



Grantham  
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# Supplemental evidence on the impacts of climate framework laws

Technical Annex to the report *Impacts of  
Climate Framework Laws: Lessons from  
Germany, Ireland and New Zealand*

March 2024

This is a technical annex of supplemental evidence to the report *Impacts of Climate Framework Laws: Lessons from Germany, Ireland and New Zealand* by Alina Averchenkova, Catherine Higham, Tiffanie Chan and Isabela Keuschnigg, published in March 2024 by the Grantham Research Institute on Climate Change and the Environment. The full report is available at [www.lse.ac.uk/granthaminstitute/publication/impacts-of-climate-framework-laws](http://www.lse.ac.uk/granthaminstitute/publication/impacts-of-climate-framework-laws)

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# Contents

1. Introduction	1
2. Impacts on climate governance	3
3. Impacts on political debate	16
4. Impacts on climate change policies	22
5. Impacts on citizens and civil society	27
6. Impacts on society and climate	32
Appendix 1. Methodological notes	38
Appendix 2. Interview protocol	40
Appendix 3. Timelines of key events related to the climate framework laws in case studies	41
References	44

# 1. Introduction

This document provides a synthesis of evidence on the impacts of climate framework laws from over 70 semi-structured interviews conducted with experts in Germany, Ireland and New Zealand between June 2023 and January 2024. This evidence underpins the findings in the report *Impacts of climate framework laws: Lessons from Germany, Ireland and New Zealand* published by the Grantham Research Institute on Climate Change and the Environment in March 2024. An introduction to each of the case study countries and an overarching analysis of how climate laws have impact and the types of impact they produce is set out in the main report. This is accompanied by policy recommendations for legislators, policymakers, business and civil society groups.

This technical annex provides more in-depth description and analysis of interviewees' views. We set these out across five main areas we have identified from this research in which climate change framework laws can have impacts:

- (i) Climate governance
- (ii) Political debate
- (iii) Climate change policies
- (iv) Citizens and civil society
- (v) Society and climate.

A more detailed overview of our methodology is provided in Appendix 1. Appendix 2 contains our interview protocol. We have also included timelines of key events related to the framework law in each of the case study countries in Appendix 3.

## How we refer to the key laws

**Germany:** The primary climate framework law in our German case study is the Federal Climate Change Act, *Bundes-Klimaschutzgesetz*, 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).

We use the abbreviation **KSG 2019** for the original legislation and **KSG 2021** for the amended legislation.

**Ireland:** Ireland's Climate Action and Low Carbon Development Act was enacted on 10 December 2015. It was amended by the Climate Action and Low Carbon Development (Amendment) Act 2021.

We use the abbreviation **CALCDA 2015** for the first law and **CALCDA 2021** for the amended legislation.

**New Zealand:** The Climate Change Response Act was enacted in New Zealand on 18 November 2002. It was amended by the Climate Change Response (Zero Carbon) Amendment Act 2019.

We use the abbreviation **CCRA** for the first law and **ZCA** for the amended legislation.

## Further abbreviations

### Germany

**CPP:** *Klimaschutzprogramme*, the climate action programmes required under Section 9 of the KSG (the Federal Climate Change Act)

**ERK:** *Expertenrat für Klimafragen*, the Council of Experts on Climate Change

**KKB:** *Koordinierungsstelle Klimaneutrale Bundesverwaltung*, the Coordination Office for Climate-neutral Federal Administration

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## **Ireland**

**CCAC:** Climate Change Advisory Council

**CADB:** Climate Action Delivery Board

**CAP:** the annual update to the Climate Action Plan 2019 required under Section 4 of CALCDA 2021

**CARO:** Climate Action Regional Office

**LCAP:** Local Climate Action Plans, required under section 16 of CALCDA 2021

## **New Zealand**

**CCC:** Climate Change Commission/He Pou a Rangi

**CRMG:** Climate Response Ministerial Group

**ERP:** Emissions Reduction Plans required under Section 5ZG of the Climate Change Response Act (ZCA)

**FMCA:** Financial Markets Conduct Act

**NZ ETS:** New Zealand Emissions Trading Scheme

## 2. Impacts on climate governance

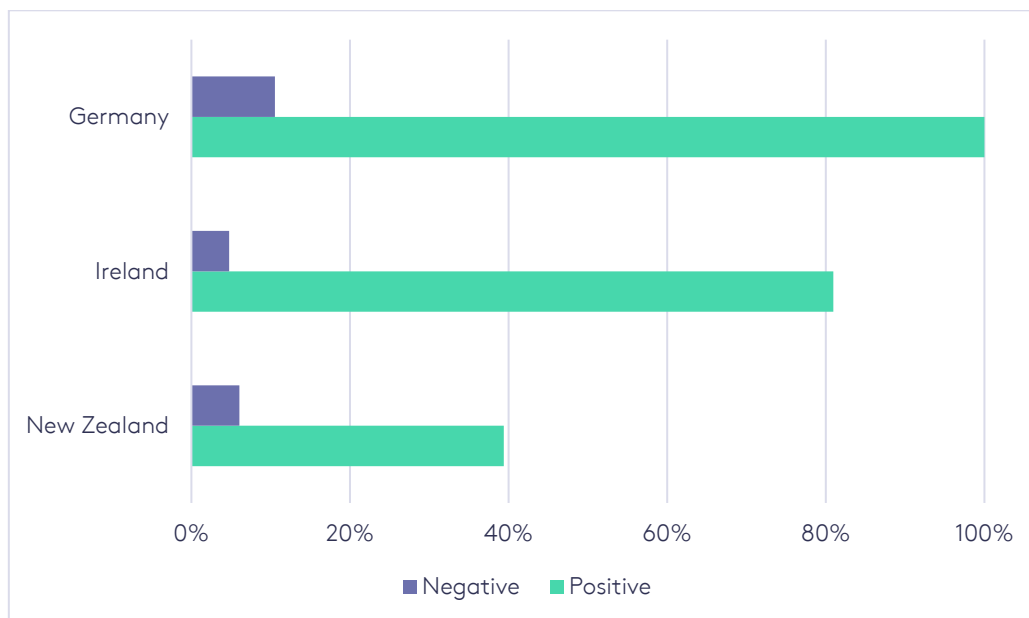
Previous research has highlighted the role of climate framework laws in strengthening climate institutions (Averchenkova and Nachmany, 2017) and in addressing strategic governance challenges like accountability, coordination and integration (Zwar et al., 2023; Sridhar et al., 2022). In our three case study countries, we found evidence of impacts across six key dimensions of climate governance:

- (i) Climate framework laws can improve cross-sectoral coordination and multi-sector integration.
- (ii) Climate framework laws can enable sub-national action and improve vertical coordination.
- (iii) Independent expert advisory bodies are providing a credible information basis and are expected to help drive ambition.
- (iv) Climate framework laws play a key role in strengthening administrative and political accountability for climate action.
- (v) Climate framework laws provide opportunities for judicial oversight, which can increase implementation and enhance ambition.
- (vi) A lack of clear consequences for non-compliance poses serious credibility challenges and risks to democratic norms.

The rest of this section looks at each of these dimensions in turn.

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.

**Figure 2.1. Percentage of interviewees that mentioned positive and/or negative impacts on climate governance, post passage of climate framework law**



*Note: The figure shows the share of interviewees in each country who thought that the relevant climate framework law created positive and/or negative impacts on governance. It accounts for the number of interviewees who described positive or negative impacts at least once, rather than reflecting the number of impacts described, as many interviewees referred to the same issue several times. Where the same interviewee described both positive and negative impacts, they were added to both the positive and negative counts.*

## **i) Climate framework laws can improve cross-sectoral coordination and multi-sector integration – if designed well**

Overall, the evidence from our interviews suggests that climate laws can lead to better coordination between government departments and improve integration of climate issues into the work of ministries not traditionally seen as having a climate focus. However, we saw significant variation between the country case studies in this area, in part due to differences in legislative design and constitutional context.

In New Zealand at least 16 interviewees commented on increased coordination and engagement across government on climate change because of the legislation. The situation was similar in Ireland, where at least nine interviewees spoke explicitly about improvements in coordination and integration. Climate Action Plans and sectoral emission ceilings were seen to contribute to “a whole of government approach” to climate action at both the ministerial and the administrative level in both these countries. For example, although the ZCA places 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. One public sector interviewee also commented that the National Adaptation Plan had had a similar effect: “The Department of Conservation and the Ministry for Primary Industries were having to liaise a lot more on ... what their risks were in terms of a wildfire or drought or so on and how they could present a unified position.”

### **Climate laws can increase ministerial coordination and cooperation, especially when inter-ministerial institutions are created or existing ones are mandated to focus on climate change**

The ZCA has contributed to improved coordination at the ministerial level and better integration of climate issues into the mandates of all government departments. As a research/advisory interviewee said, 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”. A media interviewee noted, “Ministers ... are really getting climate change on their desks.” Several interviewees in New Zealand spoke about the Climate Response Ministerial Group (CRMG), chaired by the Prime Minister, as being an important part of the governance architecture that enhances ministerial coordination. One public sector interviewee thought that the CRMG “enables really a level of visibility ... if one sector doesn’t deliver on its emissions targets, then actually someone else has to pick that slack up. So it’s really raised the prominence of the interconnectedness of climate policy across the public sector.”

At the ministerial level, the requirement for the Irish government to agree the sectoral emissions ceilings was noted to have created a need for coordination between departments and to integrate climate action into each ministry’s mandate. However, the impact of the legislation in this area was described as limited by several interviewees, because responsibility for too many of the sectoral emissions ceilings ultimately fall on the Minister for Environment, Climate, and Communications and Transport. At the time of the interviews the Minister was Eamon Ryan, leader of the Green Party, and the prominent role he and the Greens play in the current coalition government makes it difficult to disaggregate the impacts of the legislation from the impacts of having the Green Party in government, particularly with a dynamic and committed leader in the picture. A similar issue was raised for New Zealand, where several people commented on the importance of James Shaw’s leadership during his tenure as Minister for Climate Change.

### **Climate change laws can also improve cooperation at the administrative level**

Several interviewees pointed to the Climate Change Executive (CE) Board, a body created to support implementation of the ERP, as a useful mechanism for coordination between departments at the administrative level in New Zealand. Some also highlighted the central coordinating role played by the Ministry for Environment (MfE). In the words of a public sector interviewee: “for a long time, [the MfE] were kind of shouting from the outside, trying to get people engaged, whereas [the ZCA] gave [the MfE] quite a lot of mandate to kind of push other departments to deliver on things and really play a bit of a leadership and coordinating role.”

In Ireland, interviewees commented on the importance of the Climate Action Delivery Board (CADB), which was created to implement Ireland's Climate Action Plans, and involvement of the Department of the Taoiseach [Prime Minister]. However, there were also concerns about implementation. One research interviewee noted that the CADB has not met as regularly as intended (see also Boland, 2022; O'Sullivan, 2021; Social Justice Ireland, 2022). Another legislator/political advisor interviewee noted that the CADB was less impactful than a series of issue-specific cross-departmental taskforces that had also been established to implement elements of the CAP, pointing to the Offshore Wind Delivery Task Force as a particular success. This demonstrates that the creation of a coordination institution is not sufficient: much of its performance depends on sustained political will, and also the clarity of its mandate.

### **The German law prioritises sectoral action but more emphasis on cross-sectoral coordination is needed**

In Germany only a few interviewees discussed the question of horizontal coordination between ministries and public servants and their views were mixed over whether the KSG has led to improvements in this area.

The relative lack of cross-sectoral coordination in Germany was raised as reflecting the political culture and tradition, in which the Chancellor plays a comparatively more facilitative role in government, each of the sectoral ministries are much more independent, and cooperation between them depends largely on political alignment. This confirms findings from Flaschland and Levi (2021) that the design of Germany's climate law, particularly the sectoral carbon budgets and the requirement on sectoral ministries to propose immediate action programmes if these are missed, really places the emphasis on multi-sectoral action, i.e. all sectors taking their own discrete actions, rather than cross-sectoral action, where more emphasis would be placed on developing policy programmes in concert and considering synergies and trade-offs between sectors.

The lesser degree of cross-sectoral coordination in Germany was also evident in the relatively limited importance placed on climate action planning compared with the other two countries. In 2019, the then Chancellor convened an inter-ministerial working group, the so-called Climate Cabinet, which worked on the development of the initial edition of the KSG and the Climate Action Programme 2030, which was adopted during the same time period. The KSG requires the government to produce a new Climate Action Programme each time the long-term 2050 Climate Action Plan is updated, and to "specify measures" that it will take to meet emissions targets. However, there is limited guidance for these Plans and Programmes in comparison to the more detailed requirements in the other two case study countries.

The emphasis on sectoral action described above was considered appropriate to Germany's political system by some interviewees, but one public sector interviewee said that this "doesn't solve the problem with those [ministries] who are difficult" and suggested that the creation of an ongoing inter-ministerial working group might help to improve the performance of these ministries.

The current design of Germany's legislation highlights a tension between the need for an approach that fits well within existing practices – in this case taking into account the power of the sectoral ministries within the German system in general – and the potential to create inter-agency and inter-ministerial accountability through increased coordination. While the first option may be operationally easier, in the German case it has also led to an absence of several potential accountability levers to ensure effective implementation.

### **ii) Climate framework laws can enable sub-national action and improve vertical coordination**

The impact of climate framework laws on sub-national governance differs between the three case studies, largely due to different legislative design and the fact that Germany is a federal state. However, in all three countries, interviewees agreed that national-level climate legislation provides a signalling function, as it indicates that the national government views climate action as important. It helps raise awareness that all local authorities, even those less inclined to act on climate, still have to act. As one sub-national government interviewee in New Zealand put it: "Having the central government piece is still useful ... some of the local government bodies ... are less inclined to take climate action. ... [but] there's still an understanding that it is a national priority and that it is an issue they have to grapple with."



## Targets in national climate laws can guide ambitious changes to sub-national climate laws

In Germany, 12 of the 16 Länder have enacted climate legislation, seven of these being passed before the original 2019 KSG. Four have since been amended.<sup>1</sup> Although Berlin and Schleswig-Holstein were arguably more ambitious in introducing climate legislation prior to the KSG, interviewees thought that the 2021 KSG has directly influenced subsequent amendments. When discussing the 2021 amendment to Berlin's Climate Act (known as *Berliner Klimaschutz- und Energiewendegesetz*) a sub-national government interviewee said that the state was "able to orient on some points from the federal government ... in particular the introduction of sectoral targets, the departmental responsibility for the implementation of the sector targets, and the immediate programmes for readjustments in the event of imminent failure to meet overall or sector targets. These were all mechanisms that the state actually tried to replicate at the state level."

Another sub-national government interviewee referred to the example of the 2021 amendment to Schleswig-Holstein's Climate Act (the *Energiewende- und Klimaschutzgesetz Schleswig-Holstein*), noting that it was "derived" from the 2021 KSG, with the targets as the key feature tying them together. This perspective is supported by the description of the law on the Schleswig-Holstein government's website, which notes that the amendment was based on the 2021 KSG.

However, sub-national government interviewees commented that more could be done to align sub-national action with national-level targets. Although Section 13 of the KSG requires public bodies to give due consideration to the purpose of the KSG and the targets set for its implementation, interviewees said that this provision's "concrete effects [on the Länder] are still relatively difficult to grasp because it contains a rather general balancing principle, which has not yet been sufficiently clarified".

## In Ireland, creating mandatory obligations on sub-national authorities has improved the mainstreaming of climate action and alignment with national objectives

Section 14B of Ireland's CALCDA 2021 was mentioned several times as an important mechanism to mainstream climate action at the sub-national level. Local authorities must prepare local climate action plans, covering both mitigation and adaptation measures, that are consistent with the national climate action plan. One sub-national government interviewee confirmed that this 2021 requirement "brought local authorities to work on mitigation" and was a significant positive change from the 2015 version of the law. Under Section 5 of the 2015 CALCDA, the national adaptation framework had to specify the application of adaptation measures by a local authority, but there was no equivalent obligation under the national mitigation plan.<sup>2</sup> This interviewee found the 2021 CALCDA to be key to granting local authorities the power to act on mitigation: "For a local authority to do something, it has to be underpinned by legislation in Ireland."

Section 14B(4), which requires cooperation between adjoining local authorities, was also considered to have enabled important collaboration. A sub-national government interviewee described economies of scale emerging on buildings and energy efficiency projects, as there are opportunities to develop projects with neighbouring local authorities and to ensure that their plans complement each other: "That part of the legislation is really impactful ... we have been engaging with our neighbouring local authorities on a level that we probably wouldn't have done before the legislation because of that requirement."

Interviewees credited the Climate Action Regional Offices (CAROs) as key to implementing Section 14B, as they act as a "bridge" to the sectors and government departments to support "crossway" implementation. The CAROs were established in 2018 to support local governments and provide support across local authorities. In September 2023, the national government confirmed funding of €12 million to support CAROs, with a "particular focus on supporting local authorities with their Local Authority Climate Action Plans" (CARO, 2023).

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<sup>1</sup> Baden-Württemberg, Berlin, Bremen, Nordrhein-Westfalen, Rheinland-Pfalz, Schleswig-Holstein and Thüringen passed their climate laws before the KSG. Bayern, Hamburg, Hessen, Niedersachsen and Saarland passed laws after the KSG. The climate laws of Baden-Württemberg, Bayern, Berlin, Bremen, Hamburg, Niedersachsen, Nordrhein-Westfalen and Schleswig-Holstein have been amended since the KSG.

<sup>2</sup> Section 4(13) of the 2015 CALCDA states that a local authority may notify the national government of its intention to adopt or that it has adopted mitigation measures in its administrative area.

Interviewees were less certain whether CALCDA would improve coordination between national and local authorities in Ireland. Formally, local authorities are represented by the Local Government Management Agency and the County and City Management Association (CCMA). Yet, a sub-national government interviewee felt that due to lack of resources, time and continuous staffing this mechanism is not working to its full potential. This interviewee also said that funding to local-level climate initiatives remains an area of disconnect between national and local authorities, as national funding priorities are not always clear to local authorities before developing their Local Climate Action Plans. However, another sub-national government interviewee felt that open informal communication channels between ministers and local authorities have started to help address some of these challenges.

### **Where the legislation is silent on sub-national-level public sector obligations, a complex regulatory landscape may emerge**

Unlike the Irish law, the ZCA does not set up a framework of local-level climate action plans or obligations for regional councils to consider national emissions reduction plans (or adaptation plans) in their planning. This was one of the reasons why interviewees in New Zealand felt that the ZCA has not improved alignment of climate policy between the national and sub-national levels. To address the gap from the ZCA, multiple regulatory structures have emerged, which has created a complex landscape that in practice often tries to tackle the same policy objective of reducing emissions (see Box 2.2 below).

Interviewees in New Zealand also explained that part of the misalignment between national and sub-national climate action results from old restrictions under the Resource Management Act 1991, as amended by the Resource Management (Energy and Climate Change) Amendment Act 2004. This Act prevented local authorities from considering the effects of greenhouse gas emissions on climate change when issuing permits (e.g. land use consents to mine coal). These restrictions were in place until the Resource Management Amendment Act 2020 was passed.<sup>3</sup> From 30 November 2022, local government (regional councils and territorial authorities) must “have regard to” the national Emissions Reduction Plan and National Adaptation Plan when preparing a regional policy statement, regional plan or district plan, but these provisions are still very new and it is hard to assess impact at this stage.

#### **Box 2.2. Challenges in implementing national plans within local policies in New Zealand**

The complexity of coordinating sub-national action can be illustrated through the example of transport policy. One sub-national government interviewee explained that under the first Emissions Reduction Plan, the national government set a target to reduce Vehicles Kilometres Travelled (VKT) by cars and light vehicles by 20% by 2035 through “improved urban form and providing better travel options” (p.172). It also stated that it would set sub-national VKT reduction targets for major urban areas like Auckland, Hamilton, Tauranga, Wellington and Christchurch.

Transport planning is usually done “bottom-up”, with local proposals being put forward for funding to the national Transport Agency (Waka Kotahi). However, as the interviewee explained, the VKT programme was more “top-down” because of the CCRA. In addition, some cities have developed their own climate plans, which may require more ambitious action on transport than national plans. The sub-national government interviewee described the end result of this as: “three different transport plans for the same region ...”, creating considerable challenges for implementation.

*Note: In December 2023, following a change in government, the Transport Minister was reported to have ordered the Transport Agency to end work on VKT programmes and did not confirm whether the sub-national reduction targets would remain in place (Daalder, 2023).*

<sup>3</sup> The Resource Management Amendment Act 2020 was passed in June 2020 and repealed Sections 70A, 70B, 104E and 104F, which restricted local government from considering the effects that greenhouse gas discharges have on climate change. From 30 November 2022, local government (regional councils and territorial authorities) must also “have regard to” the national emissions reduction plan and national adaptation plan when preparing a regional policy statement, regional plan or district plan.

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

The creation and strengthening of the independent expert advisory bodies on climate change through the framework legislation are among the major impacts mentioned in all three countries. Many interviewees highlighted the positive impacts these bodies are having by providing depoliticised and credible information and advice on targets, policies and progress in meeting them. 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 the government to consider and respond to their advice. Table 2.1 provides a comparison of the functions of the three bodies.

**Table 2.1. Comparison of the independent advisory bodies on climate in Germany, Ireland and New Zealand**

Germany: <i>Expertenrat für Klimafragen</i> (ERK)	Ireland: Climate Change Advisory Council (CCAC)	New Zealand: Climate Change Commission (CCC)
<b>Number and composition of members</b>		
Currently five members, supported by a secretariat; gender balance must be ensured.  At least one member should be drawn from each of the fields of climatology, economics, environmental science and social matters.	Currently 13 members, supported by a secretariat; gender balance should be sought and members should have expertise in a specified range of climate-relevant disciplines.  Three are <i>ex-officio</i> members: the Director General of the Environmental Protection Agency, the Director of Teagasc (the Agriculture and Food Development Authority), and the Director of the Irish National Meteorological Service.	Currently nine members, supported by the secretariat. Members must have diverse expertise, including knowledge of distributional impacts, the Treaty of Waitangi, and Māori culture and economic activity.  Also supported by the Pou Herenga, a Māori advisory body with nine members. The Chair and Deputy Chair of the Pou Herenga are currently members of the Climate Change Commission.
<b>How are members appointed?</b>		
The Federal Government appoints members and the chairperson is elected by the members.	The chairperson and ordinary members (excluding <i>ex-officio</i> members) are appointed by the government, on the nomination of the Minister for the Environment, Climate and Communications.	Members are appointed by the Governor-General at the recommendation of the Minister of Climate Change, supported by a nominating committee.
<b>Does the body provide advice on targets?</b>		
No	Proposes a carbon budget, which is then approved by government.	Provides advice on the direction of the next Emissions Reduction Plan and next emissions budget.
<b>Does it provide an assessment of progress on reducing emissions?</b>		
Examines the emissions data of each sector, published by the Federal Environment Agency, for each reporting year (annual).  Progress reports are provided to the Bundestag (parliament) every two years.	Produces an annual review on reducing emissions.	Must monitor and report annually on progress towards meeting emissions budgets and the 2050 net zero target.  Produces a report at the end of each emissions budget period to examine the effectiveness of measures.

Germany: <i>Expertenrat für Klimafragen</i> (ERK)	Ireland: Climate Change Advisory Council (CCAC)	New Zealand: Climate Change Commission (CCC)
<b>Does it provide advice on policies necessary to implement mitigation targets?</b>		
<p>Must provide an opinion regarding the underlying assumptions on emissions reduction before the federal government:</p> <ul style="list-style-type: none"> <li>i. Sets annual emission budgets</li> <li>ii. Updates the Climate Action Plan</li> <li>iii. Adopts Climate Policy Programmes</li> <li>iv. Adopts immediate action programmes.</li> </ul>	<p>Must provide advice and recommendations to the Minister and to the government, in relation to the approval of:</p> <ul style="list-style-type: none"> <li>i. A climate action plan</li> <li>ii. A national long-term climate action strategy.</li> </ul> <p>Advice can also be provided to sectoral line ministries on actions to be included in the climate action plan.</p>	<p>Must provide an independent assessment of the strategies and policies necessary to implement emissions reductions to meet targets.</p>
<b>Is there a requirement for the government to respond to the advice provided?</b>		
No	If the Minister amends the carbon budget proposed by the CCAC, the Minister shall set out his or her reasons for doing so.	The Minister must respond to the annual progress reports, emissions budget period reports, and recommendations on the 2050 targets.

*Note: The focus of this table is on the respective bodies' responsibilities with regard to mitigation, as this is what interviewees discussed as most impactful. The Irish CACC and New Zealand CCC also have responsibilities under the CALCDA and CCRA in relation to adaptation.*

### **Independent advisory bodies have a strong authoritative voice and create a credible shared evidence base to inform climate action**

Ireland's CCAC is an authoritative, evidence-based voice in the climate debate, providing advice on carbon budgets, engaging in dialogue with sectoral line ministries, and conducting gap assessments. Speaking about the original CALCDA 2015, interviewees most often mentioned the establishment of the CCAC as being the main positive outcome. An independent assessment of the CCAC after its first five years of operation (Tallon et al., 2020) also found this to be the case, concluding that it "has been successful in establishing itself as an authoritative voice in the national climate debate" and that "its frank and rigorously evidence-based annual analysis of Ireland's disturbing record on mitigation has been a defence against even further slippage" (p.3). The report cites the use of CCAC evidence to justify an increase in the national carbon tax and an end to government subsidies for peat and coal burning as among its successes.

The creation of the CCC in New Zealand was similarly described as one of the most significant and positive outcomes of the ZCA. Despite some criticism of the approach taken by the CCC, on balance the discussions suggest that the Commission has taken an active and central role in the national climate policy debate. The institutional standing of the CCC and the status of its advice in relation to governmental decisions has already been tested in a court case, in which the government was sued on the grounds of having rejected the Commission's advice without conducting an alternative analysis and proposing a different course of action. As discussed below, the outcome of the case was that the government agreed to follow the advice of the CCC in future, strengthening perceptions of the Commission's standing. Several interviewees also said the CCC has made a clear impact on strengthening the public debate overall, bringing in Māori perspectives, providing a stronger basis for the media and other institutions reporting on the climate change debate, and making it easier to highlight underperformance.

Similarly, in Germany the Council of Experts on Climate Change (ERK) was seen by several interviewees as among the key outcomes of the KSG. "We have one clear ... independent voice in this whole process

which is widely heard and clearly stating that Germany has to do more”, noted a research/advisory interviewee. In the words of a civil society interviewee: the ERK acts “as a check on political actors [and] is one of the biggest successes that was introduced by the climate aligned coalition in Germany” and “it is one of the biggest successful elements within the law that we currently see”. Interviewees spoke of the role of the council in codifying knowledge from several reports, which is seen as being very important for the policy debate. It “has also contributed enormously to the fact that impending failure to meet targets or possible and sensible measures are discussed much more intensively politically”, argued a sub-national government interviewee. The work of the ERK is also reportedly helping sub-national governments to better understand the projected impact of the current federal policies and how much CO<sub>2</sub> savings can be expected in individual areas. A public sector interviewee further characterised ERK as being “by far the most listened to constituency and forum when it comes to climate change”.

### **Independent advisory bodies prompt increased engagement with challenging or novel policy issues**

In Ireland and New Zealand, interviewees described independent advisory bodies as playing a key role in increasing engagement with challenging or novel policy issues. For example, in New Zealand a research and advisory interviewee explained that because “it sits outside ministries” the Climate Change Commission can “tackle some of those really tricky issues like carbon sinks”. Public sector interviewees further highlighted the impact of the CCC on policy innovation: that due to its independence it could approach the debate from a different angle than would be admissible and permissible politically for a governmental department. Specific examples were given in agriculture and forestry, and on COVID-19 recovery guidance, which the CCC argued should take consideration of climate change. A private sector interviewee said the CCC “can tackle more novel approaches” and address “issues that politically aren’t possible”, “that would never get signed off from a government department”.

In both countries, the advisory bodies were also perceived as having advanced the debate on agriculture (see further discussion in Section 3). One research and advisory interviewee noted that in Ireland the CCAC “put the issue up to the government” in a way that would not have happened if discussed only internally within government. The independent assessment of Ireland’s CCAC mentioned above also confirmed that the CCAC had stimulated “the maturing of the sensitive debate on the role of agriculture and land use in Ireland’s mitigation effort” (p.3).

### **The institutional mandates of independent advisory bodies make a significant difference to their effectiveness**

In Ireland, several interviewees described differences in impact between the first iteration of the CCAC established under CALCDA 2015 and the second iteration under CALCDA 2021. According to one research/advisory interviewee, the original CCAC consisted of “mostly men and economists”, lacking “diversity and expertise” and had “really sparse resources”. An independent assessment of the body’s performance in its first five years found that the CCAC’s legislative mandate “falls considerably short of international best practice” and recommended strengthening the Council and giving more emphasis to its policy ‘advisory’ function (Tallon et al., 2020). It also raised the need for the CCAC “to gain a more independent corporate identity, capacity and structure” and recommended that the hosting arrangement with the Environmental Protection Agency be reviewed “to clarify and strengthen the processes, powers and responsibilities of the Council concerning its resourcing, corporate identity and staffing” (p. 5).

Interviewees thought that many of the weaknesses had been addressed in the 2021 revision of the CCAC. They noted that since 2021, the CCAC has expanded and has a stronger secretariat with increased capacity. One public sector interviewee said that although the CCAC still “doesn’t have all of the tools at its disposal that it could have”, evidence was beginning to show that “they might be hitting it home in terms of actually having impact”. This is despite the fact that the CCAC still includes a number of *ex-officio* members (See Table 2.1), including a stakeholder from an agricultural industry body. Several interviewees were critical on this point, as was the independent assessment noted above. However, one civil society interviewee noted that having a representative of the agricultural sector on the board had had an impact of “actually co-opting” the agricultural sector over time.

In New Zealand, 10 interviewees commented on the need to strengthen the independence of the CCC's advice. Some were concerned with the appointment process: for example, one interview speaking from a private sector perspective had a view that the CCC consisted of experts appointed by the Greens and hence held little credibility among some parts of the private sector. However, others expressed more concern about the body's interpretation of its mandate. The CCC is required to 'provide policy direction', but these interviewees felt that it had interpreted this to mean assessing not only what is necessary and feasible technically, but also including a judgement of 'political feasibility' in formulating recommendations. Experts noted that determining what is politically feasible was the task for the elected political representatives (i.e. government) rather than the CCC, and that taking this approach may undermine the Commission's role and impact in the future. Many experts also noted that the body is still very new and finding its way, and that its impact is yet to be truly tested, especially as how the government approaches climate policy is likely to change following the general election in 2023 that led to a more right-leaning coalition.

In Germany, interviewees also commented on the fact that the ERK's limited mandate and the lack of a statutory requirement for the government to formally respond to its advice restricted its impact. One research and advisory interviewee described the mandate of the ERK as more of a "notary function", focused on checking "whether the assumptions for carbon dioxide emissions reduction given for a proposed measure from the government are correct or not". There was also a concern that the advice provided, which highlighted policy gaps, is not being taken on board by the government and politicians. As one research and advisory interviewee said, the ERK's advice "tends to be pushed aside by politicians" when it is not what they want to hear. A few interviewees thought that the ERK is overstepping its current formal narrow mandate when giving high level opinions that the government's actions are falling short of targets and in the recent statements it has made on the proposed amendments to the KSG. In this context several interviewees noted the need to improve the ERK by amending the KSG to explicitly ensure it has a mandate to make recommendations on what the government should do better, and to introduce the requirement for the government to justify itself if it does not follow the recommendations.

It is evident from all three countries that providing clear mandates to both scrutinise and advise government is essential to make independent advisory bodies as effective as possible, and that it is also vital to introduce safeguards for independence into the appointments process for these bodies. One way to do so is through open and transparent recruitment processes rather than appointment by government or *ex-officio* membership. Requirements on government to respond to the advice of the advisory body directly should also minimise the risk of advice being ignored by politicians. A further potential recommendation for the design of these bodies that came up in the New Zealand context was the suggestion that the CCC should be given direct regulatory control over emissions trading scheme (ETS) unit supply and stability settings. The parallel was given of a reserve bank and its control over monetary policy. Several interviewees argued that this would enable New Zealand to overcome its past challenges around these decisions being too politicised, which has previously resulted in the crash of ETS prices and little impact on emissions over time. However, other interviewees thought that were the Commission to take on a regulatory function, this would interfere with it being a non-politicised body and might also have negative impacts for the social acceptability of climate policy.

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

##### **Regular reporting requirements underpin accountability mechanisms**

The regular processes of monitoring and reporting on performance against carbon budgets and emissions reduction targets created under the legislation were described as a crucial basis for increasing accountability both within government and at the political level across all three countries. In Germany, interviewees noted increased accountability due to the requirement to submit annual progress reports. This was largely echoed in Ireland and New Zealand, with one media interviewee in New Zealand noting "it's harder to get away with just a little bit of greenwashing ... with just sort of saying, 'Oh yes, we take climate change very seriously'". They elaborated that the framework created by the CCRA provides them with a good basis to say, "Okay, sure, are we on track to meet our first emissions budget? If not, what are you [the government] going to do to change that?"

The effectiveness of reporting requirements is significantly influenced by the question of who prepares the reports and who is expected to respond to them. This was a key point arising from the interviews, particularly in Ireland. For example, several interviewees approved of the requirement under CALCDA 2021 (Section 14A) for annual reports on climate action to be submitted to a Dail Joint Committee (in practice, the Committee on Environment and Climate Action), rather than to parliament as a whole as had been the case under CALCDA 2015. A research/advisory interviewee described this decision to “delegate to the parliamentary committee which is much more focused and much more diligent” as “the main innovation” of CALCDA 2021, creating in the words of a public sector interviewee the “actual point of accountability”.

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. However, some indicated that earlier iterations of the legislation had also made a difference because the law contained reporting obligations. As one civil society interviewee in Ireland put it: “The first law was not worthless” as it had contributed to “making the policymaking process around climate more transparent, more subject to expert advice, more subject to parliamentary scrutiny”.

As discussed earlier, reports and advice provided by independent advisory bodies introduce a new authoritative, non-politicised voice into the discussions on climate, changing the dynamics of both the political debate and policy processes and underpinning other accountability mechanisms.

### **The creation of shared responsibility between public bodies strengthens accountability**

Shared accountability for climate action between different bodies within the public sector was a positive impact of the laws noted by interviewees in all three country case studies.

In Ireland and Germany, requirements in the legislation explicitly impose responsibilities on sectoral departments or ministries. Interviewees in both countries confirmed that this led to the diffusion of political and administrative accountability through the government. As one German civil society interviewee described: “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.” Notably, many of the interviewees in Germany were concerned that proposed reforms to the KSG (see Box 3.2) could result in the watering down of this strong sectoral accountability.

In New Zealand, sectoral responsibility is much less clearly defined in the law. However, interviewees still talked about how the processes created under the law have led to an increased sense of political accountability from ministries not traditionally involved in climate issues. One public sector interviewee stated, “We see decentralised accountability for actions, and you hear the Minister of Climate Change ... talk about [how] every minister is a climate minister now.” Several interviewees also noted that the first Emissions Reduction Plan (ERP) was designed to emphasise this sense of sectoral accountability for delivery, including photos of each relevant minister and chief executive responsible for delivery in each sector to enhance this sense of shared accountability. Several interviewees also pointed to a new executive coordinating institutions, introduced to support the implementation of the law, as creating a sense of internal accountability across government. One public sector interviewee said, “the [outcome of the] creation of the Chief Executives Board ... and Departmental Board was to give that accountability and to make sure that that was both individually and collectively recognised.”

Another public sector interviewee in New Zealand also gave the example of a rapid savings exercise where for each of the potential savings or budget cuts considered by the Treasury it had to conduct an analysis of the impact the cuts would have on climate action. A public sector interviewee noted, “if you just looked at it at an agency or ministerial portfolio level ... the impact was relatively small, but when you added it all together ... it was quite a stark picture...” While such analysis will not necessarily always determine final decisions, it certainly forces government actors to justify decisions that are likely to be detrimental to climate action, thus increasing the potential to hold them accountable for such decisions.

## v) Judicial oversight can play an important role where administrative and political accountability is insufficient, but litigation should be used as a last resort

Climate laws create the potential for stakeholders to bring litigation challenging the level of ambition and non-compliance

More than half the interviewees in Germany and Ireland raised a single successful climate litigation case as one key impact of the legislation: namely *Neubauer et al. v. Germany* and *Friends of the Irish Environment v. Ireland* (or 'Climate Case Ireland') respectively.<sup>4</sup> These cases were felt to have had significant impact on both government action and the public debate about climate change, receiving significant media attention and public support. 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. In Germany, an interviewee made the same point: without "a written law to... interpret", the case would not have been possible.<sup>5</sup> Notably, the most important impacts attributed to both cases by interviewees were impacts outside the courtroom, including the fact that the cases created pressure for reforms to the legislation (see Box 2.1).

### Litigation strengthens administrative and political accountability for implementation

In Germany and Ireland, these initial successful challenges have been followed by a wave of implementation-focused challenges that demonstrate how KSG and CALCDA have led to increased administrative and political accountability.<sup>6</sup> In Ireland, several interviewees referred to the refusal of permission for the Galway Bypass project. This decision was brought in relation to a duty on public bodies to ensure its decision are "consistent with" national climate action plans in CALCDA. The Irish planning board noted in its statement after the court decision that it "accepts that... the failure to consider the new Climate Action Plan 2021 in accordance with ... [CALCDA] prior to making its decision is sufficient to vitiate the lawfulness of its decision" (O'Brien and Beesley, 2022).

In Germany, in *DUH and BUND v. Germany*, the Higher Administrative Court Berlin-Brandenburg was asked by civil society groups to rule on the inadequacy of the immediate action programmes put forward to address shortfalls in emissions reduction targets for the buildings and transport sectors. The

#### Box 2.1. Court cases creating political space for increased ambition – German and Irish examples

Interviewees in Germany and Ireland described how litigation had also helped create the political momentum required for improvements to the legislation itself. In Germany, many interviewees attributed the 2021 amendments to the KSG, which introduced more ambitious emissions reduction targets, directly to the *Neubauer* case: as one research/advisory interviewee put it, "[The case] led to an improvement of the Act a bit similar to the one that was thought of at the beginning with the first draft but couldn't be passed due to political controversies at the time." This point is confirmed elsewhere in the literature about the case (Winter, 2022; White and O'Callaghan-White, 2021). As one civil society interviewee stated: "This was one of the fastest legislative processes we have experienced for a German legislator" but it was "certainly justified at the time" because of the case.

In Ireland, interviewees explained that the success of *Climate Case Ireland* was one of the motivating factors for the 2021 amendments to CALCDA. As several interviewees noted, the Minister for Environment, Climate, and Communications and Transport, Eamon Ryan welcomed the Supreme Court judgment, stating that it should be used "to raise ambition" and subsequently confirmed that the legislation was being drafted in response (see also White and O'Callaghan-White, 2021).

<sup>4</sup> For a definition of climate change litigation and discussion of both these cases, see Setzer and Higham (2021).

<sup>5</sup> This differs from some other country contexts where similar cases have been successful even in the absence of specific legislation on climate change – see Higham et al. (2022). For further discussion of the interaction of the *Neubauer* case with German constitutional norms, see Minnerop (2022).

<sup>6</sup> In Germany, see for example: *Steinmetz et al. v. Germany* and *Deutsche Umwelthilfe (DUH) v. State Office for Mining, Energy and Geology*. In Ireland, most recently, the Centre for Environmental Justice at Community Law & Mediation is representing Friends of the Irish Environment in its High Court legal challenge of the government's Climate Action Plan 2023 (Community Law & Mediation, 2023).



government had argued that sectoral targets and requirements set out in the KSG should not be considered justiciable, but the court disagreed. Evidence relied on in court included reports mandated by the legislation and evidence from the ERK, the independent advisory body. The full impact of this case is not yet clear, as the government is likely to appeal the decision pending the outcome of negotiations around amending the relevant sections of the legislation (Bönnemann, 2023).

In New Zealand the picture was more mixed. Around two-thirds of the interviewees mentioned the potential for judicial oversight as a key impact of the legislation, but views on effectiveness varied. A public sector interviewee said, so far, no cases “have really fundamentally changed the political debate in New Zealand”. However, some interviewees felt that this might start to change, pointing to the case of *Lawyers for Climate Action v. Minister for Climate Change* (discussed further in Section 4), where the government was sued for failing to follow the advice of the CCC when deciding the price settings for the NZ emissions trading scheme. The court concluded that the government had made an error, and the Cabinet accepted that in future it should follow the Commission’s advice. As in the case of *DUH and BUND v. Germany*, this case highlights the way in which different institutions created by the climate legislation can interact to increase overall accountability for ambitious climate action.

While interviewees in all three countries described positive impacts arising from litigation, people also sounded a note of caution against over-reliance on the courts. Several interviewees were concerned that litigation could be a waste of resources and a “distraction”, with civil servants spending too much time responding to the litigation rather than advancing policy agendas. Others, even those positive about litigation, saw it as challenging and costly to pursue, suggesting that administrative and political accountability mechanisms established in the law could provide better alternatives.

#### **vi) A lack of clear consequences for non-compliance poses serious credibility challenges and risks to democratic norms**

A lack of clear consequences for missing targets was raised by interviewees as a problem in all three countries. In New Zealand, several interviewees stated that the design of the legislation actively contributes to this problem. Section 5ZN of the ZCA concerns the “effect of failure to meet 2050 target and emissions budgets”. It provides that in the event of non-compliance with the budgets or targets, a court may issue a declaration that the relevant requirements have not been met but may not make any other orders. Effectively, this requirement eliminates the possibility of the court ordering the government to take specific actions to address its failures or issuing fines or sanctions to those responsible. Similarly, a lack of consequences and remedies for missed targets and budgets created problems in Germany and Ireland. A research and advisory interviewee in Germany pointed out that “there’s no consequence other than public shaming”. A private sector interviewee in Ireland noted that there is little more than a “slap on the wrist for ... the relevant Minister”.

Arguably, the requirement to create sectoral immediate action programmes in Germany is the closest thing to a clear consequence for missing targets currently enshrined in the legislation. However, the functioning of this provision has varied in practice, perhaps due in part to a lack of clarity in the legislation. Once a ministry has produced a programme, this is subject to scrutiny by the ERK, the independent advisory body. A report from the ERK is then presented to the Federal Cabinet but there is no obligation specified for the government to respond and it is unclear whether responsibility for acting on the ERK’s recommendations lies with the relevant ministry or with the Federal Cabinet.

Interviewees also commented on the way in which the political leadership of sectoral ministries changed how they responded to the accountability mechanisms of the immediate action programmes. They contrasted the progress made by the ministry responsible for the buildings sector to comply with the requirements with the lack of effort being made by the transport ministry. This reflects a common challenge of sustained political will being necessary for effective implementation of climate legislation. As one civil society interviewee noted in the Irish context, willingness to comply comes down to respect for the rule of law, which is ultimately a political decision.

## Legislators need to address risks that non-compliance with legislation may weaken public trust in democratic institutions

This connects to a broader question for policymakers when creating climate legislation: how does one balance setting ambitious targets or carbon budgets with the risk that systemic non-compliance will undermine credibility of the climate legislation overall? As one media interviewee in Ireland noted, “When you say something is legally required ... you presume that there’s a penalty if you don’t fulfil it, [but] no, there’s no penalty... [so] from a public perspective, it loses the punch.” A German research/advisory interviewee went further, saying 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?’” Some interviewees thought that if this becomes the status quo, there is a major risk of reducing public trust in the law and the policymaking system to the extent that it could have serious ramifications for climate policy and beyond.

### 3. Impacts on political debate

Previous research focusing on the UK has shown that the framework and institutions created by a climate framework law can impact the quality of the political debate and galvanise support for acting on climate change among politically active stakeholders (Averchenkova et al., 2021). Climate laws can also help strengthen political accountability and protect against backsliding on political commitments (Nemet et al., 2017; Averchenkova et al., 2021). A climate framework law is expected to help mitigate the risk of socio-political conflict through structuring a clear and constructive policymaking process (Fisher, 2017). Political deliberation on a climate law may strengthen support for overall climate objectives and lock in political consensus (Lockwood, 2013).

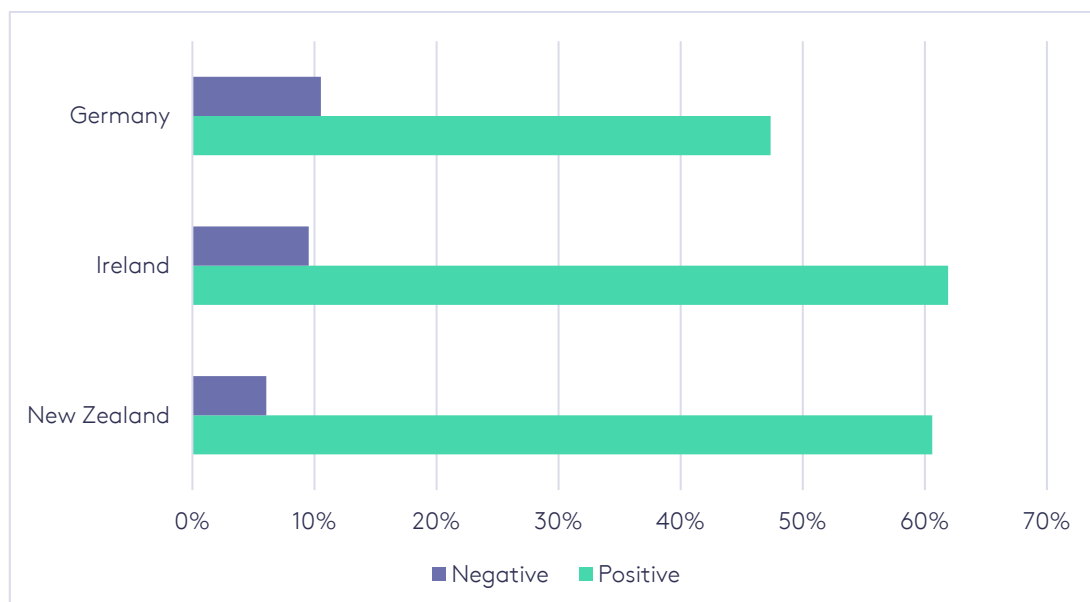
Interviewees noted positive impacts on the political debate on climate change, and linked them to the core provisions of the laws, such as targets, carbon budgets, independent advisory bodies and, in the case of Germany and Ireland, sectoral emissions reduction targets (see Figure 3.1). However, in all three countries political disagreements about the pace and focus of action in the short and medium term still pose major challenges for the effectiveness of climate laws.

We focus this section on three main impacts raised by interviewees:

- (i) Changes to the frequency, focus and quality of the debate
- (ii) Increased debate on implementation issues
- (iii) The impact of legislation on backsliding from political commitments.

A minority of interviewees remained cautious about attributing causation for the above impacts solely to the climate law. As one civil society interviewee in Germany said, “we shouldn’t overestimate the impact of climate protection laws on the political culture and atmosphere regarding climate policy”, as even without the climate law, the government may still have needed to pursue ambitious climate policy due to other contextual factors – like the EU climate neutrality target in the case of Germany and Ireland, or broader developments in international climate negotiations.

Figure 3.1. Percentage of interviewees that mentioned positive and/or negative impacts on political debate, post passage of climate framework law



Note: As before, the figure accounts for the number of interviewees who described positive or negative impacts at least once, rather than reflecting the number of impacts described, as many interviewees referred to the same issue several times.

## **i) Climate framework laws have led to more political focus on climate action**

### **Political debate on climate action is more frequent and focused on measures to meet agreed climate targets as a result of the laws**

In all three case study countries most interviewees thought that the framework established by their respective laws, in particular the requirements to meet emissions budgets or ceilings, has strengthened political focus on climate concerns. In Germany, a civil society interviewee described the KSG as an “evaluation standard”, explaining that the debate “naturally shifts very much to observing what measures are now being taken by the individual ministries and the federal government as a whole”. Research/advisory interviewees in Germany agreed that the law has helped climate concerns to become “daily political business”, and some felt that the debate has, positively, become more quantitative: “whenever you propose a measure, then somebody will ask, ‘okay how much emissions does that reduce? Are you now meeting your target? Yes or no?’”

This perspective was echoed by Irish interviewees. A public sector interviewee noted: “the legislation has brought... tremendous political and wider institutional and public focus”. Another civil society interviewee explained that because the CALCDA was passed with cross-party political consensus (see Box 3.1), it has “created a lid on top of the overall problem [climate change], and it forces resolution to happen within the pot”.

#### **Box 3.1. When a climate law is adopted through a cross-party consensus, this helps focus political debate on implementation**

The negotiations leading up to the climate framework laws in New Zealand and Ireland were largely viewed as crucial to achieving political consensus on climate action. Given that the laws were adopted with cross-party support, they have become a point of reference around which politically-active stakeholders (e.g. businesses, civil society, politicians) can rally to force discussions on how to implement commitments.

In New Zealand, these impacts were created mainly by the ZCA, as opposed to the first edition of the CCRA in 2002. Because prominent figures across the political spectrum all voted for the ZCA, it has given the general public confidence that climate change is considered important in politics and “takes a little bit of the political heat out”. Both of the largest political parties, National and Labour, “feel like it is their law”.

Similarly, in Ireland, the legislative debate leading up to the 2021 CALCDA amendments was highlighted as having placed climate change firmly on the radar of all politicians. According to a civil society interviewee, no politicians came out of the debates “ignorant of the scale of the challenge”. Interviewees felt that because the law was passed with cross-party consensus, it has become easier to draw attention to actions misaligned with the law: as one research/advisory interviewee described, “having the Act means that all politicians at least have to pretend to follow us”.

In Germany, however, interviewees emphasised the fragility of the political consensus that passed the 2019 edition of the KSG and the 2021 amendments. As one civil society interviewee put it, there was limited true political consensus around the sectoral approach, specifically from the buildings and transport sectors, and instead “just a lot of political pressure”, which allowed the 2021 KSG to pass.

## **ii) Climate framework laws have created more discussion around problematic sectors, but on its own this does not alleviate disagreement over how to meet those targets**

Although the majority of interviewees agreed that political attention around climate has increased since the laws have been passed, there were also concerns that this has not necessarily resulted in more policy decisions being made to meet targets set under the law. Several research/advisory interviewees in New Zealand also raised concerns that the increased political attention on five-year Emissions Reduction Plans has unintentionally increased the short-sightedness of politicians. One described it as “short-term

myopia within policymaking”, which is only focused on the first emissions budget. In Germany, there were a few research/advisory interviewees who felt that the political discussions on climate, although more frequent, are not focused on the most important high-emitting sectors. However, part of this attitude was attributed by interviewees to the fallout from the heating law debate in Germany (see further discussion in Box 5.1 in Section 5). Some interviewees recognised that after the large opposition to this policy, politicians have been cautious in proposing measures that would require significant behavioural change.

### **The law advances difficult debates, but overcoming a political impasse in high-emitting sectors such as agriculture requires building stronger buy-in from stakeholders**

Despite cross-party consensus on the net zero economy-wide targets in New Zealand and Ireland, this consensus has not necessarily eased the debate on how to tackle emissions from the economically and culturally important agricultural sector (see Box 3.2). Most interviewees across 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. In New Zealand, the ZCA expressly sets a separate biogenic methane reduction target of 24–47% below 2017 emissions by 2050. Ireland takes a slightly different approach and instead of including the agricultural sector target within the law itself, the CALCDA requires the Minister to negotiate an emissions ceiling for all sectors after carbon budgets have been set. The current target is a 25% emissions reduction by 2030 compared with 2018 levels.

#### **Box 3.2. Background to the debate on abating emissions from agriculture in Ireland and New Zealand**

The agricultural sector accounts for close to half of total greenhouse gas emissions in both Ireland and New Zealand, consisting largely of methane from livestock and nitrous oxide from the use of fertilizer. The sector is important to both economies. In Ireland, the agri-food exports industry employed 6.5% of the total workforce and generated €18.98 billion in 2022 (Ireland Department of Agriculture, Food and the Marine, 2022). In New Zealand, the food and fibre sector, which includes dairy cattle farming and dairy product manufacturing, contributed 10.5% of the country’s GDP in the year ending 31 March 2022 (Ministry for Primary Industries, 2023). The sector employed 13.1% of the total workforce in the year before (ibid.).\*

The sector is also culturally important in both countries. A civil society interviewee in Ireland referred to the strong rural connections of Irish communities, which link back to longstanding personal and political attitudes towards the freedom of land ownership: “talking about national herd size quickly mobilises into narratives that will touch very sensitive chords”. This significance is reflected in the influence wielded by farming lobbies in both countries, who have historically opposed significant changes to reduce emissions. In New Zealand, for example, there were protests in 2003 over a proposed tax on livestock emissions, which was nicknamed the ‘fart tax’. The debate is also complicated by the physical differences between CO<sub>2</sub> emissions and emissions of methane and nitrous oxide (IPCC, 2023) and their corresponding warming potentials.

There are often public disagreements around the required pace of change. In New Zealand, there have been protracted discussions on moving the timeline (set under the ZCA) for agricultural emissions to face pricing under the Emissions Trading Scheme. Ireland is having a similar debate about the long-term future of the sector. Its Climate Change Advisory Council published a paper in 2019 noting that “a gradual reduction in national bovine numbers may be necessary to achieve greenhouse gas emission reduction...”. Interviewees’ reception to this was mixed: one civil society interviewee commented that this was “incredibly courageous” to publish but others noted that it created a major backlash in the sector.

*\*Workforce data only runs to 31 March 2021, according to the Ministry for Primary Industries ‘Situation and Outlook’ report published in December 2023.*

Interviewees thus broadly described the laws as representing progress, given that they have pushed the agriculture sector to at least recognise that it has an impact on the climate and that some action is needed. As one civil society interviewee put it, agriculture is the “sector that has been most affected by the law, at least at the level of the discourse around the contribution of the sector to the country...” and that the “parameters of public debate on agriculture are changing”. Interviewees in both countries noted that setting targets for agriculture effectively means the sector has to be part of conversations and signals a move away from business-as-usual.

An interviewee in New Zealand who has been party to the target discussions thought that many farmers agree with the split target approach, but they fundamentally do not agree with the “final destination” (i.e. the 24–47% objective). A private sector interviewee perceived that the split target has complicated the long-term direction-setting function of the ZCA as a whole. This interviewee explained that the split target sends a “clear signal that agriculture needs to change, but it doesn’t have the absolute nature of a net zero target, which the other sectors see... [so] it’s really setting the signal that all sectors have to transition to net zero except for agriculture”.

Similarly, in Ireland, the 25% reduction target has been heavily criticised by those on both sides of the debate: NGOs and business groups from non-agricultural sectors wanted a more ambitious 30% reduction target, whereas farmers hoped for 22%. The approach of dividing up the emissions budget into sectoral emissions ceilings is also perceived by stakeholders outside agriculture to place a much heavier burden and costs on their sectors. This tension often results in delays in publishing climate action plans and ceilings.

### **iii) Climate framework laws can help prevent backsliding on long-term goals, but interim targets and implementation measures need to be better protected through sustained political pressure**

In all three countries, interviewees felt that to an extent the climate laws can help protect against significant backsliding on long-term targets, but that ultimately the legislation cannot guarantee that measures sufficient to meet such targets would be adopted and implemented. Responses from interviewees highlight the importance of ensuring mechanisms for oversight, enforcement and remedies are clearly established in the law. The law must create foundations to provide sustained political pressure. As one civil society interviewee in Ireland said: “The legislation is there, but it’s up to the ruling government of the day to properly implement it.”

In New Zealand, of the 12 interviewees that stated a clear view on whether the ZCA helps protect against political backsliding, 11 thought that it did. In Germany, of the 13 interviewees that stated a view, 10 thought that the law provided some protection against backsliding on long-term targets. 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 ascertain and that it would depend on the outcome of the next elections. This hesitation was related to not having had a significant change in government since the passing of CALCDA 2021.

### **An ambitious climate law, particularly one adopted with cross-party support, creates public and private sector expectations, making it politically difficult to reverse**

Interviewees acknowledged that while the law can in theory be amended, this is unlikely to happen in practice, given the new political reality it has created. In New Zealand, a public sector interviewee described the ZCA as setting a “new baseline” and a civil society interviewee noted that the law has shifted the public’s expectations and demands with respect to climate action. Making any significant change to the law would require backtracking on the political parties’ previous support for the ZCA. Similar perspectives came from interviewees in Germany, where one civil society interviewee said the KSG has created a reference point that is not “politically possible to abolish”. A public sector interviewee explained that the “sheer visibility” and public backlash that would likely occur if a politician suggested repealing the KSG is in itself protection against backsliding.

Several interviewees in New Zealand and Germany also explained that the respective laws have created private sector expectations that help protect against backsliding. Businesses are likely to resist significant changes to the laws, given their preference for certainty. A private sector interviewee emphasised that

the ZCA has created a wider regulatory framework (in the form of mandatory climate-related financial disclosures), to which businesses have adjusted and they would not want to undo these efforts. In Germany, a research/advisory interviewee explained that “firms are basing their investment decisions on these expectations, and now, if you change the law... they have a very good reason to be angry at policymakers”.

In Ireland and Germany, part of this shift in public expectations also flows from the European Union regulatory framework. It is difficult to fully attribute this shift to this factor, as regulatory changes at the EU and domestic level have occurred in parallel. However, a few Irish interviewees perceived that the EU regulatory framework provides greater protection than the national climate law against backsliding on the 2030 and 2050 targets. One research/advisory interviewee noted that the EU context “box[es] Ireland into a tighter corner”, while a civil society interviewee described that it would “look ridiculous... and be very difficult to wriggle out of [EU] commitments”, given the ability to judge Ireland against other EU member states.

### **Although administrative barriers and the risk of litigation can provide some protection, climate laws do not operate in a vacuum and without political will, backsliding on policies and measures can still occur**

Multiple interviewees recognised that the lengthy administrative procedures required to amend or repeal a law provide some protection against the possibility of political backsliding. In all three countries there was also recognition that the laws create an opportunity for litigation if governments choose to backtrack on commitments. As one German interviewee said, the KSG “protects to a certain extent against political regression because it is justiciable and relevant court decisions can usually be taken to heart”. This perspective emerged more strongly from interviewees in Germany and Ireland than in New Zealand. In part, this may be attributed to the fact that there have been landmark litigation wins against government in these countries, the *Neubauer* and *Climate Case Ireland* cases (as discussed in Section 2).

However, several interviewees in Germany did view the proposed legislative amendments (see Box 3.3) to remove the requirement for sector-specific immediate action programmes when sectoral targets are exceeded as indicating that backsliding is already occurring and a reflection that every legal framework is only as good as the political will to put it in place. One media interviewee went further, describing the proposed amendments as an example of how politicians can change the law once the political will is no longer there. Several interviewees in Ireland noted that although failure to meet carbon budgets does create litigation risk, there is also a risk that the Irish government would simply amend the carbon budgets<sup>7</sup> to make them easier to meet, if they are not on track.

Many interviewees, in all three countries, noted that although the law protects the long-term direction of travel for climate action, it is difficult for a law to ever protect against backsliding on specific policies and measures. The changing political context reinforces the importance of having laws that provide a stronger basis for stakeholders to exert political pressure on whoever is in government. We conducted the New Zealand interviews in the period leading up to the November 2023 elections. Most interviewees at the time thought that if the National Party won, it might choose to roll back some of the climate measures promised by the Labour-led government.

One research/advisory interviewee in Ireland emphasised that depending on the political and socioeconomic context at any particular time, there is a risk that politicians justify backsliding on measures by suggesting that the public “do not consent to these expensive policies”. This interviewee raised the example that when the government announced plans to increase the carbon tax on fuel in October 2023, Sinn Féin (the opposition party) strongly opposed the tax, citing cost-of-living concerns and other socioeconomic factors. There was a concern from this interviewee that the party might use this stance in the next general election.

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<sup>7</sup> The Minister may review a carbon budget under specified circumstances and using procedures set out in Section 6D of CALCDA.

### Box 3.3. Proposed amendments to Germany's KSG (*Klimaschutznovelle*)

In June 2023 the German government proposed substantial amendments to the KSG, including the three described below. Interviewees referred the most to the proposed amendments relating to the sectoral targets and climate action programmes (points 1 and 2 below) and some commented on the proposed amendments to the mandate of the ERK (point 3).

**1. A shift from a retrospective approach of evaluating whether annual sectoral targets have been exceeded to a forward-looking approach, examining whether cross-sectoral/economy-wide targets will be met.** The federal government would need to adopt additional measures to ensure compliance with the total annual emission budgets only if projection data show in two consecutive years that aggregate (economy-wide) emissions will be exceeded. These measures can be cross-sectoral policies. The sectoral targets will remain in the Annex. However, in the current KSG, when annual emissions budgets for a sector are exceeded, there is a requirement to devise sector-specific measures in accordance with Section 8 of the KSG. Thus, if the proposal is passed, the sectoral targets may remain legally binding on paper, but exceeding them will no longer trigger sectoral accountability through immediate action programmes.

**2. Amending the trigger for government to prepare a climate action programme (CPP), required under Section 9 of the current KSG.** Every incoming federal government would need to update the CPP no later than 12 months after entering office. The federal government would also examine the need to adopt a new CPP after each update of the *climate action plan* (this is the long-term strategy adopted in 2016 pursuant to the Paris Agreement and the EU Governance Regulation); currently this requirement to update is mandatory. Under the current KSG, the federal government needs to update the CPP if targets are missed.

**3. Extending the mandate of the Council of Experts on Climate Change (ERK) to propose additional climate protection measures which, as several interviewees commented, would significantly strengthen the role of the advisory body.**

*Source: based on the draft proposal dated 13 June 2023 and an overview by the BMWK.*



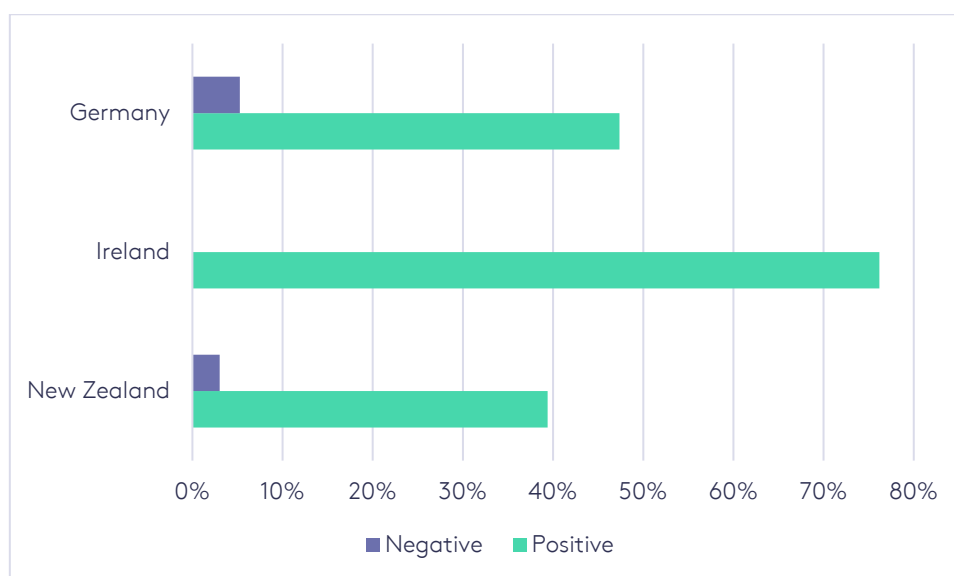
## 4. Impacts on climate change policies

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). Previous empirical work has shown that more often than not, the introduction of climate change laws leads to the creation of further climate laws and policies (Fankhauser et al., 2015).

Climate framework 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:

- (i) Climate framework laws lead to the development of new policies.
- (ii) Climate framework laws lead to the integration of climate change into sectoral policies and decisions.
- (iii) Climate framework laws send policy signals to all of government and the private sector and create increased certainty for business.

**Figure 4.1. Percentage of interviewees that mentioned positive and/or negative impacts on climate change policies, post passage of climate framework law**



*Note: As before, the figure accounts for the number of interviewees who described positive or negative impacts at least once, rather than reflecting the number of impacts described, as many interviewees referred to the same issue several times. (No interviewees in Ireland mentioned negative impacts.)*

It should be noted that this was an area where interviewees felt it was difficult to assess the impact of the legislation on policy independently from other factors driving climate action. This was particularly highlighted in Ireland and Germany, where the regulatory environment in the EU was seen as a significant driver of policy change and ambition by many stakeholders.

### **i) 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 the key positive developments stemming from the Acts. Such plans may act as anchors for mainstreaming climate (integrating climate considerations across traditionally non-environmental sectors) and cross-sectoral coordination across both political and administrative processes (see also Inderberg and Bailey, 2022),

and as a key element of new accountability systems instituted by the Acts. Requirements to create such plans can also lead to innovations in climate policy.

In New Zealand, the creation of the first Emissions Reduction Plan (ERP) in 2022 was seen as a major opportunity for bringing new policy issues onto the national agenda. This was something that had been entirely lacking under the earlier legislative architecture, which several respondents stated placed excessive reliance on the Emissions Trading Scheme (ETS) as New Zealand's primary mitigation-focused policy instrument. While there is still reliance on the ETS (see Box 4.1), following introduction of the ERP there is now more emphasis on "complementary measures". For example, two interviewees with knowledge of the process pointed to the inclusion of the concept of the circular economy in the ERP as being a very positive outcome of the cross-sectoral nature of the process. However, some interviewees argued that the ERP was a very challenging process and subject to significant limitations because of the short timeframe in which it was developed, a point corroborated by the Parliamentary Commissioner for the Environment's report in 2023. One research/advisory interviewee said that "some of those policies got lost as a result, because they came out half-baked".

In Ireland, interviewees also pointed to positive policy actions introduced during the process of developing the Climate Action Plans required by the legislation. A key positive aspect highlighted by both civil society and public sector interviewees was the promise to establish a National Just Transition Commission, learning from the experience of the peat phase-out in the Midlands Region (see also Section 6.i). This has yet to be fully implemented, although a Just Transition Taskforce was established in 2023 to make detailed recommendations about the structure and membership of the Commission (see the [Climate Action Plan 2024](#)). Although most interviewees who mentioned the Irish Climate Action Plans deemed them to be a positive force "driving" policy change, several highlighted challenges with their implementation. For example, the CAPs do not yet specify where new developments for new offshore wind projects are to be placed or how to overcome barriers in the existing planning system (see Box 4.2).

Several Ireland and New Zealand interviewees noted that the measures set out in the cross-sectoral climate plans (known as Climate Action Plans and Emissions Reduction Plans, respectively) were not on track to be implemented. In Germany, as noted above, the role of (cross-sectoral) climate action programmes (CPPs) introduced as a result of the KSG, was deemed less significant by interviewees. One sub-national interviewee highlighted that the 2023 CPP adopted in October 2023 "wouldn't have been

#### **Box 4.1. New Zealand's Zero Carbon Act and Emissions Trading Scheme: interaction between accountability and ambition in climate policy evolution**

New Zealand's Emissions Trading Scheme was first introduced through a 2008 amendment to the Climate Change Response Act 2002 and has been the subject of much political controversy over the years (Inderberg and Bailey, 2022). Nevertheless, in 2020, one year after the adoption of the ZCA, the Ardern government managed to reform the ETS to better align with the ambition of the new legislation. The new amendments included a provision requiring the NZ Climate Change Commission to advise the Minister for Climate Change on the appropriate limits and price controls for the NZ ETS to comply with the emissions budgets introduced in the ZCA. The Minister is obligated to set price controls "in accordance with" the carbon budgets, New Zealand's nationally determined contribution (NDC) and the goals of the Paris Agreement [see Sections 30GC and 5ZOA of the CCRA 2002]. However, in December 2022, the Cabinet rejected advice from the Commission and imposed less stringent controls than those recommended. This decision was the subject of a successful judicial review in *Lawyers for Climate Action v. Minister for Climate Change*, which saw the decision overturned and subsequently revised to follow the advice of the Commission.

In this case, the legislation provided the necessary accountability levers to ensure the evolution of this longstanding policy in line with the new ambition of the ZCA. Several interviewees highlighted the high significance of the decision to integrate both the NZ ETS and the ZCA into the 2002 CCRA rather than introducing stand-alone legislation each time. This approach required the adoption of a common set of definitions and principles, which supported the case for interpreting the provisions on ETS price setting in a way that was most likely to lead to the achievement of the new overarching climate goals, concretely resulting in more ambitious climate policy.

possible without the Climate Change Act [...] without the necessities of further action that became very visible due to the ...Act.” However, several other interviewees in Germany highlighted the inadequacy of the 2023 CPP for realising the targets enshrined in the KSG. One civil society interviewee even described the 2023 CPP as “unlawful” in this respect.

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

New sectoral decarbonisation policies flowing from the Acts were also described as being among the positive impacts of the legislation. 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”. It imposes a fee on purchasers of high emission vehicles that is then used to fund discounts on zero- or low-carbon emissions vehicles.<sup>8</sup>

### Box 4.2. Examples of climate laws prompting spatial planning reforms

Planning rules were highlighted as a major challenge to the development of onshore wind projects in Ireland, in part as a result of lengthy and uncertain permitting processes, a lack of strategic direction on the allocation of new projects between regions and local authorities, and because of EU legislation to protect biodiversity. However, these rules are now subject to reform through the revision of the Planning Act and proposed revisions to the National Planning Framework and National Development Strategy. It is clear from our interviews and also the [government’s roadmap](#) for the reform process that challenges in implementing the Climate Action Plan have played a significant role in motivating the proposed changes.

In New Zealand, interviewees also attributed reforms to planning legislation to the need for alignment with the ZCA 2019. Prior to the introduction of the ZCA, according to the interviewees, there was a serious misalignment between the Resource Management Act (RMA) and climate change imperatives. To resolve this misalignment and enable local councils to take climate action, the Labour-led government first repealed the relevant sections\* of the RMA and then embarked on a massive programme of environmental law reform, culminating in the passage of two new, interconnected pieces of legislation: the Natural and Built Environments Act (NBEA) and the Spatial Planning Act (SPA). A third piece of legislation on managed retreat from areas subject to flooding, the Climate Change Adaptation Bill, was not passed.

However, the lasting impact of these reforms is uncertain. The introduction of the new legislation was described by interviewees as “chaotic” since it was introduced so close to the end of the government’s term. Although the NBEA and SPA were passed in August 2023, most of their provisions are not yet in force, as they are pending the creation of various plans and policies. The phase-in is expected to take 10 years – but given that the new National-led coalition has indicated [repeal](#) of the reforms is a top priority, it is not clear that they will ever be fully implemented.

In Germany, planning rules were raised much less frequently in our interviews. However, one public sector interviewee referred to the Wind Energy Area Requirements Act (the *Windenergieflächenbedarfsgesetz*), which set binding targets for the Länder to designate areas for onshore wind energy, to help achieve the national targets in the Renewable Energy Sources Act (the *Erneuerbare-Energien-Gesetz*). The interviewee felt that this has been a positive change to facilitate implementation of the goals of the KSG at sub-national level. However, other interviewees were hesitant to attribute these planning reforms to the KSG directly.

*\*The Resource Management Amendment Act 2020 repealed Sections 70A, 70B, 104E and 104F, which restricted local government from considering the effects that greenhouse gas discharges have on climate change.*

<sup>8</sup> Uptake of the scheme radically exceeded government expectations (DriveElectric, 2023), yet the Transport Agency’s [website](#) confirms that the scheme ended in December 2023 after the new National-led coalition government made scrapping it one of its key priorities on the basis that it disproportionately impacted rural communities (Trevett, 2023).

In Ireland, interviewees also noted policy progress flowing from the Act but emphasised that this varied significantly between sectors. Several pointed to progress on energy efficiency retrofitting and the rollout of heat pumps in the buildings sector being “on track” and connected it to the legislation. Policy-driven decarbonisation of energy was also highlighted as a success, with many ascribing it to 2020 “stretch targets” for new renewables set in 2015 prior to the introduction of the climate legislation in Ireland. This illustrates the challenge of disaggregating the impact of climate laws from other relevant factors.

Nearly half the interviewees in Ireland commented on changes in transport policy flowing from the Act. These include major changes to the way public bodies manage their own transport fleets (see Box 4.3): a significant programme of purchasing new hydrogen and electric buses, and a small but growing increase in the uptake of zero emissions vehicles. However, the slow pace of change was raised frequently, with one research/advisory interviewee characterising it as “policy-driven emission reduction” that “hasn’t been fast enough”. Challenges include securing drivers for the new bus fleet, and the slow pace of change for major infrastructure projects. Nonetheless, there was a sense that having a set of policies in place to address transport emissions “that’s backed up by law”, as one civil society interviewee put it, was positive progress.

In Germany one of the most frequently discussed policy measures flowing from the 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 (see also Box 5.1), which was introduced to compensate for slow progress in increasing the energy efficiency of the country’s housing stock. However, the approved measure was significantly less ambitious than its original form due to major political opposition to the proposals. Interviewees also pointed to progress on policy in the industrial and energy sectors, although several commented on the difficulty of making a direct connection between these areas and the legislation, particularly given the important role played by EU policy.

#### **Box 4.3. Public sector climate goals flowing from the Acts**

Efforts to ensure that the public sector achieved emissions reductions were raised in New Zealand and Ireland as one area where new policies were flowing from the legislation.

In New Zealand, several interviewees pointed to the *Carbon Neutral Government Programme* as a significant shift. This programme requires government departments and other public institutions to ensure their operations are carbon-neutral by 2025. Although the target is not set out in the ZCA, one public sector interview explained it “has been strongly informed by the existence of the [ZCA]” and since “the public sector is a third of New Zealand’s economy” the programme is likely to be significant for achieving the national carbon budgets.

In Ireland, a *Public Sector Climate Action Mandate* has been introduced and explicitly connected by the government to public sector duties under S.15 of CALCDA 2021. The sector is expected to achieve a 51% reduction in emissions by 2030, which, as one civil society interviewee said, has placed “big pressure” on “semi-state companies” to reduce their emissions. Several other interviewees pointed to progress by the postal service in electrifying its fleet as a good example of this.

In Germany, section 15(1) of the KSG has introduced a goal for the federal administration to become climate neutral by 2030. A sub-national government interviewee pointed out the separate coordination secretariat that has been established to this end, namely the *Koordinierungsstelle Klimaneutrale Bundesverwaltung (KKB)*.

### **iii) Climate laws send signals about the direction of travel and improve policy certainty**

Despite the challenges in policy implementation discussed above, many interviewees thought climate laws contribute to climate policy evolution and create policy certainty for actors both within and outside government. Crucially, the evidence reviewed for this report suggests such shifts often take place even when there are no concrete requirements in the legislation, but rather because of the legislation’s ‘signalling power’. As one civil society interviewee from Ireland noted, “The law [CALCDA 2021] established in the mind of the policy community ... the non-negotiable nature of addressing climate change.”

In Germany, despite the many challenges in implementing sectoral policies noted above, the legislation was largely deemed to have had a positive impact on the climate policy environment because it provided what many described as “a reference point” for policy conversations. One research/advisory interviewee said, “The private sector has understood which direction the economy is going [...], that decarbonisation is happening, and it’s happening fast.” Interviewees also described the legislation as sending strong signals to high emitting industries like steel, coal and automotives.

In New Zealand, stakeholders from both the public and private sectors also described the impact of the legislation on related policy decisions. Within government, there was a sense that policy processes could and should be more ambitious to match the ambition in the ZCA, even where this was not a legislative requirement. One legislator/political advisor noted that the need to compare progress against the carbon budgets created a sense that policymakers had to be more “realistic” in their own assessment of their policies. Interviewees from the research community and the public sector pointed to the example of New Zealand’s mandatory climate-related disclosure standards introduced under an amendment to the Financial Markets Conduct Act (FMCA) in 2022 in a legislative process entirely separate from the ZCA. According to a public sector interviewee with knowledge of the process, there was a clear effort in the designing of the standards to ensure that they aligned with the net zero goals of the broader ZCA. A civil society interviewee confirmed that the ZCA and the reforms to the FMCA were two closely related factors in creating an “industry of climate compliance” among the private sector.

Interviewees from New Zealand also indicated an impact on private sector decision-making, with one referring to the business community as “picking it up and running with it” in reference to the ambition indicated by the ZCA, and another describing the way in which every business now feels that this is something they should be considering, even if only from a purely financial view point. Several interviewees pointed to the recent decision by Fonterra (New Zealand’s largest dairy producer and exporter) to [enter into a deal](#) with government to cut coal use at its processing plants and halve its manufacturing emissions by 2030 as an example of a shift in business thinking resulting from the Act. Interviewees stated that the company’s decision to commit the capital (alongside government funding) was clearly impacted by the “policy certainty” created by the legislation. Several interviewees felt that the NZ ETS had impacted private sector attitudes. One private sector interviewee highlighted “a very positive impact on the building of wind energy facilities”. Given the close connection between the NZ ETS and the carbon budgets under the ZCA, we can anticipate that this effect may well be amplified in the future.

In Ireland, the picture was similar, with several interviewees pointing to the fact that the legislation had created what one private sector interviewee referred to as a “stable environment for investment”, particularly in the renewables sector, where government targets would also be used in forecasting by companies. As another private sector interviewee said, “companies are starting to act themselves now on the back of having that governmental certainty”. One private sector interviewee described an interplay between CALCDA and the development of a Low Carbon Pledge by Business in the Community Ireland (BITCI). BITCI promotes this pledge among its members, and those who sign up to it commit to take action to decarbonise their operations. While the initial 2018 version of the pledge was primarily motivated by the Paris Agreement, the second iteration was designed around the requirements of the Climate Action Plan 2019.

BITCI’s 2023 progress report also shows a fairly close connection between the national-level targets and goals and action by businesses (BITCI, 2023). For example, 51% of members said they integrated the national CAPs into their sustainability strategies. While this was described as disappointing by BITCI, it nonetheless shows a significant level of engagement with the national governance architecture by the business community.

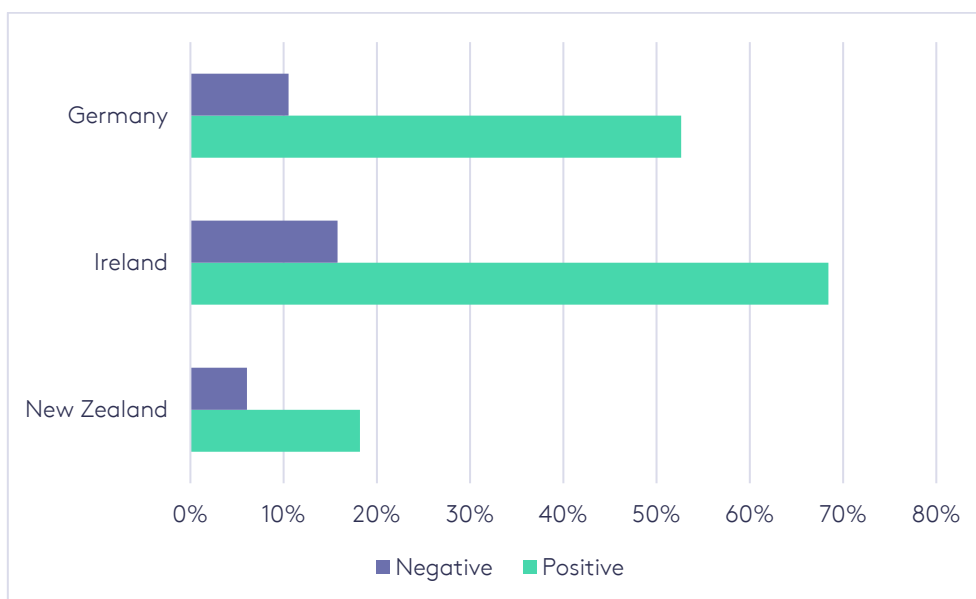
## 5. Impacts on citizens and civil society

The process of campaigning for, adopting and implementing a climate law may lead to increased public awareness and support for climate action (Orsini et al., 2021). Compared with the other areas of impact discussed in this report, the impact of climate legislation on citizens and civil society drew the greatest diversity of assessments among the interviewees (see Figure 5.1). Many interviewees emphasised the difficulty of attributing the changes in attitudes and behaviour specifically to the climate legislation, as often there are other contextual factors at play. For example, in New Zealand, many interviewees felt that extreme weather events have played a greater role in raising public awareness on climate change than the CCRA has.

Despite the challenges highlighted in this section, interviewees highlighted three positive types of impacts:

- (i) Climate framework laws increase public awareness, mainly due to greater frequency, and improved quality, of media coverage of climate action.
- (ii) Climate framework laws provide a credible basis for civil society to scrutinise progress.
- (iii) Climate framework laws are an opportunity to strengthen social acceptability for climate action through increased public participation processes.

Figure 5.1. Percentage of interviewees that mentioned positive and/or negative impacts on citizens and civil society, post passage of climate framework law



Note: As before, the figure accounts for the number of interviewees who described positive or negative impacts at least once, rather than reflecting the number of impacts described, as many interviewees referred to the same issue several times.

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

Adopting a climate framework law has provided regular opportunities to put the topic of climate protection on the political agenda, increasing media attention and therefore public debate. In the words of a sub-national government interviewee in Germany, “the KSG has certainly helped to broaden and intensify the public discussion about climate protection”. Other civil society and research/advisory interviewees in Germany also thought that the law to an extent has shaped how the public perceives the urgency of climate action. In particular, the principle of sectoral responsibility to meet annual targets has

codified more clearly the government's obligations in the eyes of the German public. The law has provided the basis for media and NGOs to monitor accountability and enables civil society to campaign using information from the government on which sectors are not performing, because the policy debate is overall "more concrete and based on the specific targets".

In Ireland, multiple civil society, media and research/advisory interviewees argued that the legislation has created "enabling conditions for people to have a national conversation about climate action". These conditions have emerged from the increased and improved media coverage of climate action, particularly of the agricultural sector's role in climate change, and has helped make the point that this sector must play its part; it is not fair for farmers to "have such an easy task compared to the transport sector". There is a growing understanding in the public debate that "we won't meet our climate targets if agriculture is allowed to do what it wants". Reports from independent advisory bodies have played a key role in adding credibility to public reporting on climate action. For example, interviewees referenced how the recommendations of the Irish Climate Change Advisory Council on reducing methane from agriculture were covered in the mainstream media for several weeks.

In Ireland and Germany, research/advisory interviewees highlighted the importance of the domestic climate laws in supplementing EU climate policy, as it brings climate action closer to home. Some felt that the public at large "doesn't care much about the EU level". However, by contrast, a few research/advisory and civil society interviewees in Ireland perceived a limited understanding among some parts of the public that Ireland has enacted its own climate legislation and that climate action is being imposed by the EU without much appreciation of Ireland's national circumstances.

In New Zealand, fewer interviewees highlighted impacts of the climate legislation on the public, although some public sector interviewees thought that the lead-up to the ZCA and the attention given to the cross-party consensus for the law was "very important for the public", as it depoliticised climate change as an issue. The public saw that climate had shifted "from something that was considered important by the [political] left and centre-left, to something that was considered important across the board".

### **It is difficult to disaggregate the climate law's impact on public awareness from other contextual factors like extreme weather events and youth movements**

When discussing impacts on public awareness about climate change and their support for climate action, interviewees found it challenging to distinguish the impact of climate legislation from other developments. In New Zealand, a sub-national government interviewee attested that there was "a [climate] movement across various different parts of the systems, one of which was legislation", but there was also a "cultural shift and a shift in voting behaviour". Many interviewees also highlighted the huge impact tropical cyclones (particularly Cyclone Gabrielle in February 2023) have played in driving increased public concern around climate action. In Germany, some research/advisory and civil society interviewees similarly argued that public awareness of climate change and their attitude towards it is probably influenced more by other factors, such as the COVID-19 pandemic and the war in Ukraine. A research/advisory interviewee in Ireland echoed that "awareness has probably come from a range of factors, including Fridays for Future, the Climate Case, the citizens assembly".

Several interviewees attributed the relatively weak impact the law has played on public attitudes to the perception of legislation as being too technical and remote from the minds of the public. Several civil society and research/advisory interviewees in Germany argued that most of the population does not know of the KSG, and it is "too high level and abstract" to drive public opinion and behavioural change. Where awareness of climate change does exist, some interviewees in Germany spoke about the challenge of translating that awareness into public support for action and changing behaviour. A media interviewee in Ireland echoed this challenge, noting the difficulties of "making the ordinary person understand why [the law] is important" and the need to refer to simple tangible examples, such as solar panels on a school roof or bans on fossil fuel boilers, to illustrate the legislation in action. A public sector interviewee from New Zealand equally noted that the majority of the public would find the ZCA difficult to understand, but said this did not mean they would not support climate change action generally.

## **ii) The framework created in climate framework laws provides a stronger basis for civil society to scrutinise progress, but it has also become more difficult to campaign effectively**

In all three countries, interviewees noted that climate legislation has 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. This also enables greater scrutiny by organised stakeholder groups. In Germany, a civil society interviewee attested that having the KSG is very helpful in talks with politicians, including the government, “because we can always make the claim that, in a democracy we agree to laws, and we have to comply with these laws”.

Some interviewees also noted that the adoption of the climate framework legislation contributed to the spread of conversations about climate to other arenas and led to engagement of new stakeholders, beyond climate-focused NGOs, in the debate. This includes, for example, the growing involvement of social justice institutions in Ireland since the adoption of CALCDA 2021, which recognised the need of having regard for climate justice, the engagement of campaigners focused on food security or the increased involvement of Māori organisations in New Zealand (e.g. Te Ara Whatu).

In all three countries there was a sense that the adoption of the climate legislation has led to a change in NGO advocacy strategies, 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 get the public as enthusiastic about each element as about the adoption of the law itself: “There’s a lag time... because it might take a couple of years for people to realise it’s not working.” With so many policies under discussion, it makes it “much harder for the NGOs to campaign”. In New Zealand, some civil society interviewees also elaborated that the adoption of the law took a long time and significant resources, so it has taken “a lot of energy [out] of the climate movement... without delivering a lot in terms of actual emissions”.

A few interviewees in Germany and New Zealand argued that the climate laws themselves have contributed to this growing challenge around mobilising vast public support for campaigns on implementation. In Germany, a civil society interviewee stated that the 2021 KSG “led to a kind of satisfaction” within the public’s perception, with people thinking that enough had been done and questioning the need for further campaigning. This “closed the space for what could be achievable and possible and predictable” and resulted in “the immense shrinking of the climate action consensus in Germany, and the law probably was a negative factor in that second phase”. In New Zealand, two interviewees, one from civil society and one from the private sector, both criticised the law for enabling a “greenwashing narrative”. They raised a concern that legislation that looks like it is doing something when it is not runs a risk of demobilising action, and can be used as “an excuse for inaction”. There is a danger that politicians use the existence of the law to justify to the public that action is being taken, despite a lack of real progress.

## **iii) All three climate framework laws provide a basis for public participation but this could be significantly strengthened through better communication and engagement processes**

In Ireland and Germany, the climate laws were viewed as enabling some public engagement at the sub-national levels, as the laws provide a foundation to increase public participation. In Ireland, interviewees highlighted the preparation of local authority climate action plans mandated under CALCDA 2021 as the main example. When developing these plans, local authorities must engage with the public through the Public Participation Networks that are comprised of different members of business, society and community groups. Local authorities must also publicise their planning process via local media, publish draft plans and invite feedback from the public via open submissions, and then respond to that feedback. A sub-national government interviewee explained that “bringing people on the journey and letting them participate” will help “feel like people have more control”, and “build up public and political support”. They also commented that “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”.

In Germany, interviewees from the sub-national and public sector perspectives also mentioned positive examples of public engagement at the regional level, for example through the Citizens Forums, but the experience was reported to vary highly from region to region and “depends on people in charge”. Section 9(3) of the KSG requires the federal government to involve Länder, municipalities, business associations and civil society organisations as well as the Scientific Platform on Climate Change and scientific advisory bodies of the Federal Government in every climate action programme through a public consultation procedure. However, in practice there have been concerns from civil society about this procedure, for example a very short time given for a recent consultation on the proposed amendments to the law led NGO the DUH to file a complaint with the Aarhus Convention Compliance Committee.

However, apart from these emerging positive examples, interviewees in all three countries highlighted weak public participation processes around the design and implementation of the climate laws as an area of concern and a priority to address. In Germany, several civil society interviewees noted that “governments don’t particularly like engaging the citizenry if they don’t have to” and that from a technocratic perspective “it may be more attractive to do it with minimal citizen engagement” but stressed that this approach is “counterproductive”. A media interviewee agreed that there is an inaccurate perception that “if you involve everybody all the time, you’re not moving”. In Ireland, an interviewee with a civil society background shared a similar sentiment that the Irish government is reluctant to move when it does not feel it has public support, and when it does “have to push things through”, it does so “without engaging the citizens” if it can. Other research/advisory interviewees thought that the lack of public participation around the legislation was a missed opportunity for strengthening social acceptability. They shared an example from the biodiversity policy context of how better organised public participation could be positive for public buy-in: the recent biodiversity citizens assemblies were described by interviewees as having “transformed the debate”, which impacted the vote in support of the Nature Restoration Law.

### **The growing complexity of public consultation processes affects how impactful the climate law can be on public attitudes to climate action**

In all three countries, interviewees expressed some concerns that the general public and organised stakeholder groups are struggling with the complexity of public consultations, which are getting longer and increasingly technical. This impacts the public’s ability to contribute and engage effectively. As one civil society interviewee in Ireland said: “Now that the law is passed, we suddenly have four big sectors... [and] over 400 actions in the Climate Action Plan. So suddenly, it’s this massive landscape of issues.” It has become much more challenging for organised stakeholder groups to prioritise their inputs and resources. Interviewees also cautioned that public participation needs to be managed very carefully, as there is little sense in pushing for participation if the decision on a course of action has already been taken. “The risk of being deceived or feeling deceived by this is so big, and then it backfires big time”, warned a journalist. A public sector expert agreed and noted that “it cannot be just another theoretical exercise of discussing issues”.

Independent advisory bodies play an important role in strengthening public engagement, as their mandates include public consultation. While some interviewees in each of the three countries mentioned the central role of the advisory bodies in driving “more public conversation” on climate, there were also concerns that these bodies need to be conscious of the high technical complexity of their outputs. A research/advisory interviewee in New Zealand noted that because the Climate Change Commission reports need to be highly accurate, their reports are always very detailed, but this then “makes it really difficult [for the public] to engage with them”.

### **Effective communication and education are crucial to building social acceptability for climate action**

The importance of having a strong communications strategy upfront, especially when designing policies that will have an impact on a large and broad range of citizens, was raised by many interviewees from Germany. Reflecting on the recent pushback against the heating law (see Box 5.1), a public sector interviewee argued that policymakers and legislators should not only aim to make “good” laws and

policies, but also “to explain them better”, “prepare for the counter-campaigns” and “run their own campaigns”, including finding and presenting “positive witnesses” who can highlight the benefits of climate action based on their own experience. In New Zealand, some research/advisory interviewees highlighted the importance of public education in strengthening public support for climate action as the country moves further into the implementation phase. The interviewees argued that the change is going to come “through a new generation of people who are really climate-literate and also who are prepared to address the democratic deficits”.

#### **Box 5.1. Lessons learned from the (mis-)communication of Germany’s heating law**

Many interviewees discussed the public opposition following the change to the Buildings Energy Act (the *Gebäudeenergiegesetz*), also referred to as the ‘heating law’, designed to phase out fossil fuel heating in buildings. Although they found that public opposition to the phase-out stemmed in part from the fact that the bill would lead to some upfront costs on 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”.

Another interviewee noted that some of these issues may have stemmed from the fact that policymakers were simply “thinking backwards” from the climate targets rather than proactively anticipating responses, suggesting that while legislative targets can act as a catalyst for new policy measures, successful climate governance also requires attention to be paid to how those measures are developed, deliberated and communicated.

The significant public backlash against this policy, which resulted in last-minute changes to the Act, also illustrates the complexity of the requirement to target multiple stakeholders when 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, resistance came from households who had been party to disinformation campaigns around what the law entailed. In other contexts, opposition may come directly from the business lobby – as has occurred in the auto industry, as a civil society interviewee pointed out.

## 6. Impacts on society and climate

While the impacts described in the preceding sections are important, they are all primarily significant only to the extent that they contribute to creating lasting positive changes on society and the climate itself. We find three key issues here:

- (i) There is significant room for improvement in the design and implementation of climate framework laws to ensure they produce positive social impacts.
- (ii) There is strong evidence of increases in financial flows towards climate action as a result of all three climate framework laws.
- (iii) Climate framework laws that incorporate key building blocks are likely to contribute to emissions reductions over the long term.

Interestingly, although we anticipated that specific adaptation and resilience outcomes would be at least partially attributed to the legislation in Ireland and New Zealand (but not in Germany where adaptation is not included in the KSG), this was not the case. In Ireland, while a few interviewees mentioned that adaptation actions would be included in both national and sub-national Climate Action Plans (CAPs) and Local Climate Action Plans (LCAPs), no interviewees pointed to specific policy actions or any associated outcomes when sharing their views on the most significant impacts of the legislation. In New Zealand, although a few interviewees mentioned an increase in action on adaptation, many saw this as motivated by the increase in extreme weather events and climate-related disasters within the country rather than the law. One research/advisory interviewee noted that although the ZCA and its related plans are now primarily focused on mitigation, over the years this would change. They predicted: “adaptation will become the number one issue in town... it will absorb the energies of vast numbers of officials and others for generations to come.”

### **i) There is significant scope to improve the design of climate framework laws so that they deliver positive social outcomes, with Ireland providing some initial lessons**

Only a few of our interviewees were confident in assigning social impacts to the climate change legislation when asked. Such confidence was highest in Ireland, where a ‘just transition’ is one of the key principles enshrined in CALCDA 2021. Several interviewees in the Irish context spoke about successful government support for the just transition in the Midlands region, which has had traditionally high rates of peat extraction. A decision by semi-state company Bord na Móna to cease using peat to produce power went hand in hand with an acknowledgement from both the company and the government that this would have economic impacts on the region. A Just Transition Commissioner was appointed in 2019 and a Just Transition Fund was created to support relevant activities in the region. One private sector interviewee described this as “a really good kind of just transition in that area”, while others also pointed that ensuring a just transition more broadly required further work, particularly as the national Just Transition Commission proposed in the CAPs had not yet been established. A particular challenge a few interviewees mentioned is the just transition in the agricultural and land use sector.

In New Zealand, several interviewees commented that strategies and action on the social impacts of climate response were not well coordinated, with just transition being hindered by what one public sector interviewee described as “silo thinking” within the government and difficulty for government departments to trace the social impacts of policies all the way through to their possible outcomes. Uneven socioeconomic impacts related to the law were most often mentioned in the context of the land use sector. For example, several interviewees pointed out that an increase in afforestation resulting from the inclusion of forestry in the ETS poses challenges for rural communities. The conversion of marginal farmland to forestry uses can have major impacts on local businesses dependent on that farm. This leads to what a private sector interviewee described as concerns that rural communities are being “hollowed out” as a result of the legislation. Several interviewees noted that the government had been slow to respond to these issues, in part because of an initial view in policy circles that afforestation would be a good thing.

A few research/advisory and Māori interviewees also noted that this issue had caused controversy among Māori stakeholders, with tensions arising between Māori business owners and iwi (large tribal groupings) that have major stakes in forestry and others who identified afforestation with monocultures as leading to maladaptation and problems for biodiversity. While a Māori interviewee highlighted progress in integrating Māori perspectives into policy processes under the ZCA, such as the creation of the Māori Climate Platform under the ERP, it was clear that the participation of Māori stakeholders, as well as other vulnerable communities, in decisions that will significantly affect their communities needs to be further improved.

In Germany, several interviewees thought that more needed to be done to address distributional and social impacts of climate policy, with several people raising this issue in discussions of the heating law, as noted above. There was a concern that the KSG “does not necessarily talk a lot about social impacts, which is ... a problem”, as one civil society interviewee put it.

**ii) Climate framework laws contribute to increases in financial flows towards climate action**

Although emissions have yet to decrease at the pace and scale required to achieve the targets in the legislation in all three country case studies, there is evidence of some progress in shifting financial flows towards climate action, which may ultimately filter through into changes in emissions (see Section 6.iii). In all three countries, interviewees pointed to more financial resources being committed to climate change, including through the creation of new funds and changes to the fiscal system motivated by and closely linked to the need to implement climate legislation. As one public sector interviewee in New Zealand said, because of the 2019 Act “a lot more was required of government or a lot more expected from the civil service, and so a lot more funding ... was delivered to them”. Similarly, a public sector interviewee in Ireland noted that the increase in public spending on climate action in recent years was “certainly quite a change of tack... and certainly the Act has to be given some credit for that”.

Table 6.1 shows examples of new funding mechanisms created to support climate action and feedback from the interviewees on the impacts of legislation on public and private spending for climate action. More research is needed to fully understand the impacts of the legislation in this area. It should also be noted that interviewees found it challenging to disaggregate the impacts of the legislation in this area from other contextual factors, such as the impact of having a Green party as part of a coalition government.

**Table 6.1. New institutions and processes created to fund climate action**

Key funds and processes
New Zealand
<ul style="list-style-type: none"> <li>• Interviewees mentioned the creation of the NZ\$4.5 billion Climate Emergency Response Fund (CERF) in 2022, which has provided NZ\$3.7 billion for climate related initiatives by December 2022 (Biennial Report and National Communication Report to the UNFCCC [BUR, 2022]). Interviewees also mentioned the Government Investment in Decarbonising Industry (GIDI) Fund, which is part of the CERF. Both are funded via the proceedings from the NZ ETS.</li> <li>• Most interviewees felt that the GIDI Fund was having a tangible impact. Since its first round of funded projects in April 2021, the Fund has leveraged NZ\$122.9 million of public funding into 88 projects, which had been supported by a further NZ\$226.2 million in private investment in the period leading up to November 2023.</li> <li>• In referring to the 2022 state budget, one private sector interviewee said: “climate is written all through that budget”. According to an independent analysis, some of this budget is expected to have at least some positive impacts for climate change (NZIER, 2023).</li> <li>• A private sector interviewee linked the launch of a NZ\$2 billion climate infrastructure fund by BlackRock to the legislation. A press release by the government on the BlackRock investment stated that “investors in the green economy can see our potential and recognise our commitment to climate commitments and goals”, which is an implicit reference to the legislation.</li> </ul>

## Key funds and processes

- Another example is the establishment of New Zealand Green Investment Finance Ltd, a state-run green investment vehicle intended to crowd in private capital for green projects, capitalised at NZ\$100 million in 2019 and recapitalised to NZ\$400 million in 2021 (BUR, 2022).

## Ireland

- A significant portion of government spending on climate and just transition comes from the hypothecation of revenues from the domestic carbon tax. For example, the 2021 budget set a linear trajectory for increasing the cost of carbon to €100 per tonne of CO<sub>2</sub> by 2030 (see OECD, 2021). Although the programme pre-dates the legislation, interviewees were clear that spending is now closely related to the implementation of the CAPs.
- Two interviewees talked about a new €3 billion state fund to invest in climate and biodiversity during 2026 to 2030, created in 2023 as part of a larger counter-cyclical fund using windfall corporate tax revenues. However, while spending for climate measures has increased in recent years, this is still estimated as less than 5% of the total public expenditure (Irish Parliamentary Budget Office, 2023). There is also a concerning trend in underspending on climate measures (ibid.).
- One legislator/political advisor interviewee commented that government departments responsible for significant emissions reductions under CALCDA had all increased their requests for funds for climate programmes over the last three or four years and received the funding. There has also been a shift in investment priorities. For example, according to a research/advisory interviewee, the Department of Transport had historically seen itself as a road building department, but now in light of the climate targets, road building accounts for less than a third of its expenditure.
- The National Just Transition Fund is providing over €22 million in grant funding to projects in the Midlands region, which is expected to attract a further €15 million with the broader goal of supporting a just transition to a low-carbon economy. It is estimated that these funds will support 178 direct and 999 indirect jobs (Irish Government, 2023).

## Germany

- Interviewees emphasised the creation of the climate transformation fund (Klima- und Transformationsfonds [KTF]) by the government as the key mechanism for financing the delivery on climate targets. Its creation is linked to the revenues from the EU ETS and the domestic emissions pricing regulation, the cross-sectoral measures in the Climate Protection Programme 2030, introduced alongside the KSG.
- The disbursement of KTF funds was complicated following a court ruling that indicated that the repurposing of funds from the COVID-19 pandemic response towards climate action was a violation of Germany's constitutional debt brake. The Government has since negotiated covering part of the shortfall but overall, funding will still be reduced (see Box 6.1).
- Several interviewees commented on the work by the Coal Commission on the phaseout (see Thuy, 2022). One interviewee noted that success relied on the willingness of RWE to agree to the early closure of some of its power plants, in exchange for €2.6 billion in compensation. One civil society interviewee noted that the agreement was possible in part "because of the policy implications of the climate framework law... business profitability up until or beyond 2030 wasn't in any way achievable".
- The deliberations by the Coal Commission commenced in 2018, prior to the introduction of the KSG, and did not flow from the legislation. Nonetheless, the deliberations resulted in a negotiated agreement that saw significant public funding used to compensate coal companies, provide support for a structural transition in the coal regions, and support workers from coal communities, totalling over €40 billion (see Gesley, 2020).

Despite promising signs of finance for climate action increasing, progress is still too slow. For example, in New Zealand, interviewees argued that there was significant room for improvement in the integration of climate considerations into financial decision-making by public bodies, particularly in helping the public sector to understand the interlinkages between carbon financial budgets. As one research/advisory interviewee explained, “there isn’t really a sense of running the financial budget in a way to deliver the carbon budget”.

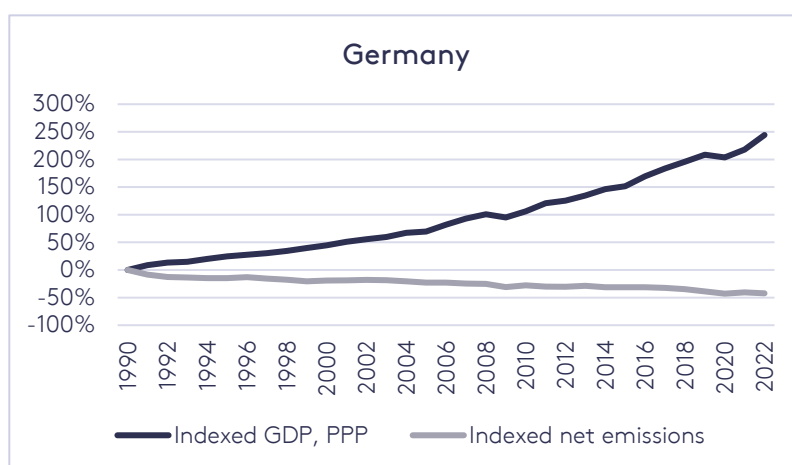
### Box 6.1. Public debt and climate action in Germany

On 15 November 2023, the Federal Constitutional Court ruled that Germany’s Constitutional debt brake meant that emergency funds left over from the COVID-19 pandemic could not be diverted to the climate transformation fund and used to support climate action. After this ruling, a **momentous decision** to increase the domestic carbon price for the buildings and transport sectors to €45 per tonne (from €30; the previously planned increase was €40) was reached to help make up the shortfall, which one research/advisory interviewee described as a “tremendous increase”. Preliminary evidence from our interviews suggests that the decision-making behind this may well have been motivated in part by pressure to ensure that the court ruling did not prevent the government from meeting the targets in the KSG, although further research would be needed to confirm this (see also a statement from the Government website [here](#)).

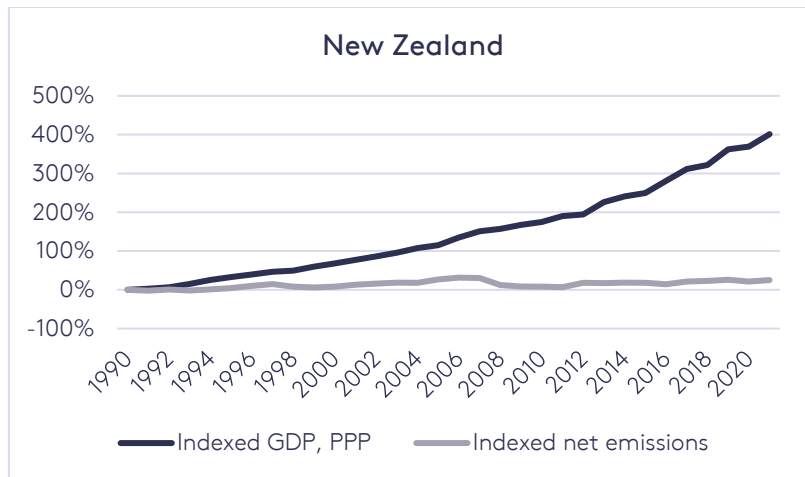
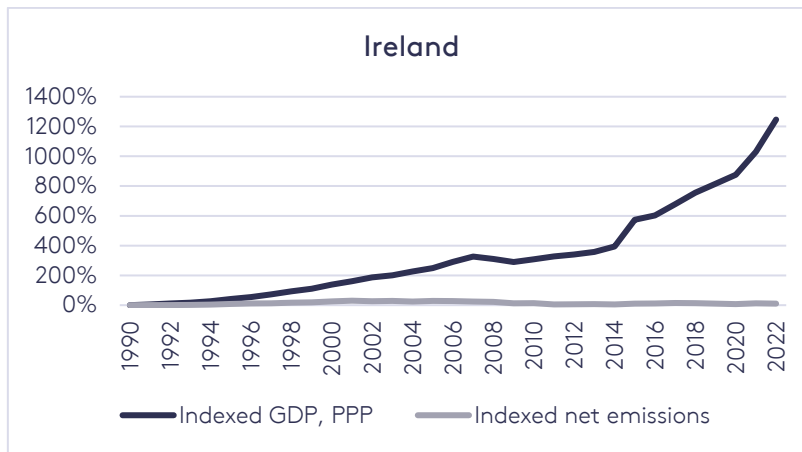
### iii) There is an expectation that the climate framework laws will contribute to emissions reductions over the long term, even if current performance is unsatisfactory

The passing of new climate legislation has been found to be associated with reduced emissions intensity in both the short term and long term (Eskander and Fankhauser, 2020). This finding was tested in our stakeholder interviews, supplemented by data on economy-wide and sector-specific emissions and projections. Overall, interviewees felt that it was too early to say whether strengthened versions of the climate laws, passed or amended in recent years, had been responsible for significant reductions in emissions in the short term, but there were some indications of potential reductions starting to occur. The data shown in Figure 6.1 aligns with their perspectives, as it is difficult to see any great change in net emissions in the years during which the relevant climate framework laws were passed or amended.<sup>9</sup> Overall, however, there has been significant decoupling between economic growth and emissions since 1990. Most interviewees also found it difficult to isolate the impacts of the climate framework legislation from other factors such as sectoral measures or global events (for example, the Ukraine war and the pandemic). In the cases of Ireland and Germany, the complex interaction with the EU regulatory framework was also discussed, as outlined above.

Figure 6.1. Changes in GDP (at purchasing power parity/PPP) and net emissions in Germany, Ireland and New Zealand over time



<sup>9</sup> i.e. in 2019 and 2021 for Germany, 2015 and 2021 for Ireland, and 2002 and 2019 for New Zealand.



Note: Series indexed to start at zero in 1990. GDP, PPP data for all three countries is sourced from the World Bank, which was last updated on 21 February 2024. Net emissions (i.e. with land use, land use change and forestry/LULUCF) were sourced from the relevant country's greenhouse gas emissions inventory published by the German Federal Environment Agency, the Irish Environmental Protection Agency, and the New Zealand Ministry for the Environment. (All data sources accessed on 21 February 2024.)

**It is too early to say whether strengthened climate framework laws will bend the curve on emissions, but there are concrete examples of avoided emissions that can be connected to legislation**

Interviewees were able to point to specific decisions or policy areas where strengthened climate laws had led to avoided emissions. In Ireland, for example, interviewees pointed out that since the passage of CALCDA 2021 and its impacts on the debate on agricultural emissions, the sector has started to make some progress with the introduction of efficiency measures. This is confirmed by data from the Environmental Protection Agency, which shows a 1.2% decline in emissions between 2021 and 2022 (Irish Environmental Protection Agency, 2023a).

Interviewees in Ireland also mentioned specific emissions-intensive projects that had been refused, which interviewees associated with the climate framework legislation. One example was the refusal to permit the construction of a proposed LNG [liquefied natural gas] terminal worth €650 million in Shannon (O'Sullivan and Lucey, 2023). Another example was the denial of planning permission to EdgeConneX to expand its data centre campus in South Dublin (this is now under appeal by the company). Some interviewees also mentioned the national planning authority's refusal to permit a €600 ring road around Galway (O'Brien and Beesley, 2022), although this project may now go ahead (O'Donoghue, 2023). Several interviewees also mentioned a rapid turnaround in thinking from semi-state energy company Bord na Móna: while the company was initially set up to generate energy from peat (its name translates to 'the Peat Board'), it went through a rapid transition following the passage of CALCDA 2015 and *Climate Case Ireland*, changing its position from maintaining that it would continue to invest in peat-fired power stations to announcing in 2021 that it was developing a plan to phase out this form of energy.

In New Zealand, interviewees also attributed emissions reductions to measures associated with the law, especially emissions avoided due to the uptake of electric vehicles. One research/advisory interviewee described the ZCA as a “substantive trigger” in this regard, a view that several interviewees from civil society and the public sector agreed with. In Germany, one civil society interviewee also connected emissions reductions in the industry sector to measures linked to the legislation, but in general interviewees were more cautious about attributing specific outcomes to the legislation.

### **Interviewees expressed concerns that although laws were contributing to emissions reductions in the long term, short-term emissions reduction targets might not be met**

In Ireland and Germany, there were some interviewees who highlighted a gap between implementation and ambition in terms of near-term emissions reductions. In Ireland there was a clear view among stakeholders from all perspectives that it would be nearly impossible for the government to meet the 2021–2025 carbon budgets set out in the legislation. In Germany, many interviewees pointed out that annual sectoral targets had already been repeatedly missed. In New Zealand, fewer interviewees pointed to issues with missed targets in the short term, but some interviewees thought this was a possibility.

This near-term implementation gap was often attributed to the time lag between the enactment of the legislation and what several public sector interviewees described as the “bedding in” of all the necessary processes flowing from that legislation. As one public sector interviewee pointed out, to make a significant dent in emissions from transport, for example, requires major infrastructure investment, time and resources: “you can’t build a metro overnight”.

Several interviewees from the public sector and civil society reflected on the possible consequences this “implementation gap” could have in years to come, particularly in regard to the legitimacy of the legislation. This prompted some interviewees to reflect on the importance of the balance of emissions reductions between the years immediately following the passage of the legislation and those that followed. However, for many interviewees who commented on this there was a suggestion that this was less important than the positive changes flowing from the legislation and the real sense of urgency that ambitious timelines created.



# Appendix 1. Methodological notes

## 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 throughout the report and this 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'.

Table A. Interviewees' perspectives

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

## 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 the main report that this technical annex accompanies. Participants included policy practitioners, campaigners and academics working directly and indirectly on climate governance issues. 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.

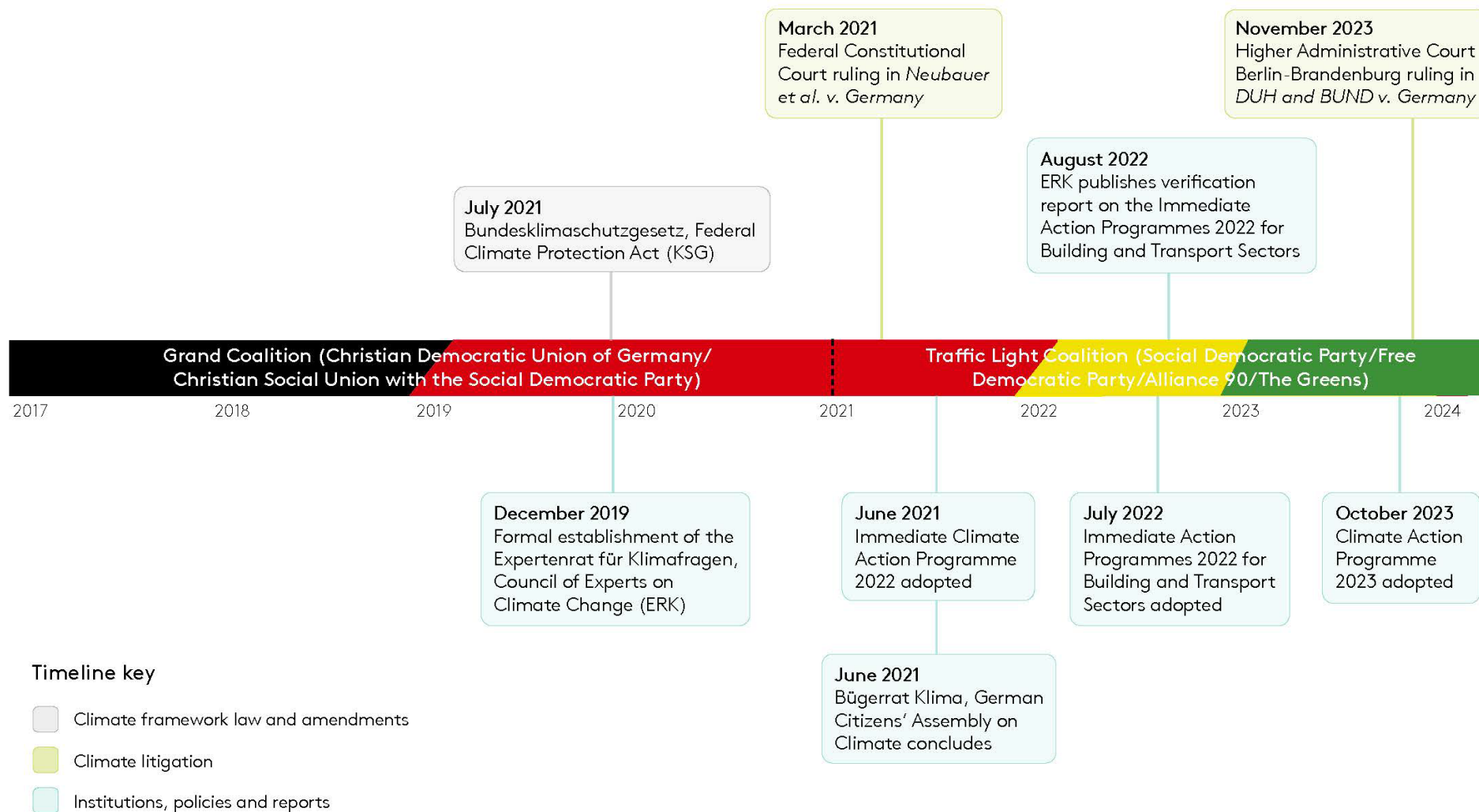
## Appendix 2. Interview protocol

We used the following list of guiding questions, but allowed interviewees to guide us towards lines of discussion that they considered were particularly important.

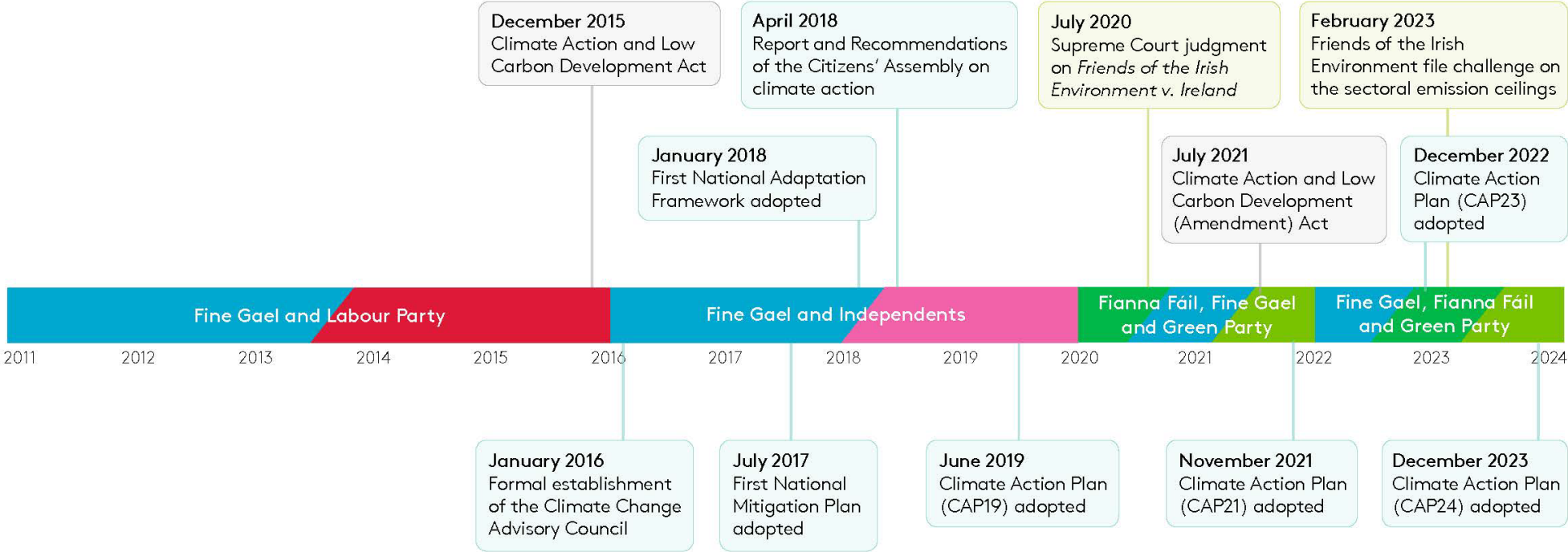
1. **To start, what has been your professional experience and role in relation to the climate framework law in [country] and what do you perceive are the key impacts from the law?**  
Making a distinction between climate change as a concern and the specific provisions of the climate law, how has the latter affected you in your professional capacity since its introduction?
2. **Has the law affected institutions and processes (if any)?**
  - a. Has the law resulted in a more science-based approach in policy? Any examples?
  - b. Have there been changes in who is involved in climate policy processes as a result of the law?
  - c. *Prompt any impacts on budgeting processes, coordination within government, sub-national governance and coordination*
3. **How has the law affected domestic climate-relevant policies (if any)?**
  - a. What policies have been introduced as a result of the law?
  - b. Have these been implemented; if so, how?
  - c. Has there been any policy integration?
4. **How has the law impacted accountability for climate action (if any)?**
  - a. What has been the impact of litigation or prospective litigation brought under the law?
  - b. What has been the impact on parliamentary scrutiny?
  - c. What has been the impact on measuring, reporting and evaluating progress?
5. **Has the law affected the nature and quality of the political debate on climate action (if any)?**
  - a. Has it made the political debate on climate action **more structured** (because there are regular decision points) and/or **more informed** (because there are technical reports)?
  - b. Has the law provided any protection against political backsliding?
6. **Has the law affected public support or awareness of climate action, and if so, how?**
  - a. Has the law increased or decreased support (or no change) for climate action?
7. **Have you seen major shifts in any sector of the economy?**
  - a. Have you seen major shifts in any sector of the economy since the passage of the law? How much of that is in your opinion attributable to the law or to policies introduced pursuant to it?
  - b. What do you think are indicators or evidence of that shift?
8. **Has the law impacted on the private sector (if any); if so, how?**  
*Prompt to give examples, ask about certainty, market signals, technology, workforce, corporate governance/ambition, competition, trade*
9. **Has the law had any other social impacts?**
10. **Solicit input on impact assessment framework**

# Appendix 3. Timelines of key events related to the climate framework laws in case studies

## Key events related to Germany's climate framework law



**Key events related to Ireland’s climate framework law<sup>10</sup>**

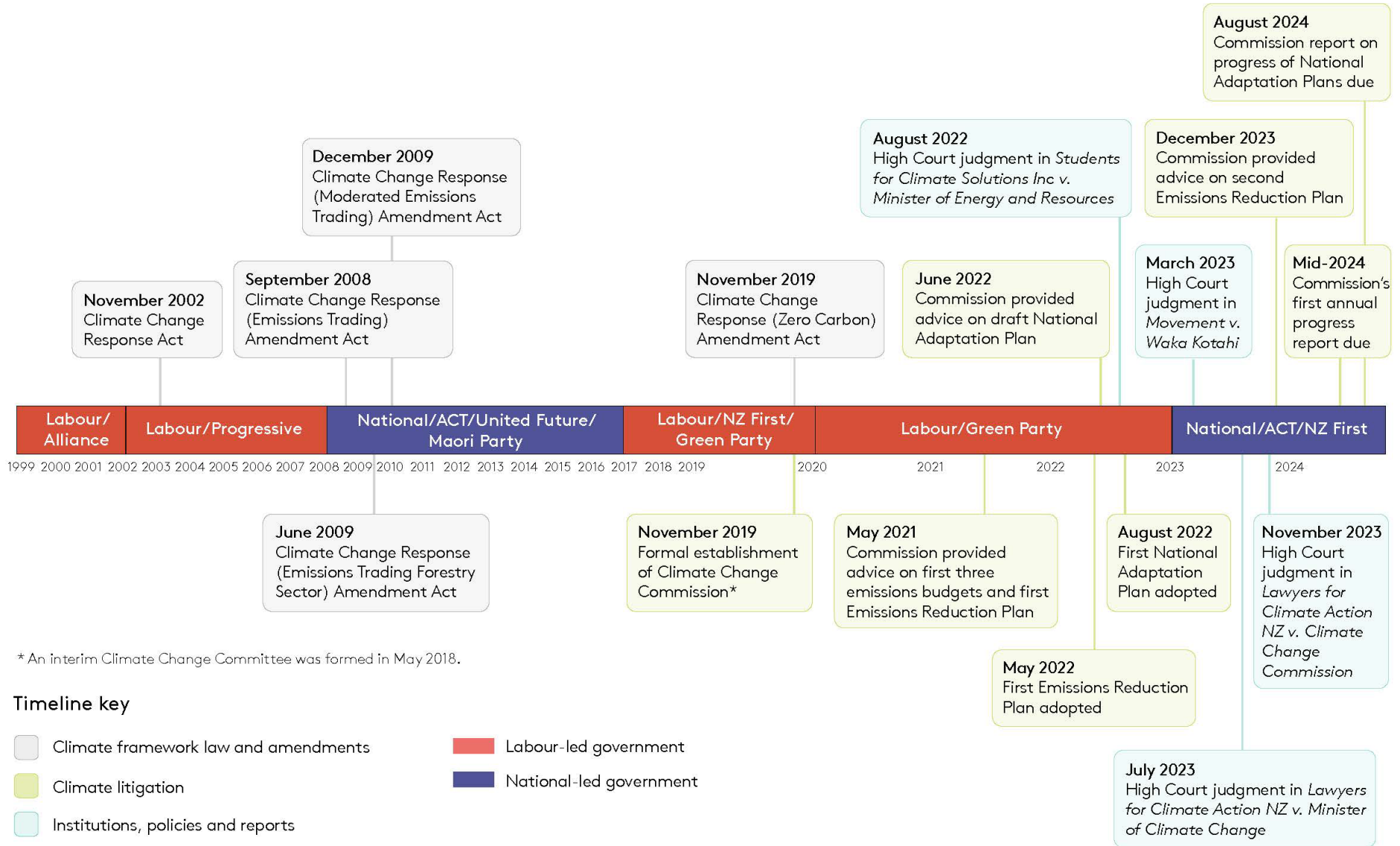


**Timeline key**

- Climate framework law and amendments
- Climate litigation
- Institutions, policies and reports

<sup>10</sup> 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.

# Key events related to New Zealand's climate framework law<sup>11</sup>



<sup>11</sup> 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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