws were viewed by many interviewees as contributing to climate policy evolution and creating policy certainty for actors both within and outside of government, despite the challenges in policy implementation discussed above. These signals cause others to align their activities with climate objectives even when not directly required to by the legislation. A key example of this was

New Zealand's introduction of mandatory climate disclosure requirements for corporations, which occurred in parallel with the passage of amendments to the climate law. Business in the Community Ireland's 2023 progress report also shows a close connection between the national-level targets and goals and action by businesses in Ireland (BITCI, 2023).

iv) Impacts on citizens and civil society

"It is important to show to people that it is not just about the need to reduce emissions, but that climate action is going to make your area a better place to live, which is what some local authorities in Ireland are trying to do through their engagement around the Climate Action Plans." (Subnational government interviewee, Ireland)

The impact of climate legislation on changes in attitudes and behaviour of citizens and civil society drew the greatest diversity of assessments among the interviewees, due to the difficulty of attributing such change to the laws and separating it from other contextual factors like extreme weather events. Interviewees were still able to highlight three positive types of impact, described below.

Climate framework laws are indirectly enhancing public awareness through increased frequency and quality of media coverage on climate action

Adopting a climate framework law has provided regular opportunities to put the topic of climate protection on the political agenda, increase media attention and therefore increase public debate in the three countries. The laws have also provided the basis for media and NGOs to monitor accountability and enable civil society to campaign on sectors that are not performing, because the policy debate is overall more concrete and based on the specific targets.

The climate laws of Ireland and Germany were noted to provide an opportunity for focusing the national conversation on climate change on targets and policies, including actions in sectors that are hard to tackle, codifying government's obligations and implementation progress in the eyes of the public. In both countries research/advisory interviewees also highlighted the importance of the domestic climate laws in supplementing EU climate policy, bringing climate action closer to home. In New Zealand, fewer interviewees highlighted impacts of the climate legislation on the public, although some thought that the lead-up to the ZCA and the attention around the cross-party consensus depoliticised climate change as an issue. However, climate laws by themselves may be too abstract for citizens to engage with in detail; to amplify their impact on public awareness there is a need to translate the discussion into accessible tangible examples, such as specific policy measures and practical solutions introduced to meet targets.

The frameworks created in climate laws provide a stronger basis for civil society to scrutinise progress, but overall it has become more difficult to campaign effectively

Climate legislation was noted in all three countries to have provided civil society with "more tools" and strengthened the ability of the climate movement to orient their campaigning around clear reference points, such as emissions targets and regular assessments of performance by the independent advisory bodies. However, the growing complexity of outputs by independent advisory bodies can present challenges for civil society, and simplification of messages is desirable.

The adoption of the climate framework legislation has contributed to the spread of conversations about climate into other arenas and led to engagement of new stakeholders in the debate. For example, in Ireland social justice institutions have increased their involvement in the debate since the adoption of CALCDA 2021, which recognised the need to have regard for climate justice. Another example is the engagement of campaigners focused on food security or the increased involvement of Māori organisations in New Zealand (e.g. Te Ara Whatu).

There was a sense that the adoption of the climate legislation has led to a change in NGO advocacy strategies in all three countries, as the focus has now shifted to implementation. However, advocacy

around implementation is challenging, as it has become more difficult for civil society organisations to know where to focus their energy and resources, due to the complexity of the climate laws and the multitude of elements they cover. Civil society interviewees commented that it is more difficult to generate enthusiasm for individual elements of the laws among the public than it was to campaign on adopting the law in the first place.

Climate laws can provide a basis for public participation, but the existing legislation could be significantly strengthened to include better communication and engagement processes

Transforming better public awareness into greater support for climate action requires enhanced public participation. There is potential for climate laws to increase public participation in climate action (and support for it). However, interviewees highlighted that public participation processes around the design and implementation of the climate laws were still nascent.

In Ireland and Germany, there was a sense that the climate laws were enabling some public engagement at the subnational levels, as the laws provide a foundation to increase public participation. In Ireland, this was around the preparation of local authority climate action plans mandated under CALCDA 2021. In Germany, there were positive examples on public engagement at the regional level, for example through the Citizens Forums, but the experience was reported to vary greatly from region to region. Interviewees also highlighted the recent example of the Buildings Energy Act as a climate policy measure where public engagement was lacking (see Box 3.5). In New Zealand, however, interviewees thought that the participation of Māori stakeholders and other communities that will be affected by the decisions needs to be further improved.

Box 3.5. Shortcomings in communicating Germany's heating law

Public opposition to a change to the Buildings Energy Act (the Gebäudeenergiegesetz), also referred to as the 'heating law', was discussed by many interviewees. The change is designed to phase out fossil fuel heating in buildings. Although the interviewees said that the public opposition stemmed in part from the fact that the bill would lead to some upfront costs for households, they argued that the problems were also partly created by the way in which the policy was introduced: how the distributional consequences on citizens would be handled was not explained. One media interviewee described the "failure" of associated communications, stating there was a lack of "social impact analysis that should have... gone with [the] communication strategy".

The significant public backlash against the policy resulted in delays and last-minute changes to the Act, which was finally passed in September 2023 after months of struggle. It illustrates the need to target multiple stakeholders in communicating such policy changes: for example, while one research/advisory interviewee said that business was ready in this case to make the shift to heat pumps, there was resistance from households who had been party to disinformation campaigns around the law. In other contexts, opposition may come from the business lobby – as has occurred in the auto industry, as a civil society interviewee pointed out.

Lessons for policy practice

More public engagement and participation around the adoption of climate laws and the policies flowing from them can help enhance societal acceptability during implementation. Participatory processes should engage people from the early stage of policy design and before the decision on the course of action has been taken, building on the innovations at the local level. Design of policies that will impact a broad range of people should be accompanied upfront by strong communication and participation strategies and include plans for extensive outreach and public information and education campaigns

v) Impacts on society and climate

Few interviewees were confident in attributing changes in society, and impacts on the climate itself (in terms of emissions) solely to the climate laws, in particular given the very short period of time since the adoption of the strengthened legislation in all three countries. However, there is some evidence of impacts in the following areas.

Climate framework laws can be designed to deliver positive social outcomes

There is significant scope to improve the design of climate laws so that they deliver positive social outcomes. The Ireland case study demonstrates that embedding just transition into climate laws can provide a useful foundation and support to affected communities (see Box 3.6). In New Zealand, by contrast, there was a sense that achieving a just transition was hampered by silo thinking within government.

Climate framework laws lead to shifts in financial flows

There is evidence that climate legislation is contributing to shifting financial flows towards climate action, which may ultimately filter through into changes in emissions (as the example in Box 3.6 also suggests). In all three countries, interviewees pointed to more financial resources being committed to climate change, including through the creation of new funds and changes in the fiscal system, motivated by and closely linked to the need to implement climate legislation. In New Zealand, there was also some evidence that the climate law had led to increased availability of private finance for climate action.

Box 3.6. The potential for climate framework laws to drive a just transition – learning from Ireland

As CALCDA 2021 has incorporated the just transition as one of its overarching principles, it is perhaps unsurprising that interviewees in Ireland felt more confident than those in Germany and New Zealand in attributing positive social impacts to the climate law.

Several Ireland interviewees discussed the government support for the just transition in the Midlands region, which they considered a success, and which they linked to the legislation and the climate action plans. To provide support in the transition to a low-carbon society and economy in a region with traditionally high rates of peat extraction, a Just Transition Commissioner was appointed in 2019 and a National Just Transition Fund set up. The Fund is providing over €22 million in grant funding to projects in the Midlands, which are expected to attract an additional €15 million with the broader goal of supporting a just transition. It is estimated that these funds will support 178 direct and 999 indirect jobs (Irish Government, 2023). These processes were described by a private sector interviewee as "a really good kind of just transition in the area" although others said there was room for improvement. For example, the National Just Transition Commission has been announced but not yet established. Further, challenges remain in implementing a just transition in the agricultural and land use sector.

Laws containing the key building blocks are expected to contribute to long-term emissions reductions

While emission reduction performance overall remains unsatisfactory in the three countries, all of which are expected to miss their current targets, it is too early to assess the impact on emissions of the latest editions of the laws. Early editions of the climate laws in New Zealand and Ireland did not bend the curve on emissions, even though overall there has been significant decoupling between economic growth and emissions since 1990 (see Figure 6.1 in the technical annex). There is insufficient emissions data to confirm a clear change in emissions trajectories since the passage of the amendments to the KSG in 2021, the ZCA in 2019, and CALCDA 2021. However, in all three countries there was a sense that the laws had led to at least some actions that would reduce or avoid new emissions, but that progress was not fast enough. There is an overall expectation that the latest

editions of the laws, containing the key building blocks (see Section 2) that were not in place earlier, will contribute to emissions reductions over the long term.

Climate laws need to be strengthened to improve adaptation and resilience outcomes

Only a few people spoke about impacts of the laws on adaptation and resilience in our interviews. Some interviewees in Ireland anticipated that increased numbers of adaptation actions would be included in both national and subnational Climate Action Plans (CAPs) and Local Climate Action Plans (LCAPs) but gave little substantive comment on this. In New Zealand, more than one interviewee raised concerns that the National Adaptation Plan primarily codified existing actions rather than generating policy innovations. Some interviewees there also raised the need to strengthen the legislation to ensure that mitigation measures do not contribute to negative adaptation outcomes, particularly in the context of forestry (e.g. forestry practices in dense monoculture plantations involve leaving debris or 'slash' when wood is harvested, which can cause damages to homes, infrastructure and marine life when extreme weather events occur). Interviewees anticipated that adaptation action might become a more significant part of the climate action discussion as the physical impacts of climate change become more severe.

Lessons for policy practice

Adaptation is a crucial part of any government's climate policy response and our findings suggest that at least in our country case studies climate laws could be strengthened to better prioritise this. Legislators and policymakers therefore need to consider how laws can be designed to strengthen adaptation, and to ensure that the linkages between mitigation measures and adaptation outcomes are fully understood. Here, lessons may be learned from legislation passed by developing countries, which has often placed more priority on adaptation (Rumble, 2019).

4. Policy implications and recommendations

The analysis of the three case study countries provides evidence that climate framework legislation is delivering on several of the key expectations that are associated with the objectives of such allencompassing laws. It demonstrates the positive role of climate legislation in strengthening climate governance and the political debate on climate change, on policies and plans, and some positive impacts on citizens and civil society (Figure 4.1 shows where impacts from the laws are most clearly perceived in practice). A small percentage of interviewees perceived impacts on society and the climate itself, noting particular challenges in applying clear causation between the law and effects on the real economy.

The potential for climate legislation to facilitate implementation of a just transition was raised in the case of Ireland, and also its contribution to shifting financial flows in favour of climate action in all three countries. However, earlier editions of the climate laws in Ireland and New Zealand have not led to a significant bend in the emissions curve, although carbon intensity of the economy has been decreasing over time in all three countries. It is too early to judge the impact of the latest editions of the laws on emissions.

Figure 4.1. Percentage of interviewees in the three case study countries that mentioned positive and/or negative impacts for each area of impact



Policy implications

Climate framework legislation is helping address governance challenges and build effective institutional frameworks and processes on climate change

There is evidence that climate framework legislation can deliver on its primary purpose of enabling the reform of national climate governance systems and be an effective tool for addressing the central governance challenges around weak cross-sectoral coordination and integration, shorttermism and piecemeal approaches in policy planning, and weak accountability for implementation. These impacts are contingent on the legislation addressing the essential building blocks and having broad-based cross-party political support and for ownership of the laws during their negotiation and adoption. We have identified core building blocks of climate laws as being the most impactful channels of influence across the three case studies. As described in Section 2, these are: targets and carbon budgets; planning and policy processes; public sector mandates and new institutions; and reporting, assessment and review. These building blocks should therefore be considered in the specific national context when designing new or reforming existing laws.

Development and debate around climate framework laws can help consolidate political consensus on climate change, while implementation requires sustained political pressure and public participation

Cross-party consensus on the adoption of a law enables the debate to focus on how to implement agreed climate objectives. It is therefore important to invest political effort and time in building such consensus from the outset rather than rushing to adopt a law that may be more vulnerable to political change. Experience in the three case study countries shows that agreeing targets in the law creates more discussion on problematic and politically sensitive sectors, for example agriculture. However, it does not alone alleviate disagreement over how to meet those targets. The laws can help prevent backsliding on long-term goals, but interim targets and implementation measures need to be better protected through civil society applying sustained political pressure and building broader-based support among the general public through stronger engagement and public participation processes.

Shortcomings in legislative design and changes in political commitment to climate action can weaken the effectiveness of climate framework legislation

Failure of the legislation to live up to its intended impact or to achieve changes as rapidly as required was the main type of negative impact raised in our research. This kind of failure was often due to issues to do with implementation, or shortcomings in the legislative design. However, mostly it can be attributed to changes in the political environment, which illustrates the key limitation of climate change legislation: laws cannot themselves ensure effectiveness if the political commitment to deliver is not present or is weakened, and the resources needed to implement actions are not available. It also highlights the importance of including explicit provisions on consequences or penalties for failing to comply with the law.

Climate framework laws can contribute to enhancing public awareness and support for climate action *if* there are explicit provisions on public participation and targeted communications

The drafting and consultative processes leading to the passage of climate laws, along with provisions in the laws themselves, can strengthen public participation. However, such participation is still nascent. Our case studies show that having explicit provisions requiring public participation at the important stages of the policy process can help address the current gaps. There is also a need to communicate the objectives and impacts of climate laws to the public in a way that is accessible and relevant to citizens' everyday lives.

Climate framework laws provide a strengthened basis for civil society to campaign on, but there is also a risk of legislation weakening climate movements or being used as an excuse for inaction

Climate laws can provide clearer reference points for civil society to campaign around, such as reports on progress in meeting emission reduction targets. They can also facilitate the penetration of climate change into related campaign agendas such as social justice, leading to new actors such as social justice activists becoming involved in the climate debate. The three case studies show that campaigning around the passage of the climate legislation has helped consolidate the climate movement in those countries.

Recommendations

Overarching recommendation

1. Countries that currently have no climate framework law should consider adopting such a law, to help strengthen national climate governance and enable more ambitious climate action.

Designing new climate framework laws or amending existing laws

- 2. Legislators and policymakers should ensure that legislation includes provisions on or makes a reference to provisions already established elsewhere, including:
- A long-term net zero target, interim targets or carbon budgets consistent with the Paris Agreement, latest developments in scientific knowledge and national circumstances. They should also include clear mechanisms for defining sectoral targets or alternative ways to facilitate the integration of climate priorities into the mandates of sectoral ministries.
- A requirement for the iterative development of climate action plans and policies to meet those targets, subject to ongoing oversight by cross-sectoral inter-agency bodies. Policymaking processes should be required to assess and address distributional impacts of climate measures, incorporating the principles of a just transition.
- A requirement for public bodies to carry out their functions in a manner aligned with climate goals, including where relevant subnational governments, state-owned companies and local authorities. Clear language requiring consistency with national climate targets should be preferred to language that makes climate goals a permissive consideration.
- Requirements for regular reporting by all agencies responsible for delivery, and assessment and review of progress, with clarity on who is required to provide reports and responses to reviews and at what point in the policy process; and a requirement for regular assessment of progress and advice on policy shortcomings by independent advisory bodies, with an obligation for government to respond to such advice.
- **Provisions to enable judicial oversight of government action**; however, careful consideration of the consequences for missed targets on the part of sectoral ministries or the government as a whole is required.
- 3. Governments should create new institutions for coordination and accountability, or strengthen the mandates of existing ones. Anchoring these institutions in the law helps protect against political change. This includes:
 - Establishing or strengthening existing inter-ministerial coordination mechanisms, at the ministerial and administrative levels, defining their mandate, composition and role in the policy process.
 - Establishing or strengthening independent advisory bodies on climate change, ensuring they have a clear mandate to advise on targets and sufficient plans to meet them, and that they provide an independent assessment of progress in implementation. The composition should ensure membership of a high level of experience, and diversity of thematical expertise and gender, political independence, and adequate resourcing.
 - Integrating public participation into critical stages of decision-making on climate change, focusing on the development of policies and on decisions around sectoral trade-offs; and communicating the rationale and need for climate change law and ensuring the public is brought along.

- 4. Campaigners, advocacy groups and civil society should incorporate the most impactful building blocks of climate legislation as above into campaigns for governance reforms, and should:
 - Be aware of the risk that ambitious law coupled with poor implementation may create a false sense of comfort that action is being taken, reducing the sense of urgency and making it more challenging to mobilise public campaigns.
 - Actively seek to develop a cross-party coalition when campaigning for climate legislation. This may be achieved by focusing initially on the core building blocks in the legislative architecture, rather than on specific policies. This coalition should engage with and develop coalitions with stakeholders working in the highest emitting sectors.
 - Be aware that after the adoption of a law, mobilising support for improving the existing legislation and its implementation is more challenging than campaigning for the need to pass a law in the first place. It requires greater technical sophistication and focus.

Implementation of climate framework legislation

- 5. Governments, civil society and commentators should make concerted efforts to increase public awareness of the purpose of legislation and climate action more broadly, emphasising national ownership and the benefits of transition.
- 6. Governments should:
 - Ensure that measures to meet targets and other obligations under the climate framework law are communicated in an accessible way to citizens and include an explanation upfront of how social and distributional concerns will be addressed.
 - **Promote inclusive public participation processes** to strengthen support for implementation, focusing where possible on specific questions, measures and policy trade-offs.
- 7. Campaigners should:
 - Work to maintain momentum around the development, assessment and delivery of policies and plans; a focus on just transition can help mobilise support.
 - Carefully consider how to best leverage the accountability mechanisms built into law, including parliamentary oversight and assessments by independent advisory bodies.
 - Assess potential risks around the use of litigation as a tool to raise ambition or enforce implementation, such as the weakening of provisions in the climate framework law (e.g. limitations on remedies), societal or political backlash, and tying up of limited resources.
 - Be careful not to discourage sectors that are delivering on their targets or budgets in the countries where a sectoral approach is taken in legislation.

Appendix 1. Methodological summary

Semi-structured interviews

A total of 73 interviews were conducted for the report and technical annex: 33 were conducted in relation to New Zealand, 21 for Ireland, and 19 for Germany. The interviews were held by online video call during the period July 2023 to January 2024. The interviewees were selected to cover a broad range of stakeholders (see Table A below), and all were actively engaged in their country's climate debate before and/or after the enactment of the relevant climate framework law. Interviewees were also directly involved in the process of developing the climate framework law and/or its current implementation. Several interviewees were actively involved in advancing the case for the passage and amendment of the relevant law. Some interviewees held relatively more sceptical positions on the law both prior to and following its passage and/or amendment.

The large majority of interviews were conducted in English. Five interviews were conducted in German and were first translated to English using machine translation services and then checked manually by a native German speaker. The interviews were transcribed and analysed qualitatively through thematic content analysis with the assistance of NVivo software. Inputs from the interviews have been anonymised and incorporated into the report and the technical annex.

The tables below show the variety of perspectives provided by the interviewees. The authors aimed to gather interviewees with balanced gender perspectives. Where an interviewee provided multiple perspectives due to differing past and current professional backgrounds, those perspectives were counted as two separate perspectives. Perspectives from members of independent advisory bodies on climate change created by the legislation were included alongside perspectives from researchers and academics. Perspectives from other independent bodies such as regulators and other advisory bodies were included as 'public sector'.

Perspective	Germany	Ireland	New Zealand	Total for all countries
	No. of perspectives			
Public sector	5	4	10	19
Legislators and political advisors	1	1	4	6
Private sector	0	3	8	11
Research and advisory	9	5	10	24
Civil society	7	7	6	20
Media	1	1	2	4
Sub-national government	2	2	2	6
Māori	N/A	N/A	2	2

Table A. Interviewees' perspectives

The technical annex contains our interview protocol.

High-level quantitative assessment

To give readers a better impression of the volume of responses relevant to areas of impact in this report, a high-level quantitative assessment was conducted to understand how many interviewees expressly indicated positive or negative impacts for each impact area. Readers should note that not all impacts described and incorporated in this count were of the same order of magnitude. Counts also represent the number of interviewees who described positive or negative impact(s) in a given area rather than the number of impacts described, as many interviewees referred to the same issues several times. Some interviewees described both positive and negative impacts within the same impact area.

Table B. Percentage of interviewees that mentioned positive and/or negative impacts in each impact area

Summary of impacts highlighted in interviews	Positive	Negative
Climate governance	67%	7%
Political debate	58%	8%
Climate change policies	52%	3%
Citizens and civil society	40%	10%

Expert consultations on framework

We held a virtual closed-door roundtable discussion to consult climate policy experts and academics on the frameworks set out in this report. Participants included policy practitioners, campaigners and academics working directly and indirectly on climate governance issues (see Acknowledgements before the Contents page). Many participants were part of the European Climate Foundation Climate Governance Hub. Inputs from this discussion have been incorporated into the report.

Limitations

Our analysis primarily relies on the evidence provided in the interviews. We acknowledge that the spread of perspectives in each country results in some limitations to our analysis. Overall, we conducted more interviews in New Zealand than in the other two countries. We were unable to secure interviews with representatives from the private sector in Germany.

There is room for further assessment of the impacts identified in this report, for example corroborating our analysis on public awareness and political debate with media coverage and parliamentary records, and for expanding the analysis to how climate framework laws function in different institutional contexts, including in developing countries.

Appendix 2. Timelines of key events related to the climate framework laws in the case study countries

Key events related to Germany's climate framework law



Key events related to Ireland's climate framework law



Note: We have not included events relating to the preparation of the National Adaptation Framework or sectoral adaptation plans, as these were not discussed extensively by interviewees. Although there have been other climate litigation cases in Ireland, we have focused on the landmark Friends of the Irish Environment cases mentioned by interviewees.



Note: We have not included events relating to the preparation of the National Adaptation Plan, as this was not discussed extensively by interviewees. Although there have been other climate litigation cases in New Zealand (e.g. Smith v. Fonterra), we have focused on cases raised most frequently by interviewees.

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