



Strengthening Democratic Governance  
for Climate Transitions

## **D3.1 - REPRESENTATIVE DEMOCRATIC INSTITUTIONS AND INNOVATIONS AT NATIONAL LEVEL**

WP3 – Representative Democratic Institutions



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## EC Summary Requirements

### 1. Changes with respect to the DoA

No changes with respect to the work described in the DoA.

### 2. Dissemination and uptake

This deliverable is for publication for the wider public and for use within the project consortium.

### 3. Short summary of results










This report examines how national parliaments across the European Union have responded to climate governance challenges through institutional innovation. Drawing on comparative mapping of all EU member states and three detailed case studies, we identify four categories of parliamentary climate innovations: commitment mechanisms (e.g., framework laws, emission budgets, sectoral targets) that bind future governments; oversight innovations (e.g., post-legislative scrutiny, climate accountability provisions) that enhance monitoring capacity; information innovations (e.g., climate advisory councils, parliamentary research services) that reduce information asymmetries; and participatory innovations (e.g., e-petitions, digital platforms, deliberative mini-publics) that expand citizen engagement beyond elections. The comparative analysis is complemented by three case studies. Austria illustrates how parliamentary budget offices can evolve into climate-competent fiscal watchdogs, embedding environmental considerations into the budget cycle. The example of the Estonian Riikikogu shows how digital participation platforms can broaden public agenda-setting and institutionalise citizen voice in parliamentary procedure. The example of parliamentary accountability mechanisms introduced under Ireland's 2021 Climate Act amendments highlight the limits and potential of accountability reforms embedded in climate framework legislation, particularly the tension between policy ambition and implementation capacity. Together, the findings underline that parliamentary climate innovation is uneven across member states, that they are reliant on political will, but also that parliaments are becoming pivotal sites of democratic adaptation to climate transitions. Across all three cases, we show that formal institutional design matters less than sustained political commitment and thoughtful integration into existing parliamentary processes and practices. However, we stress that parliamentary climate innovation remains uneven across member states and reliant on political will, but that despite this, parliaments are becoming pivotal sites of democratic adaptation to climate transitions.

### 4. Evidence of accomplishment

This report.

## Preface

The overall goal of the RETOOL project is to advance our understanding of how to address the twin challenges of responding to the climate imperative while strengthening and reinvigorating democratic governance. The project has four overarching objectives: (i) To deepen our understanding of the relationship between democratic governance and the climate imperative by developing a novel analytical framework and creating new empirical underpinnings, including important new open-access datasets; (ii) To understand how a variety of democratic institutions across Europe are responding to the climate challenge, including learning lessons from history and studying new and innovative democratic practices; (iii) To contribute to reinvigorating democratic governance in Europe by developing and synthesising new knowledge and insights on climate democracy, and presenting them in a range of high-impact formats; and (iv) To serve as a bridge between academic research on climate democracy innovations and policymakers and practitioners, as well as civil society and the wider public. RETOOL brings together an international and interdisciplinary consortium, with partners from Western Europe (Ireland, UK, Belgium, Austria), Northern Europe (Finland), Eastern Europe (Estonia), and Southern Europe (Italy, Greece), combining expertise in political science, political sociology, deliberative democracy, environmental law, European studies, and public administration. The consortium includes a democracy practitioner foundation (DDF), and all partners are closely associated with practitioner and civil society networks and involved in hands-on activities. RETOOL is being undertaken by a mature, settled consortium that has significant experience of working together, with six of our nine partners core members of the EU-funded Jean Monnet Network GreenDeal-NET.

Consortium Partner	Acronym	Country	Logo
Dublin City University	DCU	IR	
Vrije Universiteit Brussel	VUB	BE	
Università degli studi di Trento	UNITN	IT	
Universiteit Gent	UGent	BE	
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Praxis Think Tank	Praxis	EE	
London School of Economics and Political Science	LSE	UK	

## Executive Summary

This report examines how national parliaments across the European Union have adapted their institutional structures, procedures, and practices to address climate governance challenges. As representative institutions face growing pressures from long-term decarbonisation commitments, rising public contestation, and the executive's informational advantage, parliaments have become critical sites of democratic innovation. Our analysis combines comprehensive mapping of climate-related parliamentary innovations across all EU member states with three in-depth case studies from Austria, Estonia, and Ireland, representing diverse institutional contexts across Western, Northern, and Central Europe.

### Parliamentary Climate Innovation: A Typology

The comparative analysis typologises four distinct categories of parliamentary innovation, each addressing specific functional deficits within representative democratic institutions:

**Commitment mechanisms** respond to the challenge of binding future governments to long-term climate objectives within short electoral cycles. These include framework laws establishing legally binding targets, emission budgets that partition long-term goals into binding medium-term commitments, and sectoral differentiation that allocates specific emissions ceilings to individual economic sectors. For example, our mapping shows that eleven EU member states have adopted comprehensive climate framework laws, though substantial variation exists in their design. However, only five countries incorporate sectoral differentiation in their emission reduction targets, while seven have adopted emission budgeting approaches that create measurable interim milestones.

**Oversight innovations** address the accountability gap inherent in traditional parliamentary practice, which typically concentrates scrutiny on pre-enactment phases while neglecting systematic evaluation of implementation effectiveness. Post-legislative scrutiny mechanisms, climate accountability provisions, and green budgeting practices attempt to transform parliamentary oversight from a front-loaded process into a continuous cycle. However, the adoption of green budgeting remains limited to just five member states (i.e., France, Germany, Portugal, Spain, and Sweden), showing that significant implementation barriers persist.

**Information innovations** reduce the asymmetry between executive and legislative branches by equipping parliaments with independent analytical capacity. Climate advisory bodies have been established in eighteen member states, though resources vary significantly among those, from the Netherlands' well-funded council with approximately €3.9 million annually to Germany's more modest €0.2 million budget. Parliamentary budget offices, exemplified by Austria's Budgetdienst, provide alternative sources of expertise independent of government provision, enabling more effective scrutiny of complex climate policies.

**Participatory innovations** expand deliberation and engagement beyond traditional electoral channels through digital participation platforms, e-petitions, and deliberative mini-publics. These mechanisms lower barriers to citizen input and increase transparency, though their effectiveness depends critically on how any of their outputs connect to binding decision-making processes.

### Case Study Insights

The **Austrian Parliamentary Budget Office** demonstrates institutional adaptability in response to emerging policy challenges. Originally established in 2012 to provide independent fiscal analysis, the Budgetdienst expanded into environmental and climate assessment without creating separate structures or recruiting specialised staff. Instead, generalist economists developed competence in environmental analysis, integrating climate impact assessment into routine budgetary scrutiny through "green budgeting" functions. This evolution occurred through participation in international networks, collaboration with environmental research institutes, and response to parliamentary demand for climate-relevant fiscal information. The Austrian case illustrates that parliamentary innovations need not be rigidly designed around fixed mandates but can respond flexibly when supported by cross-party consensus and commitment to analytical quality. However, the office's effectiveness depends on informal political consensus rather than statutory authority, creating

potential vulnerability to shifts in political support.

**Estonia's digital participation platform** ([rahvaalgatus.ee](http://rahvaalgatus.ee)) shows how technology can expand citizen engagement in parliamentary processes. Emerging from a 2012 legitimacy crisis around party financing, the platform allows citizens to place issues directly onto parliament's agenda with just 1,000 signatures. Over 500 petitions have been posted since 2016, with 141 submitted to parliament, and the platform now generates more digital signatures annually than electronic votes cast in national elections. Environmental and climate issues feature prominently, with the platform serving as an important channel for civil society organisations to introduce new climate narratives. However, the Estonian case also reveals significant limitations: only 5-10% of initiatives result in direct legislative decisions, approximately one-third are returned without action, and the remaining petitions have unclear outcomes. The platform functions effectively as a societal "vent" and agenda-setting mechanism, but the gap between participatory input and binding decision-making remains substantial. Moreover, operational sustainability poses challenges, with the platform depending on private donations and ad hoc state allocations rather than secure institutional funding.

**Ireland's accountability mechanisms embedded in the 2021 Climate Act** amendments exemplify attempts to strengthen parliamentary oversight through multiple, reinforcing accountability types. Following recommendations from a Joint Oireachtas [Irish Parliament] Committee that had considered proposals from a citizens' assembly, the amendments established emission budgets, sectoral ceilings, consultation requirements, and obligations for ministers and civil servants to appear before committees to account for their climate actions. However, interviews with civil servants, ministers, and civil society actors reveal mixed effectiveness. No single accountability mechanism proved decisive in compelling action; rather, their cumulative effect creates regular touchpoints that maintain climate on the political agenda even when attention shifts to other priorities. Critically, the Irish case exposes the lingering tension between long-term climate commitments and short-term political responsiveness: politicians ultimately felt most accountable to current electorates rather than future generations, and accountability mechanisms struggled to overcome periods of political inattention. The findings suggest that accountability works more through creating "death by a thousand cuts", making inaction incrementally more politically costly, than through any decisive sanctioning power.

### Cross-cutting Findings

Several themes emerge across all three cases. First, formal institutional design matters less than sustained political commitment and effective integration into existing parliamentary processes. Second, innovations prove most effective when building on established structures rather than creating entirely separate mechanisms. Third, the gap between institutional design intentions and actual outcomes remains substantial, particularly regarding the challenge of maintaining long-term climate commitments within democratic systems structured around short electoral cycles. Fourth, parliamentary capacity, measured through budgets, staffing, and institutional efficiency, varies significantly across member states and does not correlate straightforwardly with legislative or policy output, suggesting that organisational practices and political culture likely mediate the relationship between resources and climate governance effectiveness.



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## Abbreviations

CCAC	Climate Change Advisory Council (Ireland)
CI	Citizens' Initiative (Estonia)
CSO	Civil Society Organisations
ETS	Emissions Trading Scheme (EU)
EU	European Union
FTE	Full-time equivalent
GHG	Greenhouse Gases
JOCCA	Joint Oireachtas Committee for Climate Action (Ireland)
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Cooperation and Development
OGP	Open Government Partnership (Estonia)
PBO	Parliamentary Budget Office (Austria)
PPP	Purchasing power parity
RIA	Regulatory Impact Assessment
US	United States
VAT	Value-Added Tax
WIFO	Österreichisches Institut für Wirtschaftsforschung (Austrian Institute of Economic Research)



# 1. Introduction

Parliaments are central to the achievement of the goals of the Paris Agreement, as they set the level of climate ambition, and institutionalise mechanisms for the systematic monitoring and evaluation of domestic climate legislation and policies (Falkner, 2016). Such oversight can increase transparency and reinforce accountability in the domestic implementation of internationally agreed climate commitments (Murphy, 2020). Despite this, however, as representative institutions face growing pressures from declining public trust (Kulin and Johansson, 2024), democratic backsliding (Waldner & Lust, 2018), or rapid technological change (Nordhaus, 2019), the question of how legislatures adapt to address the climate crisis has become increasingly salient. As a consequence of this evolving context, current research has started to focus more on parties and parliamentarians as agents of climate action (Moore et al. 2024; Farstad, 2018).

This report examines the role of national parliaments in addressing climate challenges, focusing on innovations within representative democratic institutions across EU member states. To this end, we center our analysis on core parliamentary functions (i.e., representation, legislation, scrutiny, and deliberation) and investigate how these functions have been adapted or enhanced in response to climate imperatives. Parliamentary innovation refers to the deliberate introduction of new practices, procedures, technologies, or institutional arrangements within legislative bodies aimed at enhancing their functionality, legitimacy, and responsiveness. Drawing on Rogers' (2003, p. 12) definition, we understand innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption". Parliamentary innovation can therefore be understood as a concept capturing changes to the structures, processes, and outputs of legislative institutions. We distinguish between several types of parliamentary innovation, with most examples of innovations often falling under multiple categories. Procedural-organisational innovations involve changes to rules, standing orders, and internal processes that govern legislative work, including structural changes to committee systems, administrative arrangements, and resource allocation. Participatory innovations focus on new mechanisms for citizen engagement and public involvement in legislative processes. Technological innovations encompass the adoption of new tools for communication, deliberation, and transparency that transform how parliaments operate and interact with citizens.

Current examples of climate-related parliamentary innovations illustrate how parliaments innovate in practice. Examples include the adoption of new climate change acts establishing legally binding frameworks and long-term targets (Nash & Steurer, 2019; Torney, 2025), the establishment of specialised parliamentary bodies such as Finland's Committee for the Future that explicitly addresses long-term policy challenges (Koskimaa and Raunio, 2020; 2023; 2024: Koskimaa & Rapelli 2025), ombudspersons for the future (Smith, 2020; Rose, 2025), the creation of independent climate advisory bodies that provide scientific expertise to inform parliamentary deliberation (Averchenkova et al., 2021), or convening of climate change citizens' assemblies that introduce deliberative mechanisms alongside traditional representative channels (Torney, 2021; Machani et al., 2025). Additional innovations suggest further developments: Legislatures are also experimenting with enhanced mechanisms for accountability in the climate arena, as explored in our Irish case study below; the establishment of independent parliamentary budget offices that provide analytical capacity independent of government control, exemplified by Austria's Parliamentary Budget Office; or the use of digital tools to enhance citizen participation in legislative processes, as demonstrated by Estonia's e-participation platforms.

Understanding these innovations is best done by differentiating them along different parliamentary functions. Bagehot's (1865) classical formulation identifies five principal functions: the elective function (selecting the executive), the expressive function (articulating public opinion), the teaching function (educating the electorate), the informing function (bringing grievances to government attention), and the legislative function (making laws). Modern scholarship has refined this typology while retaining its essential insights. Norton (2013) identifies three primary functions: legislation, scrutiny or control, and legitimation, emphasising that parliaments do not merely pass laws but also subject them to deliberation and confer democratic legitimacy upon the political system. The control

or oversight function involves holding the executive accountable through mechanisms including questions, debates, committee investigations, and post-legislative scrutiny. The communication or representative function connects citizens to the political process, with parliamentarians serving as intermediaries who articulate constituent interests, explain government actions, and maintain the linkage between governed and governors (Saalfeld, 2000).

These parliamentary functions intersect with the analytical framework developed in RETOOL, which structures our analysis around dimensions of democracy that are directly relevant to climate governance (Brawley-Chesworth et al., 2024). Four dimensions are particularly relevant for understanding parliamentary innovations. First, *representation* encompasses how parliaments, parliamentarians, and political parties carry out representative tasks, with particular attention to climate-related representative claims and activities. Second, *knowledge and expertise* examines which epistemic resources are used or invoked by parliaments debating and making decisions on climate policy, including both internal parliamentary capacity and external expert advice. Third, *participation* focuses on the mechanisms through which citizens and organised stakeholders are able to engage parliamentary processes, influence agenda-setting, and contribute substantively to climate decision-making also beyond elections. Fourth, *accountability* examines how parliamentarians hold the government accountable for climate commitments through parliamentary questions, debates, inquiries, and systematic monitoring mechanisms.

Climate change is a major challenge for representative institutions (Bernauer, 2013; Finnengan, 2022; Oberlack, 2017; Schulze, 2021; Smith, 2021; Buzogány et al., 2025; Brawley-Chesworth et al., 2024). Applying these four dimensions to parliamentary practice reveals both the nature of these challenges and how parliamentary innovations might help ameliorate them. The long-term nature of climate commitments is often at odds with short electoral cycles, creating commitment credibility problems (Schulze, 2021; Smith, 2021). Moreover, the urgency of climate action demands rapid policy responses while its whole-of-society character requires coordination across traditionally siloed policy domains (Lah, 2025). Multilevel governance structures, particularly within the EU context where most climate policies originate from, further complicate parliamentary control (Di Gregorio et al., 2019; Auel & Christiansen 2015). Finally, climate policy generates contestation among competing interests, placing particular demands on deliberative capacity (Böhler et al., 2022; Carter & Little, 2021). Each of these challenges show specific deficits within traditional parliamentary practice that innovations attempt to address.

The comparative analysis proceeds in two stages. First, we systematically map innovation adoption across all EU member states, documenting which countries have adopted which types of innovations and identifying patterns in institutional design choices. Drawing on various comparative datasets of parliamentary activity and characteristics<sup>1</sup>, we develop a mapping of parliamentary innovations organised around the functional deficits they address within representative democratic institutions. Four categories emerge from the comparative analysis: innovations addressing commitment credibility and the binding of future governments to long-term objectives; innovations responding to oversight deficits through enhanced monitoring and evaluation capacity; innovations reducing information asymmetries between executive and legislative branches through independent analytical capacity; and innovations expanding participation and deliberation beyond traditional electoral channels.

Second, we examine selected case studies in depth to understand how innovations actually function in practice and how they reshape parliamentary engagement with climate policy. These three cases serve as illustrations of the comparative taxonomy developed in the mapping exercise, with each

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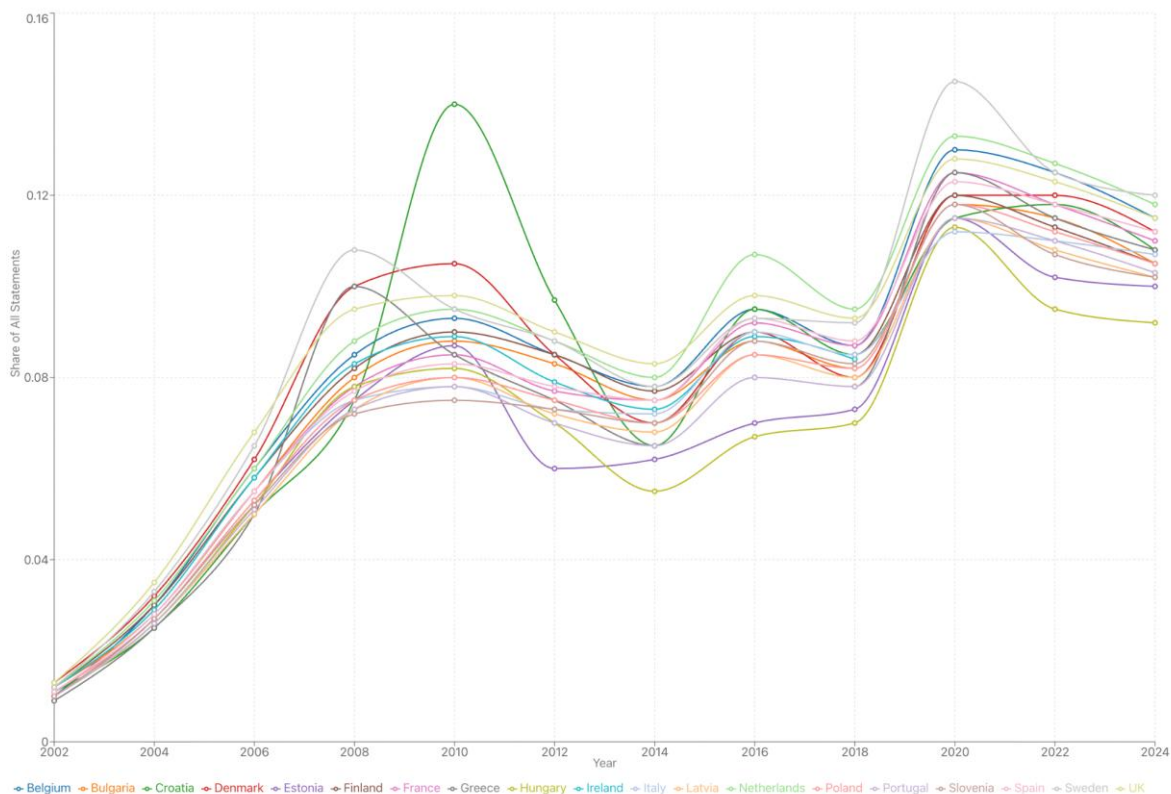
<sup>1</sup> Parliamentary debate data were obtained from the ParlaMint corpus (<https://www.clarin.eu/parlamint>), climate legislation data from the Climate Change Laws of the World database (<https://climate-laws.org/>), climate policy data from the Climate Policy Database (<https://climatepolicydatabase.org/>), and parliamentary institutional data from the Inter-Parliamentary Union's Open Data platform (<https://data.ipu.org/>).

case study exemplifying a distinct category of innovation while also revealing how these categories interact in practice. The Austrian case examines the establishment and evolution of the Parliamentary Budget Office (*Budgetdienst*), focusing particularly on its expansion into climate and environmental analysis through "green budgeting" functions. Therefore, it illustrates how innovations addressing information asymmetries can evolve beyond their original mandate to incorporate climate considerations into routine fiscal oversight. Next, the Estonian case analyses the institutionalisation of collective citizen initiatives through a dedicated online platform, exploring how digital participation mechanisms can alter the relationship between citizens and their representatives in climate policymaking. Then, the Irish case investigates the accountability mechanisms embedded in the 2021 Climate Act amendments, examining whether enhanced oversight requirements and compliance procedures have effectively strengthened parliamentary control over climate policy implementation. Furthermore, it provides novel insights into the gap between institutional design intentions and actual accountability outcomes, particularly regarding the challenge of maintaining long-term climate commitments within short electoral cycles. Together, these three cases span the range of innovation types identified in the comparative mapping (information capacity, participation mechanisms, and accountability structures) while representing diverse institutional contexts across Western, Northern, and Eastern Europe, allowing us to observe how different types of parliamentary innovations operate within varying political and administrative cultures.

## 2. The evolution of climate change in parliamentary discourse

Before examining specific innovations in parliamentary climate governance, it is important to understand the broader evolution of climate issues within parliamentary discourse. Figure 1 displays the share of all parliamentary statements devoted to climate-related topics across EU member states and the United Kingdom from 2002 to 2024. This temporal analysis shows both the overall intensification of climate deliberation, as well as the distinct trajectories through which different parliaments have elevated climate concerns within their legislative agendas. Understanding these patterns of parliamentary attention provides the context for interpreting the innovations documented in subsequent sections, as the salience of climate issues within national parliaments shapes both the political demand for institutional reforms and the resources allocated to climate governance capacity. Moreover, tracking how climate discourse has evolved within representative institutions shows the broader relationship between parliamentary debate and climate action, setting the stage for our examination of how specific innovations attempt to translate increased attention into effective policy outcomes.

Figure 1 shows a clear increase in the focus of parliaments on climate issues across all countries in the sample. In 2002, climate-related statements accounted for just 1–2% of parliamentary discourse in most countries. Over the following two decades, however, this figure increased significantly, reaching approximately 10–12% by 2020. This trend's near-universal nature signals a Europe-wide overhaul in the scope of parliamentary deliberations, with climate issues transitioning from the periphery to occupy a significant portion of mainstream legislative debate time.



**Figure 1.** Share of statements related to climate change in parliamentary debates (2004-2024)

The trajectories, however, show substantial variation in both timing and intensity. Several countries experienced notable early peaks that diverged from the general pattern. Croatia saw a sharp spike around 2010, where climate statements reached nearly 14% of all parliamentary discourse before declining and then rising again. This peak coincides with Croatia's final phase of EU accession negotiations, during which parliamentary debates focused heavily on harmonising environmental legislation with the EU's *acquis communautaire*. France experienced a pronounced surge in 2016, exceeding 13%, directly following the country's hosting of COP21 in December 2015. The Paris Agreement's adoption generated sustained parliamentary attention to climate commitments and their domestic implementation throughout 2016. The UK displays two distinct peaks: a moderate rise around 2009 (corresponding to the Copenhagen climate summit) and a more substantial surge in 2019-2020, when climate statements approached 15% of parliamentary discourse. This latter peak likely reflects the declaration of a climate emergency by Parliament in May 2019 and preparations for hosting COP26. Sweden's trajectory shows a dramatic acceleration after 2018, reaching its highest point around 2020-2021. This surge corresponds temporally with the rise of youth climate activism, particularly the Fridays for Future movement which generated extensive parliamentary debate about the adequacy of existing climate policies.

By contrast, countries such as Slovenia, Poland, and Hungary maintained lower levels of climate salience throughout much of the period, typically remaining below 8% even during the general upward trend. The period from 2012 to 2018 exhibits the greatest cross-national variation, with countries spread across a range from approximately 5% to 11% of parliamentary statements devoted to climate issues. After 2018, however, a second convergence becomes visible, with virtually all countries clustering tightly in the 10-12% range by 2020, a pattern that persists through 2024.



**Figure 2.** Sentiment towards climate change in parliamentary debates (2004-2024)

Next, Figure 2 presents the sentiment expressed toward climate issues in parliamentary debates across the same countries and time period<sup>2</sup>. Sentiment scores, drawn from the ParlaMint corpus, range from 1 (most negative) to 5 (most positive). Whereas climate salience exhibited consistent growth and eventual convergence, sentiment displays relative stability across the entire period, with most countries clustering in a narrow band between 2.2 and 2.6 throughout the two decades. Sweden is a clear outlier, maintaining consistently high sentiment scores above 2.6 for the entire period and reaching a peak near 2.8 around 2020. The Nordic countries more broadly (Denmark, Finland) and the Netherlands sustain sentiment levels in the upper range of the distribution, typically above 2.5. By contrast, Greece maintains lower sentiment throughout, hovering around 2.2, while Hungary, Poland, and Bulgaria cluster near 2.0-2.1 for most of the period. The period after 2020 reveals a negative pattern in several Central and Eastern European countries. Poland and Hungary both experience pronounced declines in sentiment, dropping below 2.0 by 2022-2023. Bulgaria follows a similar trajectory. These declines occur precisely when climate salience reaches its peak, indicating that increased parliamentary attention to climate issues has coincided with more negative or skeptical framing in these contexts. This divergence between debate intensity and sentiment suggests that the convergence in climate salience across European parliaments masks substantial differences in how climate issues are discussed and evaluated within national political discourse.

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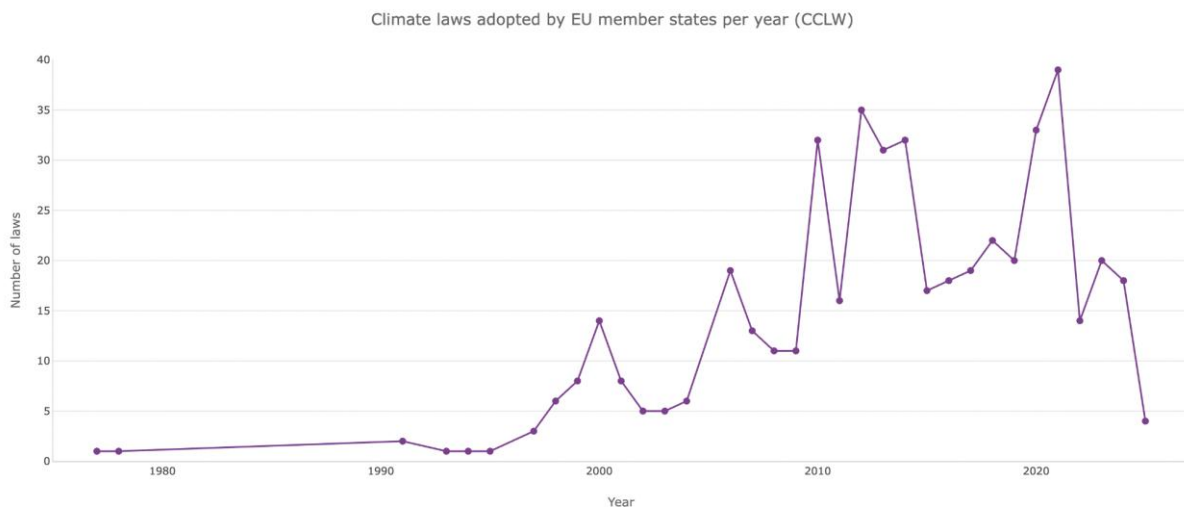
<sup>2</sup> The one exception is Ireland, which is not in the original ParlaMint dataset, and hence we do not have access to the original sentiment scale.



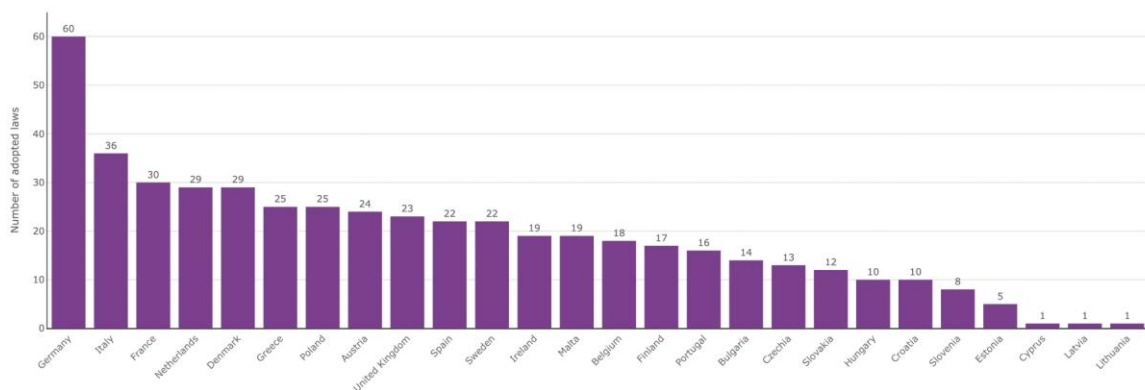
## 3. Innovations in representative institutions

### 3.1 The formalisation of climate commitments through legislation

The intensification of parliamentary debate on climate issues has been accompanied by a substantial expansion in climate-related legislation (Iacobuta et al., 2018; Eskander et al., 2021). Figure 3 displays the annual adoption of climate laws across EU member states from the mid-1970s through 2024. The temporal pattern reveals three distinct phases of legislative activity. During the initial phase, extending from the mid-1970s through the early 1990s, environmental legislation remained sparse, with typically one or two laws adopted annually across all member states combined.



**Figure 3.** Annual adoption of climate laws across EU member states



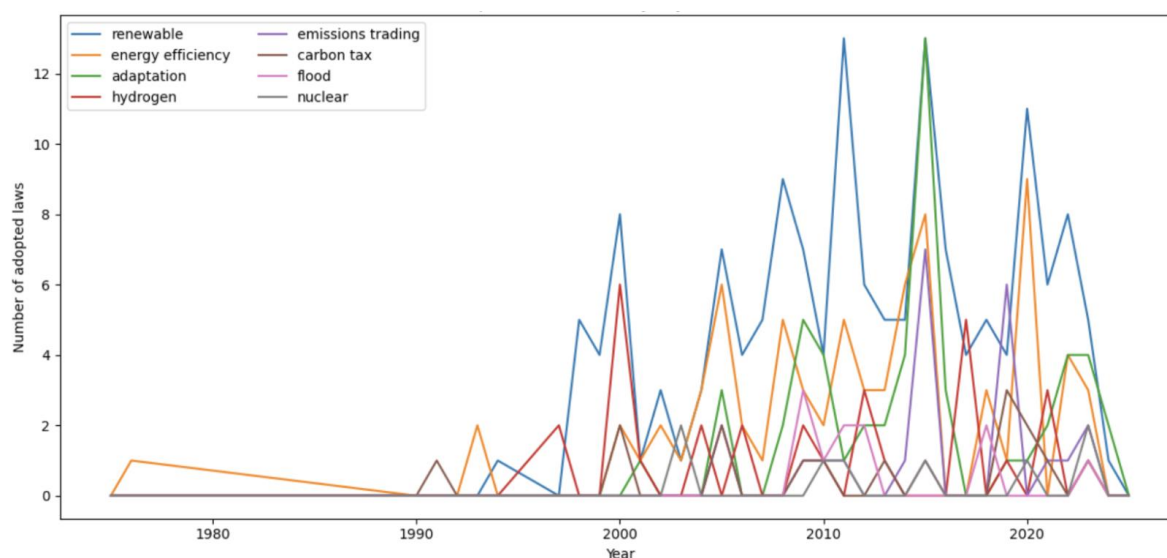
**Figure 4.** Total adoption of climate laws by EU Member States

The second phase, beginning in the mid-1990s and accelerating sharply after 2005, saw a substantial increase in legislative output. Annual adoptions rose from single digits to double digits, reaching an initial peak of 14 laws in 2000 and 19 laws in 2008. This acceleration corresponds to the entry into force of the Kyoto Protocol and the subsequent implementation of EU-level climate directives that required transposition into national law. The third phase, spanning approximately 2010 to 2022, represents the period of most intensive legislative activity. Annual adoptions fluctuated between 16 and 39 laws per year, with the highest peak occurring in 2022 at 39 laws. This surge reflects the



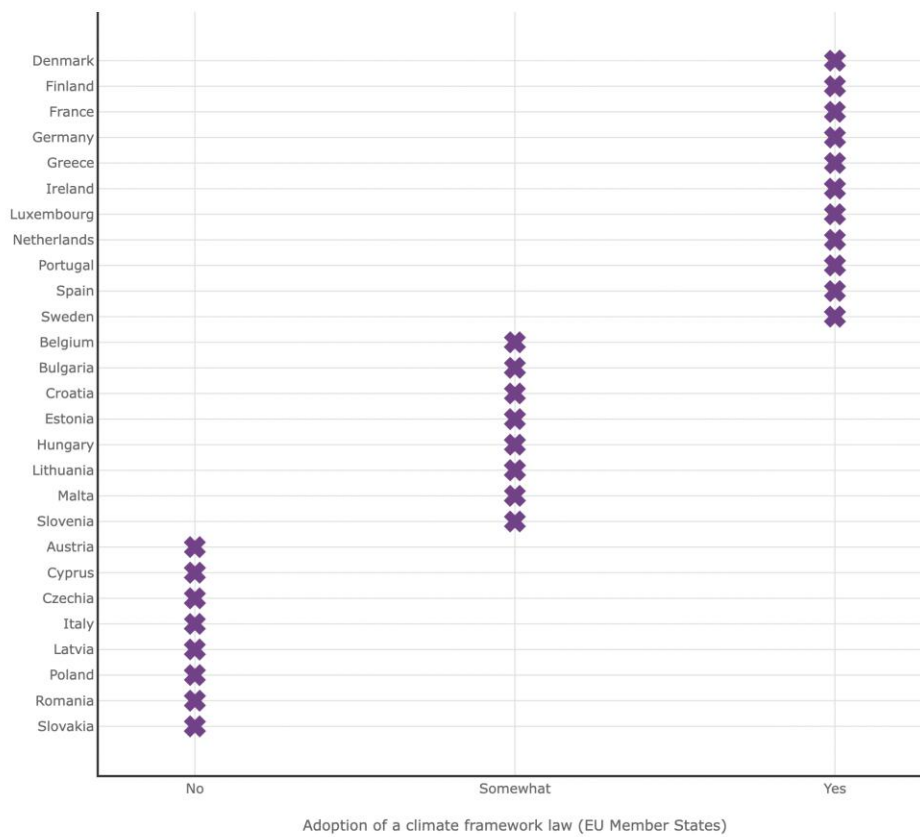
announcement and subsequent implementation of the European Green Deal and the raising of EU climate ambitions, including the target of climate neutrality by 2050. The sharp decline visible in 2023-2024, dropping to fewer than 5 laws annually, likely reflects a combination of legislative exhaustion after the intense reform period and an implementation phase, as the comprehensive legislation adopted in the early 2020s requires time to be transposed, operationalised, and assessed before further legislative action becomes necessary.

The distribution of the total number of climate laws adopted by EU member states show substantial geographic variation in legislative intensity. Germany is the clear outlier in the sample, with over 60 laws adopted by 2024, more than double the number of laws adopted by Italy, which ranks second. Accordingly, the second tier of legislative activity includes Italy (36 laws), France (30 laws), and the Netherlands and Denmark (29 laws each). Then, a middle group of countries, including Greece, Poland, Austria, Luxembourg, Spain, and Sweden, has adopted between 22 and 25 climate laws each. At the lower end of the distribution, newer member states and smaller countries show substantially fewer climate laws. Slovenia has adopted only five climate laws according to the database, while Estonia, Cyprus, Latvia, and Lithuania have adopted one or none.



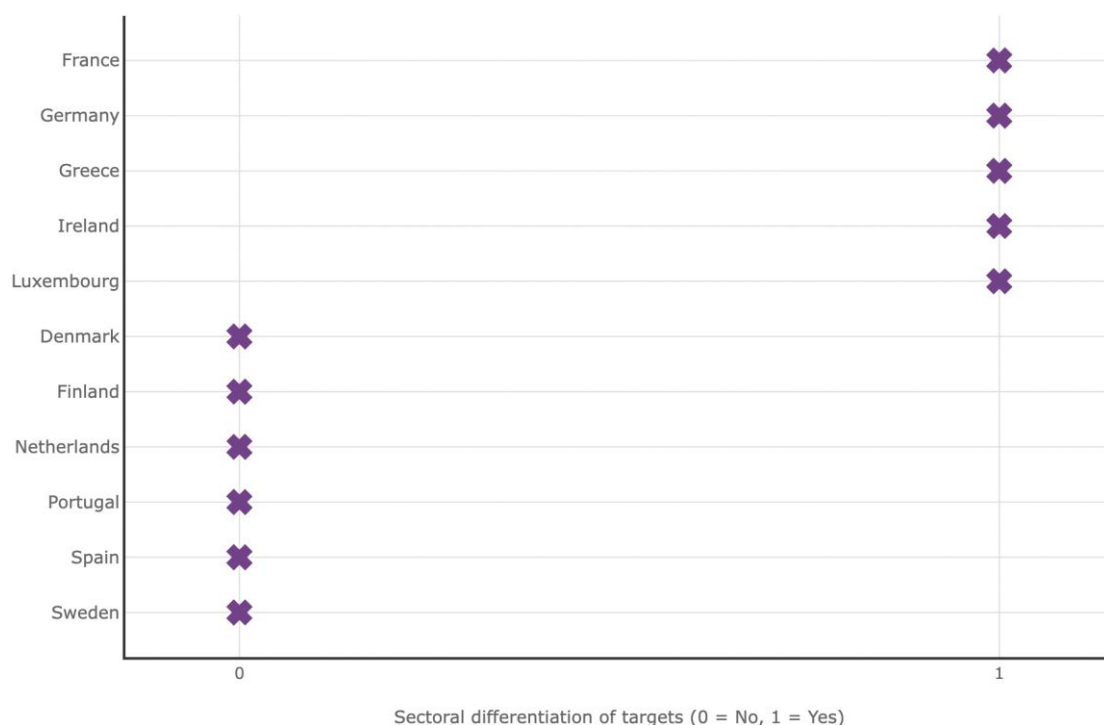
**Figure 5.** Total adoption of climate laws by policy domain

Figure 5 illustrates the thematic evolution of climate legislation by identifying laws according to key policy domains. Energy efficiency legislation dominated the early period, with modest activity in the late 1970s and 1980s. The late 1990s and early 2000s witnessed the emergence of renewable energy legislation, which subsequently became the most prolific category. Renewable energy laws peaked around 2014 and 2020 at approximately 13 adoptions per year, reflecting the implementation of EU renewable energy directives and national renewable energy targets. The 2010s saw the diversification of climate legislation into new policy domains. Adaptation legislation emerged as a distinct category, peaking around 2019. Market-based instruments, including emissions trading and carbon tax legislation, show more modest but consistent activity throughout the 2000s and 2010s. Finally, hydrogen legislation represents the most recent thematic addition, appearing primarily from 2019 onward.



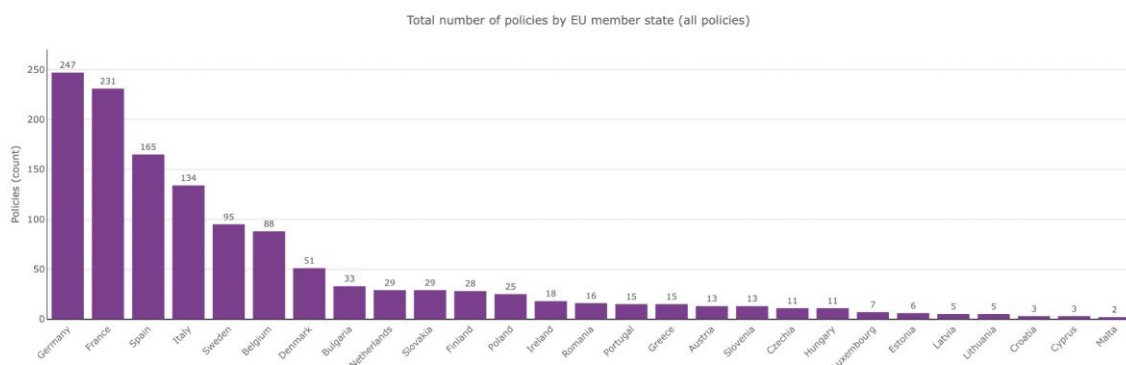
**Figure 6.** Adoption of a climate framework law by EU member states

These broad classes of environmental laws, and more recently laws addressing the causes and consequences of climate change, reflect how domestic institutions react to the climate crisis. However, the comprehensiveness of these laws may vary. In turn, climate framework laws are a recent governance innovation designed to steer national responses to the climate crisis more effectively than ad hoc strategies or policy plans (Averchenkova et al., 2024; Nash et al., 2021). These framework laws codify long-term objectives, such as climate neutrality by 2050 or emission targets by 2030, while embedding mechanisms for planning, monitoring, expert input, and public participation (Duwe & Evans, 2020). By enshrining these elements in law, climate framework laws reduce the risk of policy reversal under changing governments and provide durable signals to investors, civil society, and other state institutions. They also integrate disparate processes ranging from targets, planning cycles, budgetary checks, and oversight into one legal architecture, ensuring climate action remains coherent over decades. Figure 6 illustrates how EU member states differ in their adoption of these laws. Eleven countries, largely in Western and Northern Europe, have comprehensive climate framework laws; eight have weaker or partial versions; and another eight have none at all.



**Figure 7.** Adoption of a sectoral differentiation within climate framework laws

Even among countries with climate framework laws, there is significant variation in their design (Nachtigall et al., 2024). Figure 4 shows whether these laws include sectoral differentiation in their emission reduction targets, that is, whether they set distinct targets for specific economic sectors such as energy, transport, agriculture, or industry, rather than only economy-wide goals. Only five of the eleven countries with comprehensive framework laws incorporate this feature: Luxembourg, Ireland, Greece, Germany, and France. The remaining six (i.e., Sweden, Spain, Portugal, the Netherlands, Finland, and Denmark) rely solely on aggregate, economy-wide targets.

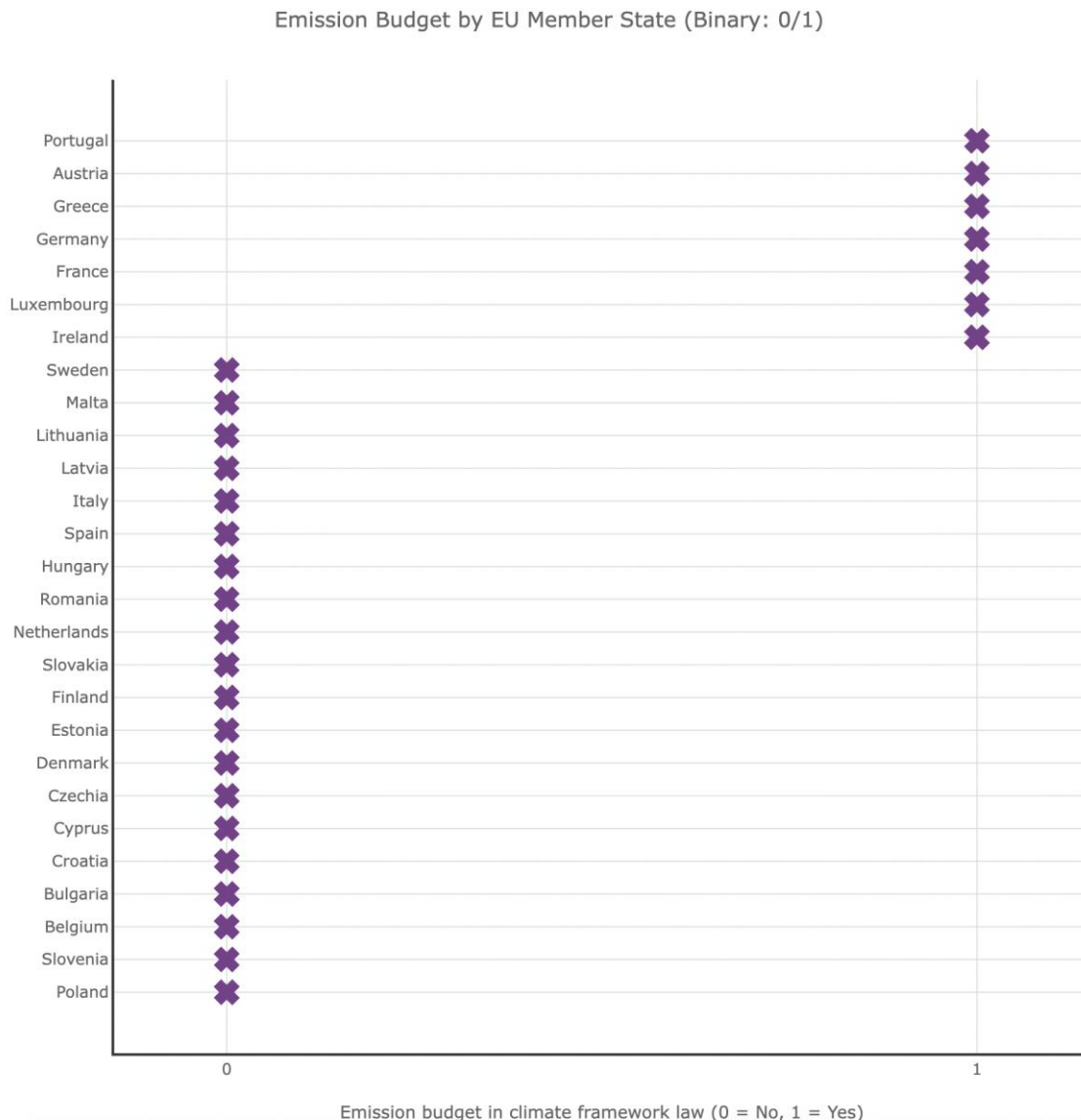


**Figure 8.** Total climate policies adopted by EU member states

Finally, the translation of climate laws into concrete policies<sup>3</sup>, displayed in Figure 5, reveals an even

<sup>3</sup> Policies, following the methodology of Climate Policy Database, are defined as laws, strategic documents, targets, or other policy documents that result in lasting reductions in a country's emissions intensity. These policies are either introduced by parliaments, approved by parliaments when governments enact them, or subject to parliamentary monitoring. They typically fall into three categories: measures with explicit climate change mitigation objectives (such as greenhouse gas emissions reduction strategies), energy policies that decarbonise energy supply or reduce demand, and policies introducing low-emissions practices to non-energy sectors like agriculture and land use.

more pronounced variation in climate governance intensity than legislative adoption alone. Germany again leads with 247 adopted policies, followed closely by France with 231 policies. Spain occupies third place with 165 policies, while Italy has implemented 134 policies. A second tier includes Sweden (95 policies) and Belgium (88 policies), both of which show relatively high policy-to-law ratios. The distribution then drops sharply, with many member states having adopted fewer than 30 policies. Romania, Portugal, Greece, Austria, and Slovenia cluster between 13 and 18 policies, while smaller and newer member states show minimal policy adoption. Estonia has adopted only 6 policies, while Malta, Cyprus, and Latvia have implemented fewer than 5 policies each. Based on this distribution, it could be argued that legislative adoption represents only the first step in climate governance, with substantial heterogeneity in the administrative and political capacity required to operationalise legal commitments through detailed policy instruments.



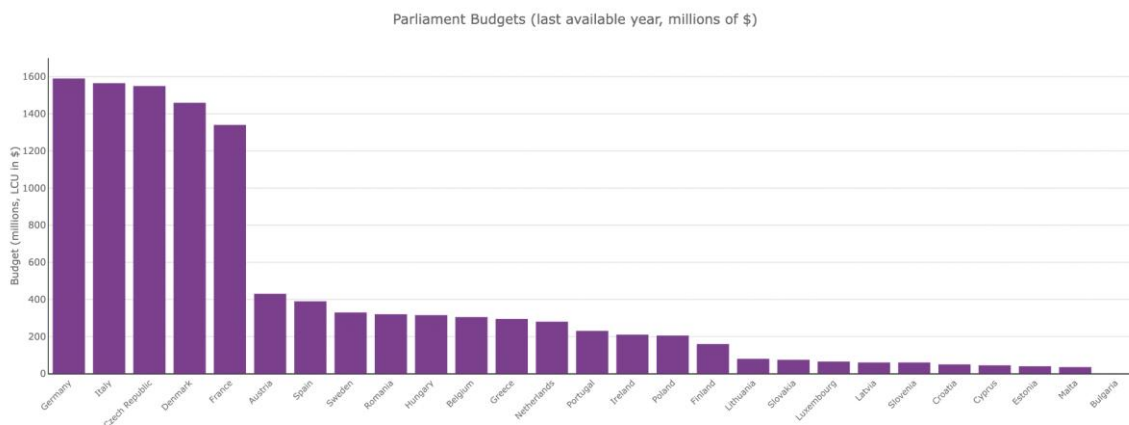
**Figure 9.** Adoption of an overall emission budget by EU member states

However, operationalising legal commitments through policies is only part of effective climate governance. Representative institutions must also establish robust monitoring mechanisms to ensure policies deliver intended emission reductions and that governments remain accountable for their climate commitments over time (Schoenefeld et al., 2018). Emission budgeting has emerged as an example of such a tool that can bridge this accountability gap (Ramajani et al., 2021). By dividing overarching future targets into concrete reduction periods with sectoral allocations, emission

budgets can remake the abstract long-term goals traditionally associated with climate policy into measurable interim milestones. Figure 9 shows that emission budgeting remains confined to a minority of EU member states, with only seven countries having integrated this accountability mechanism into their climate frameworks. Ireland, Luxembourg, France, Germany, Greece, Austria, and Portugal have adopted budget approaches, while the remaining 20 member states rely on conventional target-setting without binding interim budgets.

### 3.2 Parliament's institutional capacity to deal with climate change

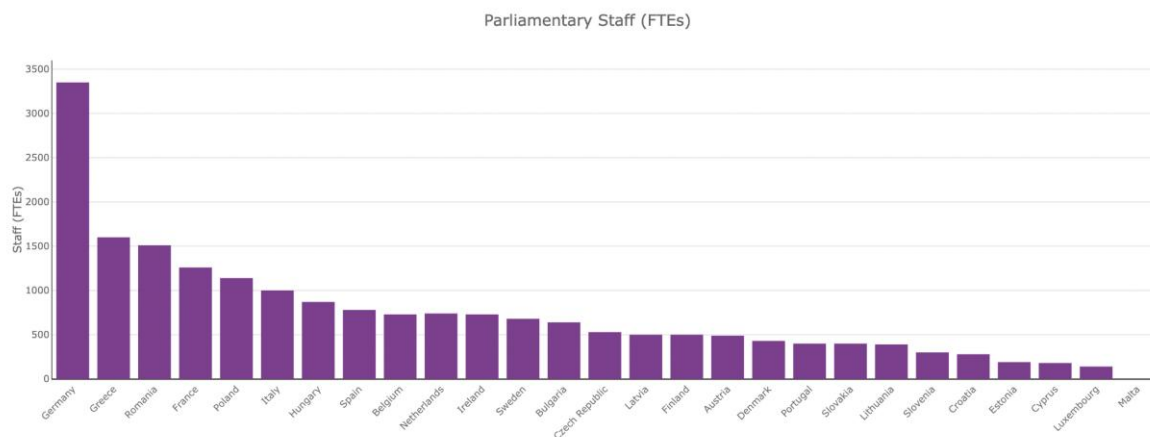
The capacity of parliaments to engage effectively with climate governance depends on their institutional resources. First, we examine two basic indicators of parliamentary capacity: budget allocations and staffing levels. Additionally, we construct a measure of institutional efficiency by regressing the logarithm<sup>4</sup> of parliamentary budgets, at purchasing power parity, on the logarithm of staff numbers and extracting the residuals. This measure captures the extent to which parliaments command budgetary resources beyond what would be predicted by their staffing levels alone, providing a proxy for institutional capacity that accounts for differences in organisational structure and resource allocation strategies.



**Figure 10.** Parliamentary budgets (most recent available year, millions of PPP-adjusted dollars)

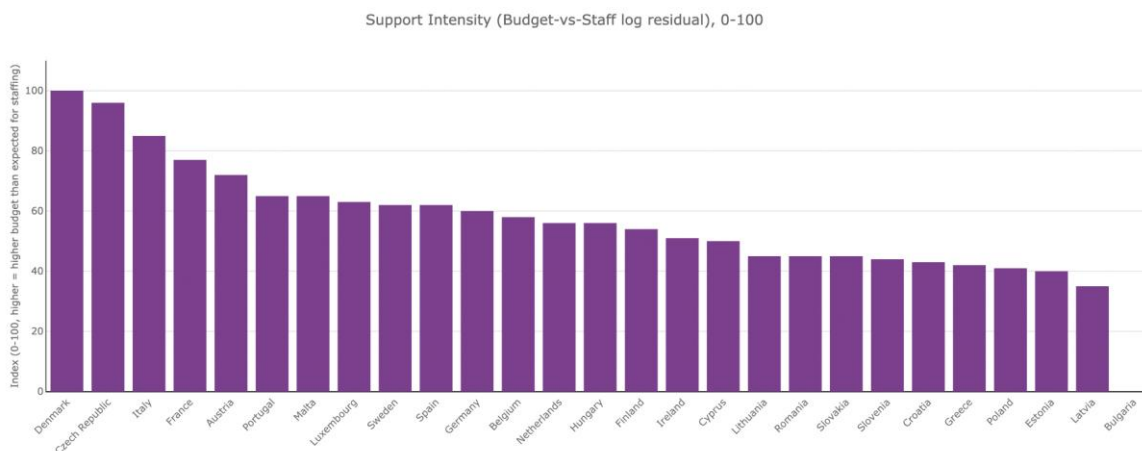
Figure 10 shows parliamentary budgets across EU member states in millions of PPP-adjusted dollars, using the most recent available data for each country. Germany's parliament operates with the largest budget at approximately 1,600 million dollars, followed by Italy, the Czech Republic, Denmark, and France, which range between 1,350 and 1,550 million dollars. Austria operates on roughly 420 million dollars, while Spain and Sweden command approximately 340-390 million dollars. Most member states operate with budgets below 300 million dollars, with the smallest parliamentary budgets found in Bulgaria, Malta, Estonia, and Cyprus, all below 50 million dollars.

<sup>4</sup> The measure is constructed using a log-log regression, which means we take the logarithm of both budget and staff numbers before analyzing their relationship. This accounts for economies of scale: larger parliaments don't need proportionally larger budgets because they spread fixed costs across more staff. For example, we can look at the difference between Denmark (100) and Bulgaria (35). If both countries had the same number of staff, Denmark's budget would be approximately 2.8 times larger than Bulgaria's after accounting for standard economies of scale.



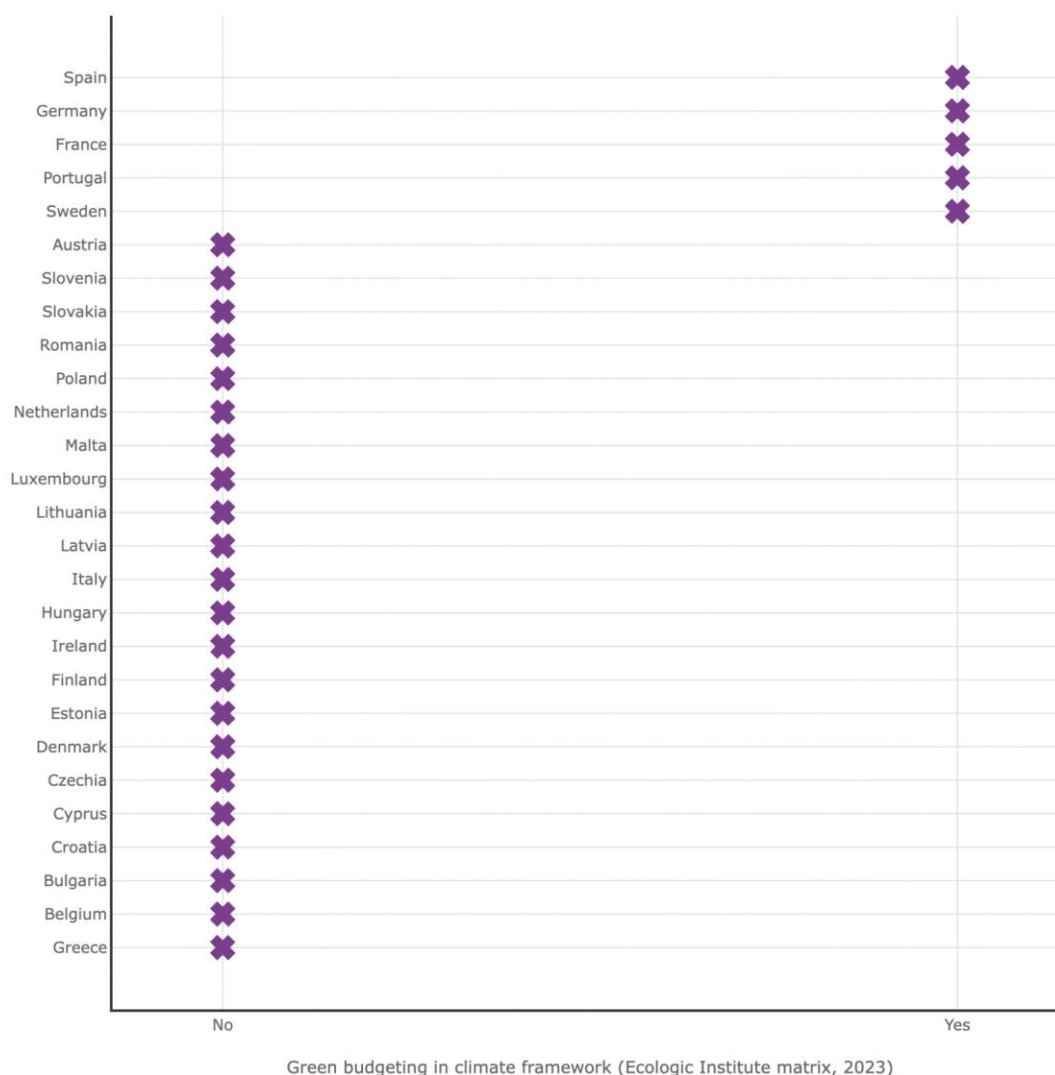
**Figure 11.** Parliamentary staff (most recent available year, full-time equivalents)

Figure 11 shows parliamentary staffing levels across EU member states in full-time equivalents (FTEs). Germany's parliament employs by far the largest workforce at approximately 3,350 staff members, substantially exceeding any other member state. Surprisingly, Greece occupies second place with roughly 1,600 FTEs, followed closely by Romania with approximately 1,500 FTEs. France, Poland, and Italy come next, employing between 1,000 and 1,250 staff members. The distribution then drops to a middle range, with Hungary, Spain, and Belgium operating with 700-900 FTEs. Most parliaments employ between 400 and 700 staff members. As expected, the smallest parliamentary administrations are found in Malta, Luxembourg, Cyprus, and Estonia, all with fewer than 250 FTEs.



**Figure 12.** Parliamentary institutional capacity index

Figure 12 presents the institutional capacity measure, calculated as the residual from regressing log budget on log staff. Denmark leads with a score of 100, followed by the Czech Republic and Italy, while Bulgaria, Latvia, and Estonia fall below 40. Higher scores suggest parliaments can invest more in specialised expertise, commission independent research, and maintain robust committee support structures. These resources prove particularly consequential for climate governance, where effective parliamentary oversight requires technical knowledge, sustained policy analysis, and capacity to scrutinise complex regulatory frameworks. Notably, the capacity scores do not correlate straightforwardly with legislative or policy output, implying, at least at a first glance, that institutional structure and organisational practices mediate the relationship between parliamentary resources and climate governance effectiveness.



**Figure 13.** Green budgeting across EU Member States

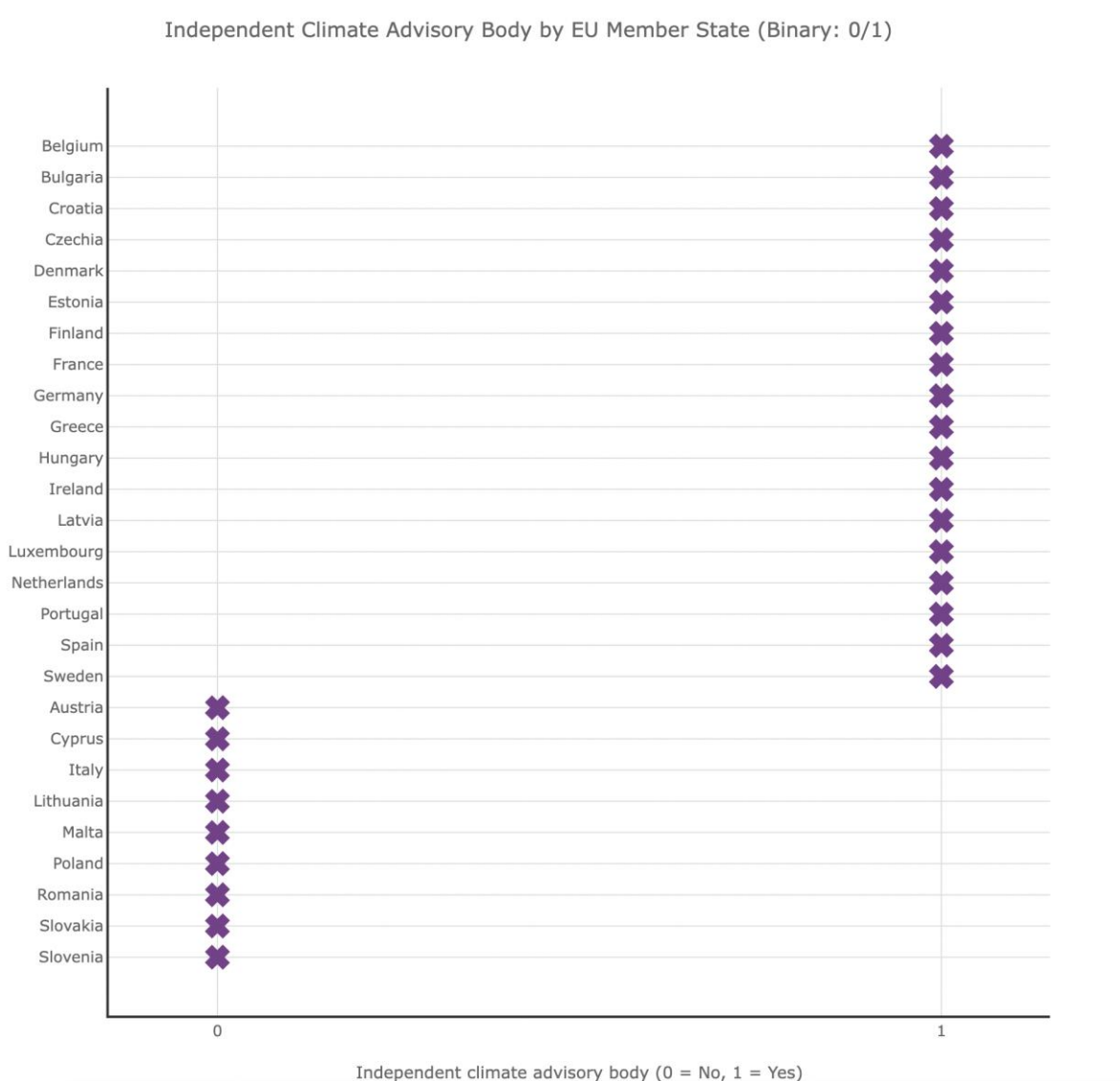
In light of the broader institutional capacity of parliaments across EU Member States, a follow-up question is whether these capacities are being used to address the climate crisis. One way of looking at this is to see if the budget is used in ways that either positively or negatively affect a country's emissions, i.e. green budgeting.<sup>5</sup> Figure 13 shows which EU member states incorporate green budgeting within their national climate-framework architecture, drawing on data from the Ecologic Institute. Only five countries - France, Germany, Portugal, Spain, and Sweden - have green budgeting provisions in place. The distribution is uneven: green budgeting clusters in Western/Northern Europe with a single Southern adopter (Portugal) and no adopters in Central-Eastern Europe. As a result, fiscal levers, such as the annual budget, multi-annual fiscal frameworks, and spending reviews, may not yet be aligned with climate commitments in most states, potentially weakening parliamentary capacity to steer and scrutinise climate policy through the budget cycle.

<sup>5</sup> Green budgeting is a complex and contested term, with different definitions producing varying assessments of which member states have adopted such practices. The EU's definition is particularly stringent, requiring comprehensive integration of climate considerations across the entire budget cycle. Our analysis instead relies on the more nuanced taxonomy developed by the Ecologic Institute (2023), which captures a broader range of green budgeting practices and institutional arrangements.



### 3.3 Knowledge and Expertise: Specialised advisory committees

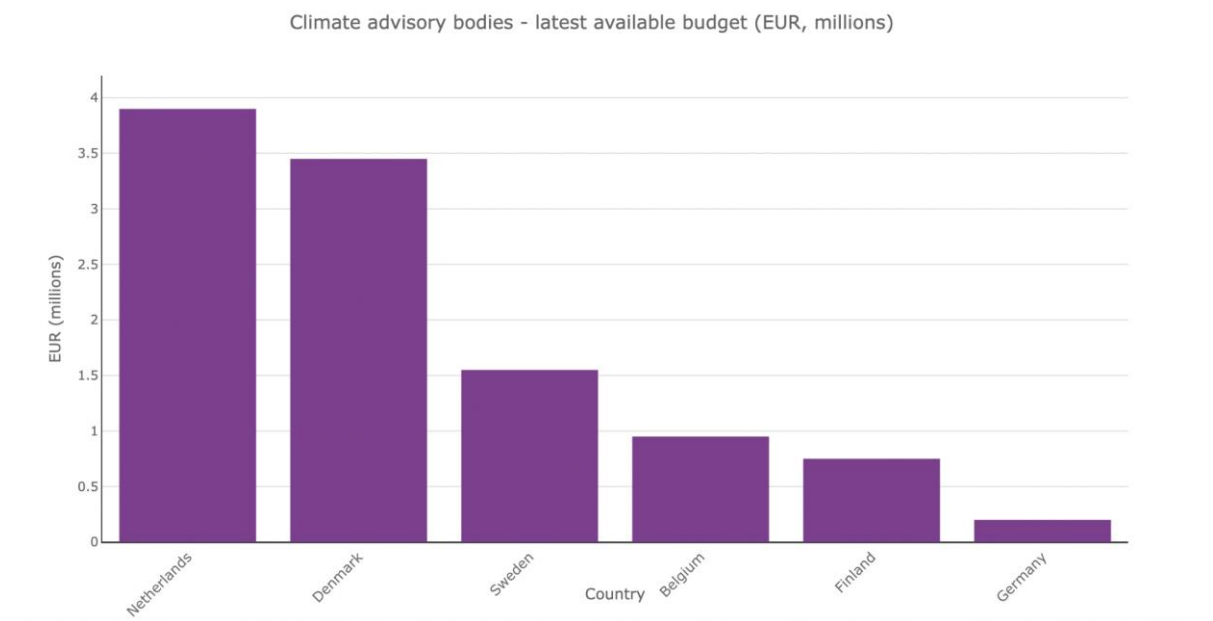
Beyond general parliamentary resources, several member states have established specialised climate advisory bodies to provide independent scientific expertise and policy recommendations (Averchenkova et al., 2021; Elliot et al., 2023). These bodies can be seen as a continuation of the long tradition of offices of parliamentary technology assessment in Western Europe, following the example of the Office of Technology Assessment of the US Congress (Cruz-Castro & Sanz-Menéndez, 2005). These bodies represent an institutional innovation designed to bridge the gap between climate science and political decision-making. However, systematic data on these institutions remain sparse and fragmented. We collected information on climate advisory bodies across EU member states, accepting any such body with an explicit climate mandate regardless of its size, formal authority, scope of activities, or whether it also addresses adjacent environmental or sustainability topics. For a subset of countries, we obtained data on staffing levels and budgets, though these figures are not directly comparable due to differences in institutional mandates, organisational structures, and data reporting practices.



**Figure 14.** Climate advisory bodies across EU Member States

Accordingly, Figure 14 shows which EU member states have established independent climate advisory bodies. Eighteen countries have created such bodies, while nine have not. This binary indicator aggregates diverse institutional arrangements, from well-resourced scientific councils with

statutory authority to informal expert committees with limited mandates.<sup>6</sup>

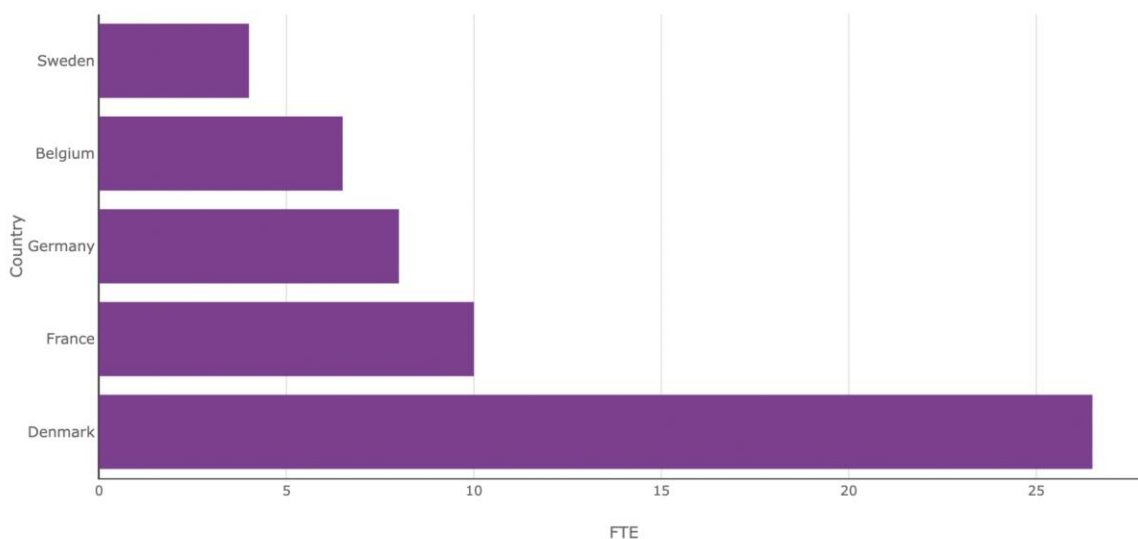


**Figure 15.** Climate advisory bodies budgets

Figure 15 shows budget allocations for climate advisory bodies in six countries. The Netherlands' climate advisory body commands the largest budget at approximately 3.9 million euros annually, followed by Denmark at roughly 3.5 million euros. Sweden's body operates with approximately 1.5 million euros, Belgium with 0.9 million euros, and Finland with 0.7 million euros. Germany's climate advisory body has the smallest budget among those shown, at roughly 0.2 million euros.<sup>7</sup>

<sup>6</sup> However, just the presence of an advisory body does not indicate its effectiveness, independence, or influence on policymaking, as countries without dedicated climate bodies may incorporate climate expertise through other institutional channels.

<sup>7</sup> These budget figures capture direct operational expenditures but do not reflect the full resource picture. Many advisory bodies benefit from in-kind contributions, including office space provided by host institutions, seconded staff whose salaries remain covered by their home agencies, and pro bono expertise from academics whose time is funded through university positions. Additionally, some bodies commission external research or consultancy work funded through separate budget lines not reflected in these figures, while others rely primarily on internal analysis. The budgetary models thus reflect different institutional philosophies about whether climate advisory capacity should be built in-house or accessed through external networks.



**Figure 16.** Climate advisory bodies staffing levels

Figure 16 displays staffing levels for climate advisory bodies in five countries where data are available.<sup>8</sup> Denmark's Climate Council operates with approximately 26 full-time equivalent staff members, the largest among the countries examined. France's Haut Conseil pour le Climat employs roughly 10 FTEs, while Germany's Expertenrat für Klimafragen operates with approximately 8 staff members. Belgium's climate advisory body has around 7 FTEs, and Sweden's Klimatpolitiska rådet employs approximately 4 staff members.

### 3.4 Mapping of innovations in climate democracy within national parliaments

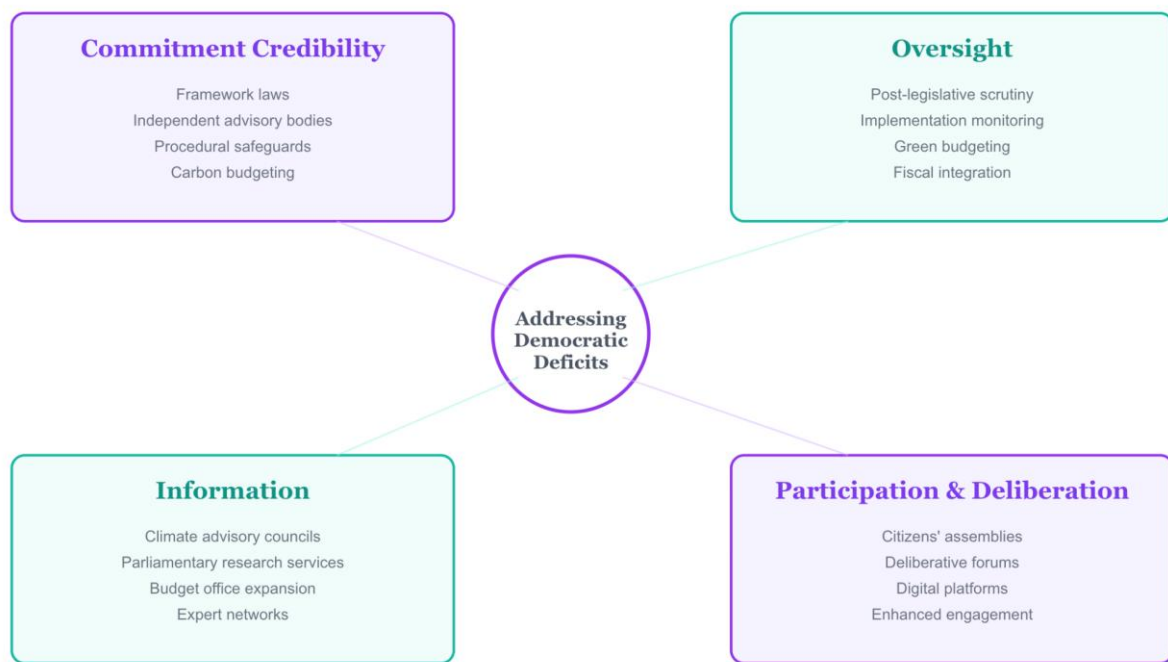
The comparative patterns documented in this section show that national parliaments, the key representative institutions across the EU Member States, have responded to climate imperatives through institutional experimentation across multiple domains. Overall, these innovations represent efforts to address tensions that sometimes arise between democratic governance and ambitious climate action: the challenge of maintaining accountability for long-term commitments within short electoral cycles, the problem of coordinating action across traditionally siloed policy domains, the difficulty of integrating complex scientific knowledge into political decision-making, and the need to sustain public legitimacy for potentially costly transitions.

Parliamentary innovations in climate governance can be mapped according to the specific functional deficits they address within representative democratic institutions. In this sense, the first set of innovations responds to the commitment credibility problem: how can current parliaments bind future governments to long-term climate objectives while preserving democratic responsiveness? Traditional legislation can be readily amended or repealed by subsequent governments, creating policy uncertainty that undermines investment in long-term transitions. Innovations addressing this challenge include framework laws with constitutive elements that raise the political costs of reversal, such as independent advisory bodies with statutory mandates, procedural requirements that force public justification of any deviation from targets, and embedding commitments within fiscal frameworks through green budgeting. These mechanisms create institutional friction that makes

<sup>8</sup> These staffing figures refer to permanent secretariat positions and do not capture the full scope of expertise involved. Most climate advisory bodies draw on contributions from public servants seconded from other government agencies, elected officials who serve as members or observers, and independent experts who provide advice without formal employment. The institutional models vary considerably, with some bodies functioning primarily through networks of external expertise coordinated by small permanent staff, while others maintain larger in-house analytical capacity.

abandonment or ambition reduction of commitments more politically visible and costly, while still making sure that future parliaments retain ultimate sovereignty as representatives of the people.

The architecture of framework laws varies along two main dimensions: the specificity of interim targets and the differentiation of sectoral responsibilities. Some frameworks establish only distant end-state goals, leaving implementation pathways largely undefined, while others create detailed interim budgets that partition long-term targets into binding medium-term commitments. Similarly, some frameworks set only economy-wide targets while others allocate specific emissions ceilings to individual sectors. These design choices have major implications for accountability, as they determine whether subsequent assessment can identify specific implementation failures rather than merely noting aggregate underperformance. However, the varying adoption patterns of these features across member states points to continuing disagreement about how prescriptive climate legislation should be and how much flexibility governments should retain in implementation.



**Figure 17.** Climate democracy innovations in national parliaments

A second category of innovations addresses the oversight deficit inherent in traditional parliamentary practice (Auel, 2007; Santiso, 2015). Legislatures typically concentrate scrutiny on the pre-enactment phase, subjecting proposed legislation to extensive committee review, debate, and amendment. Systematic evaluation of whether enacted legislation achieves intended effects or produces unexpected consequences remains quite rare. This creates an accountability gap that is particularly problematic for climate policy, where impacts may emerge only years after implementation and where the gap between the stated legislative ambition and practical implementation has proven persistent. Post-legislative scrutiny mechanisms institutionalise systematic review of implementation and effectiveness, transforming parliamentary oversight from a front-loaded process into a continuous cycle (de Vriese & Norton, 2020). The application of such mechanisms to climate legislation recognises that monitoring implementation carries equal weight to crafting initial policy (Westminster Foundation for Democracy, 2025).

Other related accountability innovations operate through fiscal oversight. Parliamentary budget processes provide annual opportunities for scrutiny, traditionally focusing on financial propriety and efficiency (Fasone, 2021). Green budgeting practices attempt to integrate climate impact assessment into this established oversight cycle, asking whether budget allocations align with stated climate commitments and whether expenditure patterns support or undermine emission reduction goals. The limited adoption of such practices despite their apparent potential shows the lingering

presence of some implementation barriers, including the technical demands of environmental fiscal analysis, the organisational challenge of coordinating between budget committees and climate-focused bodies, and the political resistance to subjecting a wider range of government decisions to systematic environmental evaluation.

A third group of parliamentary innovations focuses on the information asymmetry between executive and legislative branches. Governments command over extensive administrative resources, specialised expertise, and control data generation and presentation. This asymmetry is particularly acute in policies with multilevel implications, such as the scrutiny of EU decision-making (Buzogány & Kropp, 2013) or in technically complex policy domains like climate change, where understanding of the issue and how to tackle it effectively and efficiently requires integrating insights from multiple scientific disciplines, economic modeling, and even technical engineering assessments. Parliamentary support services attempt to reduce this imbalance by providing legislatures with analytical capacity independent of government provision (Brandsma & Högenauer, 2025; Brandsma & Otjes, 2024). Independent advisory bodies, while not primarily designed to strengthen the legislative branch vis-à-vis the executive, can serve as alternative sources of expertise that parliaments may draw upon when scrutinising government proposals and monitoring policy implementation. The institutional designs adopted to do so vary significantly: some member states have created specialised climate advisory councils, others have expanded the mandates of existing parliamentary research services or budget offices, and some rely on hybrid arrangements combining internal parliamentary capacity with external expert networks. These different models, thus, reflect varying positions about whether climate expertise requires dedicated institutions or can be integrated into existing analytical infrastructure, and whether independence finds best guarantee through organisational separation or through professional norms and transparent methodology. The resources dedicated to such analytical capacity, captured in the budget and staffing data presented earlier, show a significant heterogeneity in parliamentary investment in independent expertise. Parliaments operating in contexts where government-provided information generally enjoys high regard may perceive less need for alternative analytical capacity than those where executive claims face frequent contestation or where government capabilities themselves face limitations.

Finally, a fourth set of parliamentary innovations addresses participation and deliberation beyond the electoral channel (Smith, 2020). Representative democracy provides periodic opportunities for citizens to express preferences through elections and continuous opportunities for organised interests to lobby legislators, though these channels have limitations for complex, long-term issues like climate change. Digital participation platforms represent one approach to expanding engagement, using technology to lower barriers to submission of views, access to information, and monitoring of parliamentary processes. The effectiveness of such participatory innovations depends on how their outputs connect to binding decision-making: purely consultative exercises risk becoming symbolic gestures that generate citizen recommendations subsequently ignored, while tightly integrated processes risk constraining parliamentary autonomy.

## 4. Case Study One: Austria

### 4.1 Knowledge and Expertise

Parliamentary effectiveness in present-day democracies depends upon access to, and utilisation of, specialised knowledge and expertise (Rizzoni, 2023). As legislatures navigate increasingly complex policy domains (Demir & Reddick, 2024), the acquisition and deployment of expert knowledge becomes even more essential to their constitutional functions. This challenge is particularly acute in climate policy, where scientific complexity intersects with long-term fiscal commitments and cross-cutting policy implications that span multiple ministerial portfolios and temporal horizons. Weiss (1979) identifies three models of knowledge utilization that capture the diverse pathways through which evidence shapes political decisions. The instrumental model conceptualizes knowledge as directly applied to specific policy decisions, with research findings serving as immediate inputs to problem-solving. The conceptual model, by contrast, describes a more gradual process of enlightenment, whereby research shapes the understanding of policy issues over time, influencing how problems are framed and perceived rather than providing immediate solutions. Finally, the symbolic model represents a more political use of knowledge, wherein research serves primarily to legitimate positions already determined through political processes. Crucially, these three models are not mutually exclusive, but rather, they often coexist within the same institutional context, with different actors employing knowledge in different ways depending on their strategic positions and objectives.

However, the practical implementation of these knowledge utilisation models often faces institutional obstacles. First, their generalist composition means that most legislators lack specialised training in the technical domains they must oversee, creating dependence on external sources of expertise (Brandsma & Otjes, 2024; Ward & Monaghan, 2025; van Voorst, 2026). Second, limited staff resources compared to executive bureaucracies produce asymmetries in analytical capacity that can undermine effective scrutiny (Moens, 2023). Third, the inherent tension between technical rationality and political responsiveness means that purely technocratic solutions often prove inadequate in a democratic, and thus electorally-embedded context, where competing values and interests must be usually reconciled through continuous political negotiation rather than through technical optimisation (Bertsou & Caramani, 2020).

In practice, these constraints lead parliaments to rely on diverse knowledge sources, each with distinct strengths and limitations. Committee hearings provide forums for direct engagement with experts and stakeholders, even though they are often constrained by time and political dynamics (Kornberg & Siefken, 2023). Legislative research services offer in-house analytical capacity, but typically operate with limited resources and must balance competing demands from multiple committees and members (Ward & Monaghan, 2025). Independent advisory bodies provide arms-length analysis, though their effectiveness depends on institutional design and political acceptance of their role (Krick, 2015). The challenge for parliaments lies in coordinating these various sources to produce coherent, reliable, and politically legitimate bases for decision-making.

One institutional response to these challenges has been the establishment of parliamentary budget offices (Lienert, 2013; Molepo & Jahed, 2023). These independent analytical units within the legislative branch provide parliamentarians with autonomous fiscal analysis, reducing dependence on executive-supplied information and enhancing legislative capacity for informed budget scrutiny. While traditionally focused on fiscal and macroeconomic analysis (Lienert, 2013), these institutions have increasingly extended their expertise into new policy domains where budgetary implications intersect with technical complexity. Our focus is on one such extension: the integration of climate and environmental expertise within Austria's Parliamentary Budget Office (*Budgetdienst*). We examine how this institutional adaptation contributes to scrutinising climate policy, a domain where long-term fiscal commitments, scientific uncertainty, and cross-cutting policy implications create distinctive demands. Overall, this case study shows how existing representative institutions can



develop new forms of expertise in response to emerging policy challenges, while also speaking to broader questions about the relationship between fiscal governance and climate governance.

To understand this innovation and its implications for the scrutiny of climate policy within domestic representative institutions, we proceed as follows. First, we provide background on the establishment of the *Budgetdienst* as part of Austria's broader fiscal governance reforms and the structures of Austrian policymaking. We then examine how climate and environmental expertise has been integrated into parliamentary budget analysis, what analytical functions this capacity performs, and how it relates to existing parliamentary processes. Finally, we assess what this case reveals about the possibilities and limitations of developing specialised expertise within legislative institutions for complex, long-term policy challenges.

## 4.2 Background

Austria's parliamentary system is characterized by a relatively weak parliament dominated by strong parties due to the country's party-list electoral system (Müller, 2003). Resulting from the country's neo-corporatist heritage, policymaking still often relies on pre-legislative bargaining between ministries, peak associations, unions, employers' chambers, and social partners. Knowledge and technical expertise are embedded in corporatist actors and the bureaucracy and less in parliament (Katzenstein, 1985). Coordination between the executive and the legislature has been typically dominated by party logic, resulting in both parliamentary administration and individual MPs having limited resources (Konrath et al., 2023). The executive branch, particularly through the Ministry of Finance, maintained control over both the generation of budgetary data and its presentation to parliament. This structural imbalance limited parliament's ability to independently assess government proposals and fulfil its constitutional role as the holder of budgetary authority. The creation of the *Budgetdienst* in 2012 was as a consequence of major structural reforms to Austria's budget framework law in 2009, which granted the government considerably more flexibility in budget formulation and execution without being constrained too much by the parliament. However, being involved in the reform discussion in the ministry from early on, the Austrian Nationalrat conditioned this concession on two compensatory mechanisms: enhanced reporting requirements and the establishment of an independent budget analysis unit within the parliamentary administration itself (Downes et al., 2018). The Austrian model is inspired by the US Congressional Budget Office, which pioneered the concept of providing legislatures with independent in-house fiscal analysis capability (Joyce, 2011), while reflecting political and institutional arrangements in Austria. In the following years, the Austrian Budgetdienst has increasingly developed capacity to assess budget impacts of legislation and government programmes, including in the field of climate and environmental analysis.

## 4.3 Our focus

While various related aspects of Austrian climate policy-making have been studied in recent years, including technology assessment and foresight (Nentwich et al., 2015), science-policy interaction (Hermann et al., 2016), or climate assemblies (Buzogány et al., 2022), little attention was given to the role of parliamentary actors. The innovation we study is Austrian Parliament's Budgetdienst, understood as an institutional innovation encompassing mainly organisational design (creating an independent analytical unit within parliamentary administration), but also procedural innovation (establishing new workflows for budget analysis and member service), and capacity building (developing specialised expertise accessible to all parliamentary factions). Our case study draws on two sources of information. First, we examined official publications of the Parliamentary Budget Office (PBO), including analytical reports, budget assessments, and methodological papers. We also reviewed parliamentary documents, including the 2009 political agreement establishing the office, committee reports, and transcripts of budget committee proceedings. Second, we conducted 4 interviews with experts working in the Budgetdienst and in the parliamentary administration of the Austrian Parliament. We examine the Austrian PBO through three interconnected themes that focus on its institutional development, the autonomy and credibility of the PBO in the absence of a comprehensive legal foundation, and the expansion of the mandate to address environmental and



climate concerns. These three research themes are generated inductively from the evidence and structured to move from general topics to the specific field of climate innovations. The first two aspects address the core functions and institutional standing of the *Budgetdienst* in general terms: its effect on overall legislative scrutiny, the executive-legislative balance, and its sources of independence. This broader institutional context is essential for understanding the third aspect, which specifically narrows the focus to the primary theme of this case study: how the Budgetdienst has leveraged that general capacity to adapt and expand its mandate into the complex policy domain of climate change.

## 4.4 Findings

### 4.4.1 Institutional design and core functions

The Austrian PBO was created in 2012 to provide independent and objective budgetary analysis to Parliament. It is formally part of the Parliamentary Administration but has a specific mandate to directly advise MPs and especially the Budget Committee. Establishing the Budgetdienst was a response to the structural weakness of policy analytical capacity in the Nationalrat, where party groups relied on their own sectoral experts and the parliamentary administration provided merely legal expertise (Konrath et al., 2023). However, as the sectoral committees lack specialist staff, there was a shared understanding among the parties that the parliamentary expertise, particularly in sensitive fields such as finances, were inadequate and could not be covered by the few experts working in the party groups. The window of opportunity that opened as a result of the budgetary reforms provided some remedy as a result of the institutional bargain between the executive and the legislative (Interview #2). This resulted in perhaps the most distinctive feature of the Austrian PBO model: the PBO's lacking comprehensive statutory authority. The office was established through a short "Political Agreement" among political parties (Parlament Österreich, 2012; Budgetausschuss, 2012) rather than legislation, and its access to government data relies on voluntary cooperation and administrative assistance (*Amtshilfe*) rather than legal entitlement. Theoretically, this situation creates vulnerability: an uncooperative government could potentially withhold information and obstruct the office's work. In practice, however, the Budgetdienst has managed to maintain independence and access throughout its existence due to the cross-party consensus and epistemic reputation. All parliamentary groups have used the office's work and have consistently defended its independence, not only the opposition parties for which it creates a level playing field. This broad support creates political costs for any government that might attempt to undermine the office's operations. At the same time, the office has built credibility through the quality and objectivity of its analysis (Interview #1; Kratzer, 2025). Parliamentary actors and the press describe the office as politically unbiased. It is this reputation of impartiality that makes the office's assessments valuable to all factions and creates incentives for cooperation (Interview #1; Kratzer, 2025).

To understand the establishment of the Budgetdienst, some specificities of the Austrian political system and administrative culture are helpful. While the Austrian political system has been historically characterised as one being dominated by the coalition of two powerful political parties, coalition dynamics have changed over the last two decades with new parties entering government (Konrath, 2017). This had implications also on strengthening legislative oversight in general. Regarding administrative culture, in theory, Austrian administrative culture emphasises inter-agency cooperation and information sharing between branches of government. The principle of *Amtshilfe*, while not creating enforceable rights for the PBO, reflects broader norms of administrative collaboration that have generally facilitated information access. Nevertheless, routines of information provision from the executive to the Budgetdienst had to be first established in the office's early years, with interview partners reporting that cooperation has improved over time (Interview #2, #3). The office maintains direct communication channels with ministerial offices and is constantly monitoring legislative activities, including participating in committee meetings. This accessibility and responsiveness has helped building good working relationships with the executive and ensures that the office's work addresses real needs of legislative scrutiny. According to its own assessment, the office provides analysis that is valuable in political debates by making deliberations more evidence-

based (Interview #2). The office's correction of government estimates for inflation relief measures (concluding the impact would be substantially lower than claimed) demonstrate analytical independence and generate media attention that raises the office's profile and political value.

Another important factor behind the PBO's effectiveness is its strong formal, but also informal, integration into Austria's wider ecosystem of budgetary institutions. This includes also the personal level, as PBO's leadership had cross-institutional experience, as the founding director previously worked at the Court of Audit, while the current one on both the executive and legislative sides of budget politics. The PBO maintains close links not only with the Ministry of Finance, but also with other expert bodies, such as the Fiscal Advisory Council, where it participates in an advisory capacity and is also part of international networks related specific subissues of budgetary politics, such as green budgeting. The Budgetdienst also frequently draws in its expertise in cooperation with independent institutes such as the Austrian Institute of Economic Research (WIFO), EcoAustria, or the Federal Environmental Agency (Interview #2, #3).

According to the Political Agreement which led to its establishment, the PBO supports the Austrian National Council in discussing, deciding on, and overseeing the federal budget and its implementation. It does so by providing written analyses, impact assessments for new legislation, and short studies upon request of the Budget Committee and other parliamentary committees. The Budgetdienst is a small, specialised unit within the Austrian Parliamentary Administration's Legal, Legislative, and Scientific Service. Its compact structure - currently comprising ten professionals, including six subject-matter specialists and supporting staff - was a deliberate choice to prioritise expertise over wide coverage. Analysts hold competence across multiple policy areas rather than narrow specialisation, with research assignments distributed based on workload and expertise rather than rigid functional divisions. This organisational model enables strong analytical output relative to staff size. Between 2012 and 2025, the office produced several hundred analyses, assessments, and briefing documents of substantial length in response to parliamentary requests. The autumn budget season is usually the annual peak of activity, when the office must analyse the 3,600-page government budget proposal ("Budgetziegel" or "budget brick" in parliamentary vernacular) and produce comprehensive assessments within the four-week period between budget presentation and parliamentary vote.

The office has four core functions, including budget analysis, legislative costing, performance monitoring and specialised analysis (Parlament Österreich, 2012; Budgetausschuss, 2012). Budget analysis involves producing independent assessments of government budget proposals, including overview analyses highlighting key priorities and concerns, detailed examination of individual budget chapters across all ministry portfolios, and guided reading materials to help members of parliament navigate complex budget documents. Legislative costing focuses on the fiscal implications of proposed, planned, or hypothetical policy measures. This service is available to all parliamentary groups and individual members, enabling opposition parties to cost their policy alternatives and governing parties to verify government estimates. Performance monitoring involves assessing whether government programmes achieve stated objectives and comply with fiscal rules, including EU-level deficit and debt requirements. This function has become increasingly important as Austria faces fiscal consolidation pressures. Lastly, specialised analysis is done upon the request of the budget committee or parliamentary groups, and ranges from trend analysis of federal subsidies to assessment of distributional impacts of tax reforms.

#### **4.4.2 Impact on parliamentary capacity and executive-legislative relations**

The PBO's existence has altered the information landscape of Austrian budgetary politics by empowering the legislative side. Before its creation, the Ministry of Finance held near-monopoly control over fiscal data and analysis and determined what information parliament received and shaped its presentation through "spin" that emphasised positive developments and minimised problems (Kratzer 2025). This information asymmetry curtailed parliament's ability to fulfil its constitutional responsibility for budget approval and oversight. MPs had to rely primarily on government-supplied analysis when evaluating proposals, limiting their capacity for independent judgment.

The PBO has rebalanced this relationship by providing parliament with independent analytical capacity. Budget committee members now have access to assessments that may confirm, qualify, or contradict government claims. Alongside the draft federal budget submitted to the National Council, the Austrian government publishes a supplementary document on environmental and climate protection that provides an overview of climate-related expenditure by policy field, climate- and environment-relevant tax measures, and Austria's contributions to international climate finance. This document is evaluated and commented on by the PBO. Opposition parties in particular value this alternative information source, using Budget Office analysis to challenge government narratives and proposals or to refine their own drafts (Interview #2). At the same time, governing party members also utilise the office's work, recognising that independent verification enhances the credibility of policy positions (Interview #2, #3). References to the Budgetdienst have become regular in parliamentary discourses over the last decade (Parlagram, 2025).

The office's impact manifests in two main ways. First, committee deliberations are now informed by detailed independent analysis of budget proposals, including identification of inconsistencies, unrealistic assumptions, or inadequately justified provisions that might otherwise escape attention. Parliamentary groups can obtain credible estimates of their policy proposals' fiscal implications, enabling more substantive policy debate (Interview #2). For example, the NEOS party requested assessment of its education policy proposals, learning that implementation would require billions of euros annually - information crucial for evaluating the proposals' feasibility (Interview #3). Second, this has implications beyond the parliament. The PBO's analyses receive parliamentary and media attention and enter public discourse, creating additional pressure on the government to justify its positions. The office's regular reporting on fiscal trends and consolidation requirements has, for instance, contributed to increased attention to Austria's deficit and debt challenges. Analyses published before coalition negotiations highlighted the scale of fiscal adjustment required, providing important context for subsequent political developments (Kratzer, 2025).

Among the limits of the PBO should be mentioned that it provides information and analysis, but political actors make decisions based on multiple considerations beyond technical assessment. Members of parliament draw their own conclusions from Budget Office work, sometimes using selective elements to support predetermined positions (Interview #2). Moreover, the office's small size constrains its capacity. With only ten staff members, it cannot match the analytical breadth or depth of government ministries or international organisations. The office must prioritise its work carefully, responding to a limited number of specific requests rather than conducting comprehensive analysis across all policy domains. Being aware of the capacity needs of comprehensive analysis which usually involves several staff members, bottlenecks are solved based on informal agreements among the party groups (Interview #3). Finally, the lack of legal foundation remains a concern. The theoretical possibility of government obstruction persists, and the office's long-term security depends on continued political consensus. The coalition agreement of the current government includes a brief mention of a statutory entrenchment of the PBO to guarantee the office's status and information access rights (Interview #2).

#### **4.4.3 The Budget Office's Role in climate policy**

The office's expansion into environmental and climate analysis was a significant evolution of its mandate that resulted from the increase in budget-relevant legislative activities in the climate field. The initial push toward green budgeting did not originate from a single political actor but emerged as a combination of parliamentary demand and international epistemic diffusion. As our interviewees noted, several parties advocated integrating climate consequences into fiscal evaluation, largely because access to reliable information on climate spending was asymmetrical and dependent on ministerial goodwill. Parallel to this domestic demand, participation in OECD and EU fiscal networks exposed the Budgetdienst to methodological debates on quantifying climate-related fiscal risks, which helped normalize climate as a budgetary category rather than a sectoral policy issue (Interviews #2, #3). This "green budgeting" function integrates environmental externalities into fiscal analysis, recognising that budget decisions have ecological as well as economic consequences. The Budgetdienst analysts now routinely assess the climate and environmental impacts of budget measures in budgetary chapters related to agriculture, climate and energy and transport policies,

and provide expert evaluations of carbon pricing mechanisms, or evaluate government performance against greenhouse gas reduction targets.

This expansion into environmental and climate analysis shows the office's capacity for institutional adaptation, responding to the formalisation of climate change mitigation in Austria's budget framework as performance objectives for reducing greenhouse gas emissions and developing sustainable energy systems. The office's approach to green budgeting includes activities such as assessing whether legislation and budget proposals meet requirements for environmental impact reporting and alignment with climate goals. For instance, the office's analysis of the 2022 eco-social tax reform identified multiple areas where the government failed to provide sufficient detail for parliament to evaluate environmental performance (Parliamentary Budget Office, 2022). Interviewees emphasised that the tools remain primarily those of public finance rather than environmental modelling. In practice, climate assessment is conducted through (a) distributional analyses that incorporate behavioural assumptions (e.g., modelling how CO<sub>2</sub> pricing alters consumption); (b) plausibility checks of ministerial claims on emissions outcomes; and (c) long-term risk-tracking through updates to ETS prices and fossil-fuel tax revenue forecasts. On specific reforms such as the eco-social tax reform, Budgetdienst analysts estimated not only equity effects but also indirect emissions impacts based on consumption and vehicle registration data (Interview #3).

Further climate-related tasks include scrutinising government estimates of policies' environmental effects and, where necessary, producing independent assessments, including evaluation of carbon pricing mechanisms such as emissions trading schemes and carbon taxing; examining the relationships among climate, economy, and public finances through briefing notes on topics such as circular economy approaches and the fiscal implications of climate change itself; and assessing how environmental policies affect different population groups, combining traditional public finance concerns about equity with environmental policy analysis to provide distributional analysis with an environmental dimension. This integration of environmental considerations into routine fiscal analysis are at the core of the innovation. Rather than treating environmental policy as a separate domain, the office embeds climate and environmental impacts in comprehensive assessment of government proposals. This approach reflects recognition that sustainable public finance must account for environmental externalities and long-term ecological consequences of fiscal decisions. The Budgetdienst conceptualises climate policy as a *Querschnittsmaterie* – a cross-cutting dimension present across Transport, Agriculture and Environment, and infrastructure portfolios – rather than a self-contained policy field. This approach structurally differs from ministries' climate units: the office embeds climate considerations into the fiscal core of legislation, which allows climate impacts to be evaluated even where proposals are not formally labelled climate policy (Interview #3).

Importantly, the green budgeting function was not based on the creation of new and separate organisational structures or recruitment of environmental specialists. Instead, the office's generalist economists have developed competence in environmental assessment, applying standard public finance analytical frameworks and tools to climate policy questions and collaborating with environmental agencies and research institutes such as WIFO or the Federal Environmental Agency when specialised expertise was required. The Budgetdienst's climate competence is fostered through expert networks: it participates in the OECD Working Group on Parliamentary Budget Offices and Independent Fiscal Institutions, as well as in EU-level sub-groups on climate-related fiscal risks (Interview #3).

Over time, the Budgetdienst developed analytical capacities that in some respects exceed those of the ministries themselves, particularly in the field of regulatory impact assessment (RIA). Interviewees emphasised that the PBO built its reputation through distributional analyses of major tax and spending reforms, an area where the Ministry of Finance did not develop comparable expertise. Because the Budgetdienst works directly at the legislature–executive interface, it gains early procedural access to ministerial drafts and background information, allowing it to identify weaknesses and omissions in RIA before legislation reaches the plenary. This proximity to the law-making cycle, combined with organisational independence, makes its assessments more credible than ministerial self-reporting and less constrained by strategic framing. The office therefore became not only a consumer of impact assessments produced by the executive. The particular expertise

developed in the field of climate-related regulatory impact assessment of legislation is considered to be on par with the executive's expertise. While the office does not conduct primary modelling, it is increasingly positioned as the arbiter of whether ministerial climate impact statements are methodologically sound and sufficient for parliamentary scrutiny. This will be useful also in the future when ministries will soon be required to use a standardised "Klimacheck" instrument as part of the regulatory impact assessment and the Budgetdienst expects to play a secondary verification role once these assessments become mandatory (Interview #3).

As climate change mitigation was formalised into Austria's budgetary framework through performance objectives for GHG reduction and renewable energy development, the Nationalrat required capacity to verify whether government claims about environmental impacts were credible. The Budget Office fills this accountability gap by subjecting government RIA to independent analysis, ensuring that climate commitments can be integrated into budgetary planning and legislative review. In this context, the office's role is particularly evident in its ability to expose inadequate environmental disclosure by the government (Interview #4). In its comprehensive analysis of the 2022 eco-social tax reform the Budget Office identified multiple areas where the government failed to provide sufficient detail for parliament to evaluate environmental performance against stated objectives. This critical assessment goes beyond merely accepting government claims about carbon reduction, instead demanding the transparent data and methodology necessary for democratic accountability. By highlighting these deficiencies, the office strengthened parliamentary capacity to demand comprehensive environmental impact reporting and challenged the government to substantiate its climate policy assertions with verifiable evidence. Moreover, the Budget Office managed to integrate climate considerations into broader fiscal and to show the complex relationships between environmental policy, economic impacts, and social equity. Its assessment of carbon pricing mechanisms, including emissions trading schemes and carbon taxation, examines not only environmental effectiveness but also distributional consequences across income groups and regions (Interview #4).

Finally, the office's role in monitoring long-term climate commitments provides crucial continuity in an area where political attention fluctuates with electoral cycles and economic pressures. Climate change mitigation requires sustained policy effort over decades, yet political systems naturally focus on shorter-term concerns. The Budget Office's routine inclusion of environmental performance assessment in its budget analyses and legislative reviews institutionalises attention to climate goals, making it more difficult for governments to quietly abandon or dilute environmental commitments when they become politically inconvenient. This watchdog function, exercised through regular independent reporting accessible to all parliamentary factions and the public, strengthens the durability of Austria's climate policy framework by embedding accountability mechanisms directly into parliamentary processes.

## 4.5 Lessons Learned

The example of the Austrian Parliamentary Budget Office shows that legislatures can develop significant independent analytical capacity even with modest resources and without legal foundations. Several lessons emerge from the Austrian experience. First, political will is important for parliamentary innovations. While statutory authority would strengthen the office's position, its success has depended primarily on sustained political support across parties and demonstrated analytical quality. Institutional innovation succeeds when key actors perceive value and commit to making arrangements work. This also means that independence of the PBO has to be constantly defended. The office's independence is not guaranteed by formal rules but has to be maintained through daily practice, including objective analysis, equal engagement with all parties, transparency about methods and limitations, and value to all parliamentary actors regardless of partisan affiliation.

Second, the design of the institution shows that small, generalist and institutionally embedded innovations can be successful. The office's impact despite its small size suggests that parliamentary support services need not replicate the scale of executive branch agencies to make meaningful contributions to legislative capacity. Strategic focus, quality over quantity, and effective external



partnerships can enable small teams to punch above their weight. The Austrian approach of employing competent generalists who develop expertise across multiple domains appears more sustainable than narrow specialisation, particularly for small offices. This model facilitates flexible deployment of staff, cross-fertilisation of analytical approaches, and institutional adaptability as priorities evolve. This adaptive capacity seems to suggest that parliamentary support services need not be rigidly structured around fixed mandates. The Austrian experience shows how small, flexible teams of competent generalists can develop new capabilities in response to evolving parliamentary needs if they have access to external expertise networks and are committed to analytical quality. An important aspect related to adaptability is related to the institutional embeddedness of the PBO. Adding to this, the expansion into environmental analysis built on existing analytical frameworks and integrated new considerations into established processes rather than creating new structures.

The third noteworthy aspect is the structural fragility of the PBO. The Austrian Budgetdienst is both empowered and exposed precisely because its authority is reputation-based rather than statutory. Its influence rests on performance, reputation, and cross-party expectation of neutrality, which are reversible if political incentives change. Expanding into climate policy potentially might raise the stakes of this neutrality: climate spending is not only expertise-based and is both distributive and identity-related, making analytical independence difficult if climate policy becomes increasingly polarized.

In summary, the Austrian case illustrates both the potential and the fragility of parliamentary innovation. The Budgetdienst has strengthened parliament's capacity for independent fiscal analysis and rebalanced the relationship between legislative and executive branches. Its effectiveness relies on political consensus and an institutional culture that cannot be fully guaranteed through formal design. This dependence on informal foundations makes replicating the Austrian example demanding, but it remains a promising reference point for countries seeking to bolster legislative scrutiny and democratic accountability in climate matters.

## 5. Case Study Two: Estonia

*"If the prevailing political culture is unable to open up, then new opportunities must be sought to supplement it. That is the message of the People's Assembly" (People's Assembly, 2013).*

### 5.1 Participation

As the RETOOL theoretical framework elaborates, participation plays an important role in democratic climate governance (Brawley-Chesworth et al., 2024). There are normative, instrumental and substantive rationales for including the public and stakeholders in policymaking (Stirling, 2006). Normatively, participation is valuable in its own right; instrumentally, it enhances legitimacy and public buy-in; substantively, it can lead to better and more robust climate policy outcomes. At the same time, participation is sometimes framed as a barrier to swift action, or it is argued that citizens are insufficiently informed to contribute meaningfully (Armeni & Lee, 2021). However, participation remains a central element in discussions about democratic environmental governance and democratic innovations (Smith, 2021; Pickering et al., 2020; Robinson & Shine 2018). A number of democratic innovations seek to widen participation to groups typically excluded from traditional processes, such as future generations or non-human actors, or widen political participation beyond participation in elections. Recent scholarship has increasingly highlighted parliaments not only as arenas of representation and accountability, but also as evolving sites of democratic participation in their own right. Participation is understood as the structured involvement of citizens and stakeholders in parliamentary decision-making processes across the policy cycle (O'Flynn, 2019). Parliamentary innovations focused on participation respond to broader pressures on democratic legitimacy and to the recognition that complex policy challenges, such as climate governance, might need new forms of public engagement to sustain trust and consent (Stirling, 2006; Pickering et al., 2020).

While the literature has focused on why individual citizens reach out to parliaments, for instance through petitions, as one important form of political participation (Hooghe et al., 2014), legislative studies scholarship has distinguished between two major strands of participation-related parliamentary innovations linking citizens and parliament (Leston-Bandeira, 2012). One concerns the rise of deliberative tools, such as citizens' assemblies or deliberative polls that have proliferated in Europe as mechanisms for reasoned public input into contested areas of legislation (OECD, 2020). When integrated with parliamentary committees, these assemblies can inform agenda-setting, clarify societal preferences, or help legislators navigate distributive conflicts. The strongest effects are found where institutional "uptake rules" require parliaments to respond formally to citizens' recommendations (Courant, 2022). In the climate domain specifically, such deliberative mini-publics have been used to surface value conflicts around transition pathways and to make long-term justifications more visible to legislators (Devaney et al., 2020; Boswell et al., 2023; Escobar & Elstub, 2025). A second set of parliamentary innovations concerns participation tools, often grouped under the umbrella of "e-parliament" reforms (Leston-Bandeira, 2007). E-petitions, public consultations and crowdsourcing platforms, many of them developed independently from parliaments, allow citizens to input claims or proposals directly into parliamentary processes at scale (Ranchordás & Voermans, 2017; Matthews, 2021; Olejnik, 2025). While these online tools expand reach and transparency, the literature also warns that digital participation is highly sensitive to platform design: without structured facilitation, it can amplify self-selection biases or favour already mobilised groups (Buzogány, 2016; Aichholzer & Rose, 2020).

In what follows, we present an Estonian case centred around the national petition platform [rahvaalgatus.ee](https://rahvaalgatus.ee) that combines deliberative and digital parliamentary innovations. The platform allows citizens and organised civil society actors to place issues directly onto the Riigikogu's agenda, generating transparency, agenda-setting power and public deliberation even where legislative



uptake remains limited. Over time, citizens' initiatives<sup>9</sup> have become an established channel of participation, including in policy areas such as the environment and climate governance where citizen mobilisation has typically preceded political action.

## 5.2 Background

After re-gaining independence from the Soviet Union in 1991, Estonia has journeyed from a poor post-communist transition society to one of the world's most developed countries. The country's transition from totalitarianism to democracy was powered by an active civil society and cultural uprising, known as the singing revolution (Bennich-Björkman, 2007). In 1991 a 60-member Constitutional Assembly was chosen to draft a new constitution, where it was also determined that the best route to stability lay in a shift away from presidentialism and toward a parliamentary form of government. The Riigikogu is the unicameral parliament of Estonia, where 101 seats are distributed via semi-closed party list proportional election system. In addition to approving legislation, the Parliament appoints high officials, including the prime minister and chief justice of the Supreme Court, and elects the president. Among its other tasks, the Riigikogu also ratifies significant foreign treaties that impose military and proprietary obligations and bring about changes in law, as well as approves the budget presented by the government as law, and monitors the executive power (Eesti Vabariigi Põhiseadus, 2020).

The constitution was ratified by popular vote in June 1992, and in September of that year Estonia held its first free and democratic elections. A new political elite was born, committed to the rule of law and democratic institutions, free market economy and catching up with Western welfare societies. On the global Human Development Report ranking, Estonia consistently ranks high among Eastern European countries, and Estonia's development strategy is reported to have a good balance between economic, social, educational and environmental policies, while leveraging innovation and maintaining social welfare (World Health Organization, ND).

The main development in the 2000s has been a series of technological innovations that today are fundamentals for Estonian digital society and are regarded as among the main factors of transformative success. A digitalized public sector and public services, as well as digital identity, e-voting and digital tools for citizen engagement in policymaking have contributed to transparent and efficient governance as well as low levels of perceived corruption (Commission, 2024; e-Estonia, 2024; e-Estonia, ND).

Estonia has been a member of the global Open Government Partnership (OGP) network since 2012 and was the co-chair of the OGP in 2022-2023. Estonia's OGP action plans have implemented nearly 60 different activities that help promote transparent, inclusive, and accountable governance practices. Although the OGP is coordinated in Estonia by the Government Office, several norms stipulate that each ministry, administrative agency, and local government is responsible for openness, transparency, and collaborative decision-making. Estonian OGP action plans and open government policies are drafted in cooperation with NGOs (Riigikantselei, 2023).

Estonia stands out as a high-performing liberal democracy—scoring strongly on core electoral and civil-liberty dimensions in global assessments—yet it lags comparatively on the *deliberative* and *participatory* components that capture the quality of public reasoning and citizen involvement beyond elections (Nord et al., 2024; Freedom House, 2025). While the number of Estonians reporting high or moderately high trust in the national government is close to the OECD average of 39%, the drop in trust since 2021 has been well above OECD average. Only 17% of Estonians feel that “people like them” have a say in what the government does and this brings light to a pronounced “voice”

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<sup>9</sup> There are several different translations for this concept in the literature, including ‘collective petitions’, ‘citizens’ proposals’, ‘collective appeals’, and ‘citizens’ initiatives’. We have used the term ‘citizens’ initiatives’ throughout this report. In Estonian the concept is called ‘kollektiivsed pöördumised’ in legislative/expert language and ‘rahvaalgatused’ in popular language.

gap: Estonians who feel that the current political system doesn't let people like them have a say tend to trust the national government 56 percentage points less than those who feel they have political voice (OECD, 2024). Political polarisation in Estonia peaked around 2019, and while polarisation can be a sign of pluralism, it poses challenges when mutual respect between different viewpoints weakens (Reiljan, 2025). This helps explain why trust is fragile despite solid institutional ratings.

Together, these patterns suggest a polity that is procedurally robust and rights-protecting but still overly centered on representative channels, with fewer pathways for everyday citizen influence and respectful argumentation in public debate. Strengthening democratic quality in Estonia depends on creating meaningful avenues for participation, fostering deliberative debate, and supporting civil society and media as arenas for democratic learning and exchange, according to Jacobson (Riigikogu, 2025).

Estonia's right to have citizens' initiatives (CI, or initiatives) and the rahvaalgatus.ee platform grew out of a public whistle-blowing scandal on party donations in 2012. For a post-communist society eager to phase out any corruption this posed a deep legitimacy crisis that opened discursive space for democratic change. From an activist-led open letter, a public expert engagement process led by the President's Office, an innovative national People's Assembly in 2013 that crowdsourced and deliberated initiatives for improving the political system, there was a shift in collective mindset regarding opening up democratic processes and renewing the social contract between ordinary citizens and its representatives in democratic institutions. The main innovative principles of this process - co-creation, inclusivity, argument-based deliberation - were institutionalised in the regulations of citizens' initiatives, which was one of the implemented proposals of the Assembly (Huss, 2024). In 2014, two legislative amendments came into force, establishing the right of CI for proposals by Estonian citizens and residents. The Riigikogu was obligated to process and reply to any initiative that had collected at least 1,000 signatures.

This crisis-driven, cooperative, pragmatic attitude met a unique context of digital development in Estonia, characterised by high trust in digital solutions and a mature digital identity infrastructure. Paradoxically, other government-led e-participation attempts had stumbled despite the success of e-governance and e-voting (Vooglaid & Randma-Liiv, 2022). The launch of the civic tech platform rahvaalgatus.ee in 2016 supplied the missing technical infrastructure needed to implement citizens' initiatives: a secure digital mass-signing infrastructure and an auditable hand-off into parliamentary proceedings (Saar, et al., 2024; Pallo, 2023).

Looking back, the thinking around these developments as a democratic innovation remained ambivalent: a history of multiple failed digital participation portals, split ownership between the Estonian Cooperation Assembly (platform) and Parliament office (procedure), ad hoc financing of the increasingly popular platform, minimal regulation on and thin capacity for feedback on initiatives reflected a cautious, iterative mindset (Vooglaid & Randma-Liiv, 2022; Eesti Koostöö Kogu, 2024).

### 5.3 Our focus

Our focus is on describing the institutionalisation of citizens' initiatives as the most influential democratic innovation that has been implemented by the Estonian Parliament, the Riigikogu. Methodologically, this case study is based mainly on secondary data, including relevant documents, study reports, websites, databases, media resources, and video materials, on citizens' initiatives and their processing in the parliament. These materials help us understand the evolution and relevant context of citizens' initiative as a participatory innovation that has its roots in 2012.

To supplement the secondary data, 3 semi-structured interviews were conducted to understand the operations, function, impact and possible openings for further innovation of citizens' initiatives. Interviews also helped describe relevant context for analysing democratic innovations in the parliament. Interviewees included: a young and active member of the parliament and a coalition

party, with specialisation on climate and environmental policies (Interview #3); an experienced adviser and head of parliamentary committee secretariat at the Chancellery of Riigikogu (Interview #2); and an expert from Estonian Cooperation Assembly administering the citizens' initiative platform rahvaalatus.ee (Interview #1).

The analysis covered the following research questions:

1. How have citizens' initiatives been institutionalised in the parliamentary processes and everyday practices of participation?
2. What is the nature of impact of citizens' initiatives as a democratic innovation, and which factors hinder or promote their impact?
3. What are possible openings for further innovation to arise from the potential impact of citizens' initiatives?
4. How are democratic innovations and the role of the parliament perceived by the parliamentary officials and representatives?

## 5.4 Findings

### 5.4.1 The essence and timeline of innovation

Estonia's citizens' initiative pathway crystallised from the 2012 civic protests expressed dissatisfaction with the political system, and has been later routinised within parliamentary practice, while a presidency-founded Cooperation Assembly operationalised participation through digital rahvaalatus.ee platform. Table 1 is an overview of the developmental timeline of citizens' initiatives, giving a snapshot of context to analyse its impacts.

### 5.4.2. Impacts of the Citizens' Initiative mechanism

The broader impacts can be found in increased parliamentary transparency, lowered threshold for public participation, trust and satisfaction with democracy (Saar et al., 2024). We found through our data analysis that there have been mainly instrumental and procedural impacts of the mechanism on the level of representative institutions. Some aspects of these two types of impacts were mentioned by all three interviewees.

#### The design of regulations and implementing practice

Compared to the Finnish citizens' initiative regulations,<sup>10</sup> Estonia's regulation has a lower-threshold, is broader in form, is more co-creative, is more time-bound once in parliament, and has tighter real-time traceability. The threshold of 1,000 signatures (approximately 0.1% of electorate) is very low, both citizens and permanent residents 16 and older may initiate and sign, and organisations may become supporting signatories.

The use of citizens' initiatives has become widespread, and the number of initiatives and signatories is constantly growing thanks to these very liberal thresholds. It has activated people from wider social backgrounds to participate and have their voices heard. There is a shared understanding amongst experts, that this threshold should not be changed (Interview #1). The first petitions were initiated by individuals connected to political parties, the parties themselves, and the biggest NGOs. While this practice is seen as hijacking the citizens platform, and casts doubt on initiatives when they are discussed in the Parliament, there is no discussion on setting rules to stop this practice (Interview #3).

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<sup>10</sup> The Citizens' Initiative Act of Finland entered into force on 1 March 2012. A minimum of 50,000 Finnish citizens of voting age can submit a proposal for legislation to the Parliament of Finland. Statements of support from signatories may be collected electronically or in paper form. The Ministry of Justice, Finland has set up an online system to collect statements of support. A self-management system may also be used subject to certification by the Finnish Communications Regulatory Authority (Ficora). A joint report by the Estonian Cooperation Assembly and SITRA (Saar et al., 2024) describes the citizens' initiative mechanism and its impacts in detail.

**Table 1.** Overview of developments

Timeline	Overview of developments
2012–2013	<b>The rise of the People's Assembly and participatory democracy.</b> The First Estonian National Citizens' Assembly on citizen engagement and political parties convened in 2013. After 350 people participated over one day of deliberations, President Toomas Hendrik Ilves presented the parliament with 15 proposals agreed upon by the citizens' assembly.
2014	<b>Creation of a legal framework.</b> As a result of the first citizens' assembly, amendments to the law entered into force in 2014 obligating the Parliament to consider petitions submitted by Estonians with at least 1,000 signatures from Estonian residents aged 16 and older (Riigi Teataja, 2014a), and setting the rules for proceedings on citizens' initiatives in Riigikogu (Riigi Teataja, 2014b).
2015–2015	<b>Proof of concept: launching the People's Initiative Platform Rahvaalgatus.ee.</b> The launch of rahvaalgatus.ee in 2016 marked an important new age of participation fit for a digital nation. This platform for monitoring the drafting, submission and processing of citizens' initiatives to the parliament was set up under the Estonian Cooperation Assembly in cooperation with civic tech non-governmental organisation (NGO) Citizen OS, Let's Do It Foundation and the Chancellery of the Parliament. This platform was a national commitment in the Estonian Open Government Partnership Action Plan 2014-2016, the implementation of which was overseen by the State Chancellery.
2016–2021	<p><b>Popularization and user-friendliness.</b> The very first citizens' initiative was on the environmental topic of protecting the Siberian flying squirrel population in Estonian forests. Rahvaalgatus.ee becomes a transparent and secure public participation mechanism, which citizens use regularly to drive issues onto the parliament's agenda. In 2016 six petitions were sent to the Parliament with over 11,000 signatures. In 2021 there were 79 petitions with over 117,000 signatures.</p> <p><b>Expansion of the legal framework to the local level.</b> At the national level, initiatives require at least 1,000 authenticated signatures from permanent residents aged 16+; at the local level the rule is 1% of eligible residents (and a minimum of five initiators), establishing parallel, legally grounded channels for participation at different levels of government (Riigi Teataja, 1993). In the first year, 15 local initiatives were sent to municipalities.</p>
2022–2025	<p><b>Impact and sustainability.</b> The number of signatures collected yearly on Rahvaalgatus.ee surpassed the number of electronic votes cast in national elections. In the 2023 parliamentary elections, 312,181 votes were cast electronically. In the same year, citizens provided 289,496 digital signatures on Rahvaalgatus.ee to support CIs addressed to the parliament (in addition to 25,076 signatures supporting local citizens' initiatives). It becomes apparent that citizens' initiatives react to elections and polarising topics in society (Saar, et.al, 2024).</p> <p>While the public is using the platform in greater numbers and with more impact, operational duality and financial instability pose severe sustainability risks. Unlike the similar Finnish platform, in Estonia there is no interest within government institutions to take on responsibility for operating the platform. Operations depend on private donations (approx. €16,000 per year) and <i>ad hoc</i> state budget allocations (Eesti Koostöö kogu, 2024).</p>

There has been discussion, however, that citizens' initiatives with larger support need distinguished procedure. For example, 10,000, 25,000, 50,000, or 100,000 signatures are a clearly different message by the public and should be processed with more accountability than current regulations demand (Saar et al., 2024; Riigikogu, 2024). For a member of parliament it becomes a complex dilemma to process a citizens' initiative with nearly 100,000 signatures, knowing for example that the government policy will not be changed due to the initiative. There are no regulations to handle this situation in the parliamentary commission, to be more accountable to the will of the populus (Interview #3).

The citizens' initiative in Estonia may propose changes to legislation or improvements to community life, simply by describing the situation that is not satisfactory and providing a solution with supportive arguments. This also creates a very low threshold for use, for example compared to the Finnish citizens' initiative, where initiatives are required to be draft legislative proposals (a bill) with legal arguments (Saar et al. 2024). Together with a low requirement of signatures needed, this results in an inconsistent and varied quality of Estonian citizens' initiatives (Interview #1, Interview #2). This simplicity is valued, because it is an open pathway for the citizens to have their voice heard, and parliament members see this as one of the most important functions of this mechanism: to become informed about societal sentiments and have a regular opportunity to hear from everyday people (Interviews #2, #3). The platform functions as a societal "vent" and a venue where diverse viewpoints meet, lowering the threshold to participate between elections and supporting democratic deliberation even when outcomes are not legislative (Saar et al. 2024).

The Estonian platform has a built-in, mandatory minimum 3-day co-creation phase to delay ill-considered initiatives going public, and also to encourage public engagement in drafting initiatives. The Estonian platform relies on the terms of use and does not review nor moderate initiatives systematically (Saar et al., 2024). After years of discussions, it is still the prevailing opinion that the rahvaalgatus.ee platform should not monitor or regulate the quality of initiatives, instead it should only be a digital system to submit the initiatives. However, the Estonian Cooperation Assembly offers consultation to anyone who needs help with starting a discussion on the platform. This consultation service, however, is not budgeted, even though it is an important additional mechanism to support civic capacity building to make the most of CI mechanism (Interviews #1, #2).

Due to the rahvaalgatus.ee platform's secure setup, all initiative founders and signators will get information on the initiative up until it is discussed in Parliamentary Commission hearings and an official decision is made (Saar et al., 2024). The parliamentary handling of citizens' initiatives is clear, time-bound, and the law requires a decision and reply to the initiative, making the process theoretically transparent and easy to monitor for the public. When conducting proceedings on the initiative, the committee may decide to: Initiate a bill, draft resolution or plenary deliberation of a "matter of significant national importance"; Hold a public sitting; Transmit to other competent institution; Transmit to government; Resolve by "other" (e.g. non-legislative) means; or Reject (Riigi Teataja, 2014b). In practice, mostly the decision is resolved by "other" means. However this is often done in a way that is not transparent. The secretariat officials in Riigikogu are planning to form a working group to analyse the different approaches of making a decision on initiatives, to decide on whether this needs to be regulated differently (Interview #2). There is no procedure nor capacity to systematically create a more detailed overview of where the initiative moved, who and if still is processing it (Interview #1).

One of the main tasks of the Riigikogu is to supervise the activities of the executive branch, i.e. parliamentary control. In that sense, the most influential decision that a committee can make is to initiate a plenary deliberation of a "matter of significant national importance" based on a citizens' initiative (Interview #3). The practice in commissions has clarified that, after discussing an initiative, it is not enough to formally acknowledge the decision in meeting minutes, but there needs to be a separate reply letter addressed to the initiators of the initiative. While this letter is mainly composed by the supporting secretariat of the commission, this is an important accountability check in the whole process. The practice differs, however, in how detailed the reply letters are (Interview #2).

The reply letter becomes open data and moves automatically to the rahvaalgatus.ee platform and to the email-boxes of around 300 people, further amplifying the transparency of parliamentary work (Interview #1).

Several possible needs emerged that might require legislative changes. Although the platform is technically accessible, its use largely depends on informed citizens, active associations, ad hoc budget allocations each year, OGP co-operation projects, and other projects initiated by the Cooperation Assembly and its network. Although the innovations so far seem to be lacking in accountability and supportive mechanisms, overall there is a shared understanding among the interviewees that today there is no pressing need to change the regulations. Furthermore, initiating a change in the enacting legislation is seen as being too difficult politically (Interviews #1, #2).

### **Societal effects ignited by the new mechanism**

The data analysed for this case study reveals notable impacts on the wider public. All together since the beginning, over 905 discussions have been posted (the first stage on the platform), 701 initiatives have been published, over 1.04 million signatures given, 315 initiatives sent out to the parliament or local municipality to be processed, and 166 petitions have been submitted to the Parliament (Eesti Koostöö Kogu, NDa). Initiatives' outcomes are difficult to track, since the regulation does not account for what happens after the commission conducts a hearing on the initiative. In cooperation with experts, Cooperation Assembly's ad hoc studies have found that the results are mixed. Five to ten percent of initiatives have been the subject of a direct legislative decision after a parliamentary commission hearing, but about one third of the initiatives have been rejected, and the remaining initiatives have been "resolved by other means" in the public administration, or their fate is unclear. Many matters that fall under executive competence are redirected to ministries, underscoring agenda-setting effects even where no act is drafted (Eesti Koostöö Kogu, 2024). There is no official procedure for follow-up and parliamentary accountability (Interview #1, #2), follow-up depends on each commission lead keeping track of the initiatives or not, according to their own opinion of its' importance (Interview #3).

Because rahvaalgatus.ee protects personal data, its public statistics track numbers of signatures (not unique users), so platform analytics cannot show how many distinct people participate, or their profiles. The latest omnibus results indicate that 15% of Estonians signed a citizens' initiative in the past year; in total, 27% have used this right and 34% are ready to do so, with further potential, as 43% of current non-participants say they would be willing to participate (Eesti koostöö Kogu, NDb). Moreover, 44% view citizens' initiatives as a real opportunity to have a say in the political system, and 10% report more active involvement, 1% as initiators and 9% contributing in other ways (e.g., sharing, donating, speaking up, collecting paper signatures). These attitudes matter in a context where only 17% of Estonians feel the political system lets "people like them" have a say, according to the OECD's (2024) trust survey.

### **The political impact of Citizens' Initiatives**

Issue salience is reflected in the number of citizens' initiatives each year and the topics they cover: 2023 was a record year with over 300,000 signatures overall, including approximately 65,500 on the anti-car-tax petition, while environment and social policy themes dominate the flow of submissions to committees. The data for 2025 is not public yet, but a new record for the number of users was made when an initiative to reduce the VAT rate on food products gathered approximately 98,600 signatures and sparked a very active public discussion nation-wide.

Political impacts of citizens' initiatives appeared in our data in several ways. Firstly, CIs have sparked discussion on topics that would have remained underrepresented without the initiative system (Christensen et al. 2017), for example large-value questions that no political party or parliamentary group dares to place on the agenda, or take a public stand for or against. The Estonian initiatives data show that participation in citizens' initiatives is activated by elections. This happens either via



the initiation of new petitions, or an increase in signatures of petitions that are already available, following an election. This is an interesting phenomenon, that needs further research (Interview #1). In Estonia, there is also a peak in CI activity after the publication of government programmes (Saar et al., 2024). Parliamentary speaker Lauri Hussar said on October 18th, 2024,

*"Citizens' Initiatives have always been ahead of time. They have functioned as an icebreaker ship, opening up the pathway for new understandings and policies. This has been the case with the marital equality initiative and fur farms prohibition initiative."* (Riigikogu, 2024)

Even though it is possible to initiate a legislative process via a CI, this direct impact seems not to be an important result of citizens' initiatives. Citizens' initiatives impact on policymaking and the legislature has been, and is seen to be, mostly indirect (Saar et al., 2024). The impacts become apparent later, after the procedure has already officially been decided and the process is complete. Citizens' initiatives have opened up public discussion, brought new narratives to light (Interview #1), or initiated cultural change via citizens getting more and better information, obtaining training on how to hold deliberations, and connecting more widely with diverse counterparts (Interview #3, #2). The marital equality initiative that the above quote refers to is an example of how an initiative that gained great public support, with 35,000 signatures, did not result directly in policy change. However, the change advocated in the initiative did come into effect almost four years later. The discussion of marriage equality polarized the society for years, and looking back the CI with thousands of signatures is seen as crucial element in making a narrative change happen (Interviews #1, #2).

Another example is the prohibition of fur farms in Estonia. The NGO-led initiative became public on April 12th, 2020, gained over 6,100 signatures, and was sent to the parliament and processed by the rural affairs committee, with a due date for a decision in September 2020. In this case however, 23 parliamentary members reacted quickly to the initiative, and the public discussion it created, and in June 2020 initiated a draft bill to speed up the legislative process. Ultimately, changes in the law were ratified on July 1st, 2021 (Eesti Koostöö Kogu, 2019).

A further example is the citizens' initiative "Estonia needs an exit strategy from oil shale energy (PÕXIT)", which was the first CI to be formally and publicly discussed in a Riigikogu plenary session. The CI "Climate Neutral Estonia by 2035" likewise shaped the parliamentary agenda: it surpassed the signature threshold (approximately 2,800) within a few weeks and was submitted to the Riigikogu, after which the Environment Committee held six meetings from October 2020 (some public) and sought opinions from the Social Affairs, Rural Affairs and Finance Committees. In January 2020, the Environment Committee proposed that the Board of the Parliament treat the initiative as an issue of significant national importance. Following COVID-related delays, the plenary debate occurred in 2021 (Saar et al., 2024). This sequence—time for deliberation, cross-committee engagement, questioning officials—matches what initiators view as a blueprint for meaningful handling of CIs. While the initiative did not trigger major immediate policy change, it built NGO movements and participation capacity to keep climate goals high on the agenda, consistent with findings that Estonian CIs can influence public debate and parliamentary attention beyond direct legal change (Interview #1, Interview #3).

Second, the CI mechanism has brought an important pathway for non-governmental organisations to be heard, as the data analysed for this case study reveals that a third of initiatives are initiated by NGOs. The active use and cooperation with NGOs has helped develop the user-friendliness of the platform, as well as highlighting a need for supportive consultations (Interview #1).

Third, the online platform Rahvaalgatus.ee encourages collaboration through different built-in features: by allowing users to comment on and discuss each other's initiatives, by having a mandatory minimum 3-day co-creation phase, and by allowing different organisations to officially join an initiative after it has been published to form stronger coalitions and campaigns. When used by initiators, these features have resulted in more comprehensive and well-rounded initiatives, as



users can build on each other's ideas and address potential shortcomings, while also finding each other and merging similar initiatives into one. This element of deliberation is innovative compared to other e-participation platforms, but could be further developed (Interview #1). Still we see opposing initiatives on the same topic arising which are not merged. In addition, the parliament does not have a good procedure how to process and decide on the initiatives (Interview #1, #2, #3). There is a need for additional mechanisms and decisions that the parliament could use, for example deciding to transmit the issue to a mini-public for parliamentary consultation (Interview #1).

Fourth, in the opinion of some initiators of citizens' initiatives, the broader impact of the initiatives is primarily reflected in shaping public debates and bringing certain issues into the political spotlight. Rahvaalgatus.ee is an important tool for citizens, enabling them to participate in policy-making and drawing attention to important issues, while also increasing public awareness and social engagement (Eesti Koostöö Kogu, 2024). NGOs are planning for citizens initiative campaigns as part of their advocacy plans to mobilize the public, to gain attention on the media and possible partners, and to gain legitimate and transparent access into parliamentary processes (interview #1). In today's attention economy, this effect of the platform is important. Following record breaking numbers of initiatives and signatories in 2024, and following recent very popular initiatives that have gathered more than 65,000 signatures (with one close to gaining 100,000 signatures), the mainstream media is starting to pay attention and give more coverage to different initiatives (Interview #1). This, on its own, potentially brings pressure for innovating the regulations to keep up with societal expectations and demands.

Fifth, the CI mechanism has created a new societal narrative regarding the relationship between the citizens and their representatives, opening up possibilities for addressing the need for more political accountability. 70% of people surveyed believe that taking popular initiatives seriously will increase the credibility of a politician. Only 3.6% think the opposite. These were the impacts hoped for, by the public and experts, from the discussions of the Citizens' Assembly of 2013.

And finally, regarding climate change, an analysis of the documents suggests that climate policy has entered Estonian politics through two external sources of pressure: EU directives, on the one hand, and CI and the work of interest groups, on the other. Thus the citizens' initiative portal has not only activated citizens but has become a channel for CSOs and interest groups to introduce new narratives on climate change and policies.

## 5.6 Lessons Learned

Rahvaalgatus.ee is a participatory democracy mechanism that has raised awareness among citizens and policymakers that individuals can and should participate in the political decision-making process between elections. Since the opening of the rahvaalgatus.ee platform in 2016, the exercising of the right of citizens' initiative has grown exponentially, even though the right itself has been in the Estonian constitution since 1992. It has become an irreplaceable pathway for citizens to participate in policymaking and parliamentary processes. Since the threshold has been set low, and the use of open data makes the platform technically robust, it is accessible for social groups who do not have the knowledge, capacity, networks, nor finances to participate through other means. The case of the Estonian citizens initiative mechanism highlights the importance of setting new rules and processes through legislation to initiate and sustain the further development of democratic innovations.

However, the establishment of new participation mechanisms requires more than just norms and technical solutions, political and civil society capacity are also necessary. The upward trend in the submission of citizens' initiatives via the rahvaalgatus.ee platform points to the need to strengthen institutional readiness for meaningful participation. There are no regulatory mechanisms in place to address the need for capacity and capability building on the governmental or non-governmental level, even though it has been discussed for several years.

Although there have been several technological innovations and investments in Estonian Parliament (Interview #2), there haven't been other democratic innovations of participation to date after the

Citizen Initiative Act and rahvaalgatus.ee portal were established. The high level of public scrutiny and criticism and low levels of public trust limit Riigikogu's ability to improve its capabilities and efficiency, including in the area of innovation.

The case study examined various types of impacts of citizens' initiative mechanisms and initiatives specifically on democratic participation. Regulations and digital platforms create an infrastructure for citizens' participation. In the 11 years of practice, both governmental and nongovernmental actors have gained knowledge and skills through everyday practice. Also, several citizens' initiatives have resulted in the indirect effect of civic capacity building. And finally, there is evidence of initiatives being "ahead of their" time, as a Parliamentary Speaker put it (Riigikogu, 2024), meaning that they have had impact on public narratives on different themes, including climate and environmental issues. However, the direct impact of citizens' initiatives on the legislature has been low.

## 6. Case Study Three: Ireland

*"[T]here is a need for a new governance model, that puts coordinated climate action at the centre of Government policy-making and expenditure, underpinned by a clear statutory framework. This should include an all of government approach to climate action with enhanced accountability of Government and public bodies to the Houses of the Oireachtas."* Report of the Joint Oireachtas Committee on Climate Action, p. 8.

This third case study examines accountability of government and departmental civil servants to implementation of the Climate Action and Low Carbon Development (Amendment) Act 2021 in Ireland ("Climate Act"). Enhancing accountability, as the above quote demonstrates, was one of the major drivers of revisions to the law in 2021. In this case study, we ask if the enhanced accountability mechanisms that were included by the Irish parliament in those revisions were effective, and what that can tell us about the interplay of accountability, climate action, and national parliaments.

### 6.1 Accountability

Accountability is upheld as a goal for governance around the world, and is a core concept of democracy (Bovens, 2010; Brawley-Chesworth et al., 2024). There are different definitions of accountability across the academic literature; for this report we are following the definition used by Bovens (2007, p. 450), who defines accountability as "a relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences". Having said that, we acknowledge that more expansive definitions are used by many, and some of the subjects of this research use the term to indicate a broader concept, where accountability means any process that makes someone 'account for' their actions, or be held to ethical standards of behaviour (Bovens, 2010). To understand accountability in any given context, one needs to know who is accountable, to whom, for what, and why (Bovens, 2007).

For analytical purposes, we are starting with Romzek and Dubnick's (1987) seminal work outlining four types of accountability within the public sector: bureaucratic (also called administrative), professional, legal, and political. We add to this list a fifth type used by Bovens (2007): social accountability. Descriptions of these five are shown in Table 2. It is important to note that social accountability does not fulfil all the requirements of accountability as set out in the definition. Specifically, social accountability does not usually include the ability to impose sanctions, at least not directly. However, it is included here because indirect sanctioning through negative publicity can occur (Bovens, 2007).

This type of indirect, or unofficial, accountability can be important when examining the extent to which actors feel accountable (Fox, 2015). Questions about the perception of accountability can be especially important in public organisations where civil servants may feel accountable to the public good or professional standards apart from what is in law or their official job duties (Rainey, 2014; Bozeman & Su, 2015). This concept is important for the Irish case study, because perceptions of accountability do not always respond as expected to accountability mechanisms that are put in place by governments and legislatures (Han & Perry, 2020; Overman & Schillemans, 2022).

**Table 2.** Accountability types

Type	Description	Who or what the actor is accountable to
<b>Bureaucratic</b>	Hierarchical accountability within an organisation.	One's supervisor or organisational rules
<b>Professional</b>	Accountability of people working in professions (such as engineering, medicine, accounting, etc.) to their profession's expectations, standards and practices.	Professional licensing standards, professional peers
<b>Legal</b>	Accountability based on "detailed legal standards, prescribed by civil, penal or administrative statutes, or precedent" (Bovens, 2007, p. 456).	Courts, laws
<b>Political</b>	Accountability that flows in the opposite direction from how power is granted in a democracy: civil servants are accountable to their minister, ministers are accountable to their parliament, and parliamentarians are accountable to the electorate.	The Parliament, Prime Minister, and/or President, political parties, voters, media
<b>Social</b>	Accountability to public opinion and citizen voice that operate outside of the electoral system.	Interest Groups, Charities, Oversight bodies, citizen panels

Source: Own, based on Romzek & Dubnick, 1987; Bovens, 2007; Fox, 2015.

## 6.2 Background

This case study looks at accountability mechanisms put into place by the Oireachtas (Irish parliament) in 2021 as amendments to the 2015 Climate Act. To understand the case study, some context about governance and climate action in Ireland is helpful.

First, Ireland has a Westminster-style parliament, that differs from the ideal type because of the presence of some consensus-like characteristics such as coalition governments and a proportional representative electoral system. The Irish parliament is widely believed to be weaker than most in Europe due to the concentration of power and authority in government, made up of the Taoiseach (the Irish Prime Minister) and ministers, as outlined in the constitution and parliamentary practices (Lynch & MacCarthaigh, 2023). Importantly, when it comes to the executive functions of governance, the performance of departments and the civil servants within them is held accountable through the appropriate minister. While the Oireachtas can require secretaries-general (the top civil servants in each department) to appear before committees, sanctioning can only happen through the appropriate minister, who must be a member of parliament (MacCarthaigh, 2005; O'Malley & Martin, 2023).

Second, Ireland had long been viewed by many as a laggard on climate action (Torney & O'Gorman, 2019). The 2015 Climate Act was widely criticised as inadequate, with weak accountability mechanisms (Joint Committee on Climate Action, 2019; O'Gorman, 2020). The 2015 Climate Act was not unique in Ireland in regard to the weakness of accountability mechanisms, as studies have shown accountability to be a challenge in Ireland, and repeated calls for reform have failed to solve this problem (MacCarthaigh, 2005; MacCarthaigh & Boyle, 2014; Lynch, 2023). These calls for reform are due to widespread perceptions that Ireland often has a significant gap between policy ambition and progress on the ground, including actions for climate change (Thorne et al., 2023). Therefore, Ireland serves as an interesting case study to examine whether accountability mechanisms can help advance climate action in a country known for its' climate action implementation gap prior to their enactment.

## 6.3 Our focus

In response to increased public attention to climate change, increasing discussion of climate in the Oireachtas in 2016 (as indicated in Figure 1), and Ireland's status as a laggard, the Oireachtas chose climate change as one of the topics to be discussed by a Citizens' Assembly that was run from 2016-2018. The climate-related recommendations from this Assembly were more radical and transformative than had been expected, and much more ambitious than what was being achieved by the Government at the time (Torney et al., 2020). Due to the results of the Assembly, public pressure, and a statement by then-Taoiseach Leo Varadkar in 2018 regarding Ireland's inadequate action on climate, a Joint Oireachtas Committee for Climate Action (JOCCA) was established to consider the Assembly's recommendations and make recommendations for improvements to Ireland's climate governance (Dáil Éireann debate - Tuesday, 3 Jul 2018).

The JOCCA produced a wide-ranging set of recommendations for legislative and administrative changes to climate governance in Ireland. Among these were changes to accountability mechanisms, most significantly, the establishment of a "new Oireachtas Committee that will hold ministers and public officials, at all levels of Government, directly to account for performance on climate action" (Joint Committee on Climate Action, 2019, p. 3). Subsequent legislative changes to the Climate Act in 2021 were largely consistent with the recommendations of the JOCCA report. Some of the accountability mechanisms that were included are:

- the establishment of emission budgets and sectoral ceilings;
- consultation requirements for ministers in establishing climate action plans;
- a requirement for a minister to set out reasons if an adopted emission budget is inconsistent with the recommendations of the independent Climate Change Advisory Council (CCAC);
- a requirement for all appropriate ministers to comply with sectoral emission ceilings as far as practicable; and
- a requirement for all appropriate ministers and secretaries-general to give an account before a committee of their annual climate actions and progress.

The changes made in the 2021 amendments are not particularly innovative in the sense that they have all been used elsewhere, some for many years. However, their application to climate governance in Ireland is new, qualifying them as local innovations using the broader definition of innovation included in Section 2 of this report.

Our interest for this case study is in discovering how well these attempts to increase accountability, and therefore accelerate climate action, have worked. The specific questions we ask in this research are:

1. Did the 2021 amendments to the Irish Climate Act increase perceptions of accountability of Government ministers and civil servants to climate action?
2. What accountability mechanisms are most effective for increasing perceptions of accountability to implementation of climate action in Irish Government Departments and Agencies?

To answer the research questions, we first needed to determine which of the revisions to the Climate Act were intended to increase accountability, and answer the question of accountability of whom, to whom, and for what. To do this, we reviewed the transcripts from the JOCCA hearings where the committee discussed the recommendations in the 2018 Report of the Citizens' Assembly on Climate Change and heard from members of civil society, academia, and civil servants and ministers from Government Departments and Agencies between September 2018 and January 2019 (The Citizens' Assembly, 2018; Joint Committee on Climate Action, 2019). We also reviewed transcripts of the JOCCA during pre-legislative scrutiny from October 2020 through June 2021. We refer to both of these as the "Committee" in the analysis below. Added to these were two documents: the 2019

JOCCA report and the text of the 2021 Climate Act amendments.

Second, in order to understand how those amendments changed the accountability landscape around climate action and perceptions of accountability, we conducted 13 interviews, consisting of individuals from civil society (3), the civil service (7), and elected officials (3). These individuals were chosen based on their experience with implementation or oversight of implementation of elements of the climate law between 2021 and 2025. Interviewees were asked about their perceptions of whether government ministers and civil servants feel accountable to implementing climate actions, their opinions about the effectiveness of the amendments to the Climate Act in increasing accountability, what (if any) mechanisms within the amendments have been most effective in increasing accountability, and what they would do to increase accountability if given the chance.

The data was manually coded for the five accountability types shown in Table 1 using NVivo. Further sub-codes were established during coding from the emerging themes within the data. The coding for the Committee transcripts<sup>11</sup> and interviews were then compared to discover differences and similarities between Committee intentions and current perceptions around accountability.

## 6.4 Findings

**Table 3.** Summary of the expressed intentions of the committee

Type	Summary of discussions
<b>Bureaucratic</b>	<ul style="list-style-type: none"> <li>Committee members said this should not be the primary accountability type.</li> <li>They discussed a need for a more joined-up all-of-government action; a much-discussed option was establishment of a coordinating committee in the Department of the Taoiseach.</li> </ul>
<b>Professional</b>	<ul style="list-style-type: none"> <li>Not discussed by the committee, or included in the JOCCA report.</li> </ul>
<b>Legal</b>	<ul style="list-style-type: none"> <li>There were two potential conflicting sentiments: some discussed the need to allow court challenges in order to keep future Governments accountable, others discussed the need to reduce the likelihood of future lawsuits.</li> <li>Some committee members expressed that there is a danger that Ireland will not meet external (EU, International) legal obligations.</li> </ul>
<b>Political</b>	<ul style="list-style-type: none"> <li>Most discussed of the types and an agreement that this should be the primary type of accountability in the amendments.</li> <li>Some promoted tying the hands of future governments to force climate action.</li> <li>Others promoted a softer stance whereby future Governments and Taoisigh<sup>12</sup> should be more accountable to the Oireachtas.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>There were differences of opinion on establishing a new, independent Advisory Committee that would have the power to bring the Government to court.</li> </ul>

### 6.4.1 Expressed intentions of the committee

In this subsection, the results of the analysis of the committee materials, including the discussions prior to the JOCCA report publication, the report itself, and discussions during pre-legislative scrutiny meetings. Table 3 summarises how the different types of accountability were discussed by the committee.

When the Committee discussed accountability, they focused on legal, political, and social accountability. These discussions influenced what was included in the 2021 amendments to the

<sup>11</sup> Only the transcriptions of statements made by elected Committee members were coded, not statements made by academics, members of civil society or civil servants. This was done to ensure the coded data included only the intentions of the members of the Oireachtas, and not others who spoke to the Committee.

<sup>12</sup> Taoisigh is the plural form of Taoiseach (the Irish Prime Minister)

Climate Act. There were no changes included in the amendments for professional accountability and it was not discussed by the committee. A summary of the discussions and what, if any, changes were made to the Act in the 2021 amendments follow.

Regarding bureaucratic accountability, members of the Committee talked about needing a more joined-up all-of-government approach to climate action and discussed mechanisms for ensuring departments and agencies would coordinate and collaborate better. They discussed the potential for setting up a coordinating committee under the Department of the Taoiseach. However, they also talked about bureaucratic mechanisms not being the appropriate primary location of accountability. There was a recognition among committee members that the political realm was where accountability ultimately needed to reside. The 2021 amendments did not include any changes aimed at increasing bureaucratic accountability.

When discussing legal accountability, there were three main points of discussion. First, some stated that the law needed to be strengthened so that the courts could hold the Government accountable. During the pre-legislative scrutiny sessions, Minister of State Ossian Smyth stated that *"It is a statutory obligation being created and it is almost certainly justiciable. It is something we have certainly considered to ensure the targets are justiciable and enforceable."* (9 June 2021 hearing). Conversely, there were discussions of the level of detail to be included in the law such that lawsuits were less likely to occur. These discussions were around whether vagueness in the law, while perhaps increasing flexibility of implementation, could open the Government up to lawsuits by third parties. Inherent in this discussion was a desire to reduce the possibility of legal action. A third strand of the discussions was about the danger of not meeting legal obligations, and what that would mean for Ireland. This conversation often referred to EU or International obligations, and penalties for not meeting them. In the 2021 amendments, legal accountability was addressed throughout the document through precisely chosen language, such as use of 'shall' versus 'may'.

Political accountability was the most discussed of the types. Several members of the Committee spoke about needing to rise above politics and tie the hands of future governments, while others took a slightly softer stance by suggesting that future Governments and Taoisigh should be made to be more accountable to the Oireachtas and to the people of Ireland. The JOCCA report recommended, "A Standing Committee on Climate Action of both Houses of the Oireachtas will constitute the main accountability mechanism" (page 9). This is reflected in the 2021 amendments, most directly in 14A.(2), which was amended to state "Each Minister of the Government shall, in each year after the publication of the annual report and the Agency's reports, at the written request of a joint committee, attend before such committee to give an account of the matters specified in subsection (3)".

Social accountability discussions in the Committee centred around the Citizens' Assembly recommendations for an independent advisory body that would "be resourced appropriately, operate in an open and transparent manner, and be given a broad range of new functions and powers in legislation" (page 20). Some committee members wanted to follow the Citizens' Assembly recommendation to allow this body to take the State to court if the climate obligations were not being met. There was both support and opposition on the committee to this idea. In the JOCCA recommendations and in the 2021 amendments to the Climate Law, the CCAC membership and their oversight role was strengthened such that Ministers can be compelled to 'comply or explain' their adherence to the sectoral ceilings, but no power to pursue Court action was granted.



### 6.4.2 Interviewee perceptions of accountability effectiveness

This subsection shows the results from the interviews conducted in 2025. Summaries of the findings for each type of accountability are shown in Table 4.

**Table 4.** Summary of Interviewee perceptions of accountability effectiveness

Type	Summary of interviews
<b>Bureaucratic</b>	<ul style="list-style-type: none"> <li>Interviewees said the structure put in place in 2021 is good, but implementation is still slow and challenging.</li> <li>Sometimes accountability and authority are not aligned (ex: Housing Minister accountable for housing energy efficiency, but retrofit grants in a different department: the Department of Climate, Energy &amp; the Environment).</li> </ul>
<b>Professional</b>	<ul style="list-style-type: none"> <li>Climate action less prioritised than 'traditional concerns' in Departments/Agencies with sectoral ceilings (ex: Agriculture, Housing, Health)</li> <li>Younger civil servants tend to have more professional orientation toward climate action</li> <li>Civil servants often feel accountable to professional opinions of what is 'achievable' or 'reasonable' rather than sectoral ceilings.</li> </ul>
<b>Legal</b>	<ul style="list-style-type: none"> <li>'The law' is highly valued, but in practice political considerations are thought to drive day-to-day decisions.</li> </ul>
<b>Political</b>	<ul style="list-style-type: none"> <li>Interviewees felt that political accountability to the Government is the primary mechanism</li> <li>Civil servants said accountability is to the minister, but also to the public</li> <li>Interviewees believed that, to ministers, accountability is to the Government and the public. The Oireachtas and Committees were viewed as secondary because they can cause embarrassment, but do not have any real power to sanction the ministers.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>Interviewees said that the CCAC does not have any power, but their ability to question civil servants and ministers can serve an important purpose if the media picks up on their criticisms, which acts as an indirect sanctioning mechanism.</li> </ul>

Interviewees discussed all five types of accountability. When discussing bureaucratic accountability, the interviewees generally believed the structure from the 2021 Climate Act amendments were good, and did not consistently highlight any specific accountability mechanisms as being more or less important than the others. As a former elected official said (Interview #7), "*The structure's right, I would say that.*" But, it's not enough, "*(if) you fight against the department who doesn't want to do something, trust me, you go nowhere. It doesn't matter what laws you have in your place.*" Interviewees believed that implementation is still an issue and departments and agencies were not always structured appropriately for the accountability measures to work as intended. For example, some civil servants pointed out that the sectoral ceilings act on ministers and secretaries-general of departments, but sometimes the policy levers to affect change are located elsewhere in the bureaucracy or are in the hands of private actors. One example of this was in the built environment sector, where the Minister for Housing has been asked to account for housing stock energy efficiency, while retrofit grants were located in the Department of Energy and Climate. This mismatch between accountability and administrative control allows for a 'passing the buck' mentality to persist within the bureaucracy.

Professional accountability was discussed in three main ways by interviewees. First, there was a feeling that for civil servants in departments that had sectoral ceilings, the primary and traditional role of their department (i.e. health outcomes, farm sector support, increasing housing stock) was a higher priority and that accountability to climate action was secondary at best. Second, some felt that the civil service was changing to become more climate aware as younger employees were brought in with less adherence to the old way of doing things. Finally, several of the interviewees expressed that civil servants only feel accountable to making a reasonable amount of progress on

climate, not to what is in the law. There was a narrative that the carbon budgets and sectoral ceilings were being set without regard to the reality of public governance, and that in the end the civil servants could only be held to realistic and reasonable targets. As an interviewee who is a civil servant (Interview #6) said,

*"There is a big question of actually what can we get done in the time that's available ... ultimately stuff needs to get done in the real world and there are a lot of factors which are, you know, make it difficult ... I think it'll reach the point where it'll no longer appear a reasonable accountability framework."*

What was realistic and reasonable was in the hands of the civil servants themselves via their professional expertise.

Legal accountability was not perceived as being a large motivating factor by the interviewees. There was an acknowledgement that the law is very important, and ultimately civil servants responsible to it, but interviewees felt that legal frameworks are never enough since they are changeable through the political system. As one civil servant (Interview #7) said,

*"The law is the law. So that's the highest bar that you can have in the land ... I think, look, there's a clear distinction between what's signed into law by the parliament and what is a policy decision, or even you know, up to a programme for government. ... governments can change laws or bring laws to be changed to the Oireachtas."*

Interviewees believed that EU and International laws do make civil servants more likely to take actions, but many expressed that they believed the requirements are likely to be weakened, and Ireland will only be held to 'reasonable' progress (as described above). In addition, when asked if the law compelled action, interviewees felt that legal remedies would only be available after the government failed to stay within the carbon budget, which had not yet happened. Although everyone acknowledged it was inevitable that the carbon budgets would be exceeded, they felt legal accountability could only apply retroactively.

As with the Committee discussions, political accountability was viewed by interviewees as the primary, and most important type of accountability. For civil servants, this accountability flowed through the secretary-general of their department to the minister. The minister was seen as being very influential and able to set the tone for the department. Perceptions of who the minister was accountable to varied among interviewees, with most believing that ultimately, because of the large emphasis of political parties on influencing the votes of members of the Oireachtas (often referred to as the 3-whip system), the Government was where power resided. The requirement to testify and make account to the Committee was thought to potentially bring embarrassment to the Minister, but the Committee did not have any real power and the Committee members were often distracted by the headlines of the day rather than bringing real attention to climate action. A member of civil society (Interview #1) said, *"So it's certainly uncomfortable for, you know, departments to go in there [the Joint Oireachtas Committee] and have to admit that they're not making the progress that they should be making. It's uncomfortable for ministers, ... But there's no penalty per se."* Interviewees acknowledged that ultimately both ministers and civil servants were accountable to the public, but in day-to-day activities, the public was thought of as being insufficiently interested in climate action to truly drive accountability and motivate action.

Regarding social accountability, interviewees thought the CCAC was useful in an indirect way to bring media attention to climate action. But, all agreed that since they do not have any real power, they cannot hold agencies and ministers accountable. A member of civil society (Interview #4) said,

*"That bit where, for a week let's say, there's media discussion about the fact that Ireland isn't doing as well as it should be doing on climate, as it's just been pointed out by the climate change advisory committee ... That's really really important ... but it's mediated public"*

*accountability."*

The CCAC's indirect power only took effect if the media highlighted their actions and brought it to the public attention.

Most importantly, however, interviewees felt that accountability mechanisms were not generally effective for either the civil service or ministers. A civil servant (Interview #5) said, *"if accountability is the conversation, you nearly have lost. Because public service is the first bit"*. And, a former elected official said (Interview #13), *"But in practical politics, you know, this is a political problem where we have to win the argument, because you know, we might be doing the right thing but if we're thrown out by, you know, a new Trump regime, you know, we haven't won. We haven't done the right thing."* Both of these quotes illustrate the general feeling that professional and political realities are more important in the implementation of climate action than any accountability mechanism.

On the other hand, all of the various accountability mechanisms, when taken together, can cumulatively encourage action. A civil society interviewee (#4) said,

*"Ultimately, ... if the politician thinks climate action is unpopular, they won't do it. If they think they're going to have more trouble not doing it, as in the courts will be at them, the parliament will be at them, (civil society) will be at them, the advisory council will be at them, and the media will be at them, then it's more trouble not to do climate action"*.

Consistent with this quote, most of the interviewees thought accountability mechanisms were useful in some way either through motivating those who were not already motivated or personally invested in climate action, or indirectly through embarrassment or the potential for negative media coverage.

## 6.5 Lessons Learned

What does this case study tell us about the interplay of accountability and action on climate change? To answer this question, we bring the two conversations together and summarise the main differences in what the Committee discussed in comparison to the perceptions of interviewees. Starting with civil servants and accountability within the departments, the JOCCA members discussed bureaucratic accountability and the need to ensure that departments prioritised climate action and worked across government in implementation. They considered establishing cross-departmental committees and having a political accountability mechanism whereby secretaries-general would be brought to the Committee to give account of their department's actions. However, only the political accountability requirement for appearing in front of the committee made it into the 2021 Climate Act amendments. Turning to current perceptions, interviewees felt that accountability mechanisms, no matter how they are designed, are not going to serve as a primary motivation for civil servants. Interviewees said that civil servants either feel internally accountable, or they don't, and that cannot be legislated. Interviewees instead highlighted the importance of professional accountability as being very important for intrinsic motivation of the civil service, something that the committee did not discuss, and one that does not rely on any specific accountability mechanisms. In addition, bureaucratic/political accountability<sup>13</sup> through the minister in charge of the department was important in an indirect way, with interviewees expressing that a minister who prioritises climate action can provide motivation to the civil service.

For increasing accountability of ministers and the government, the committee struggled with balancing the desire of some committee members to ensure future governments could not walk away from climate commitments with ongoing democratic responsiveness to public will. The 2021 Climate Act amendments were designed to try to balance those two concerns by strengthening some

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<sup>13</sup> In Ireland, ministers of departments serve as the head of the department in a supervisory sense over the secretary-general under the doctrine of ministerial responsibility, making accountability to a minister both bureaucratic and political accountability (MacCarthaigh, 2005).

of the legal accountability language and requiring all ministers with emissions ceilings to explain any deviation from targets (a form of political accountability). In comparison, interviewees felt that, both in general and specific to the Climate Act amendments, laws and procedures were an inadequate tool when trying to ensure long-term accountability in the face of a change in political attention away from climate change. We heard that although the Irish public, and Irish lawmakers, are not against climate action, attention has been on other priorities over the past several years, so climate law implementation has suffered. Social and political accountability mechanisms such as CCAC reports and committee hearings can bring embarrassment to ministers through negative media stories, but are not considered to have enough sanctioning power to directly hold ministers accountable.

Overall, when examining all of the data from this study together, no accountability mechanisms or types stood out as being particularly effective over any of the others. What emerged as the most important elements of accountability were the cultural expectations within a department together with a combination of multiple accountability mechanisms that, when together, provide regular and frequent touchpoints to bring climate onto the political and journalistic agenda. These touchpoints could be through government reports outlining progress on climate action plan implementation, the CCAC's annual review to assess progress against Ireland's emission budgets and climate targets, committee hearings with ministers from Departments with emissions ceilings, or parliamentary questions, to name a few. This argues for an approach that does not rely heavily on any one accountability mechanism or type, but rather on the combination of professional, legal, social, and political accountability all acting together to create a 'death by 1,000 cuts' approach to making inaction more painful for a minister and civil servants than taking action on climate commitments. Even then, however, politicians ultimately feel most accountable to their role in representing today's electorate and the interests the public prioritise most highly in the short term. The accountability mechanisms included in the 2021 Climate Act amendments have not overcome the political dilemma of trying to simultaneously be responsive to the political winds while trying to act in the long-term interest.

## 7. Conclusions

This report has examined how national parliaments across the European Union have responded to the climate imperative through institutional innovation. The comparative mapping revealed substantial variation in both the adoption and design of climate governance innovations across the EU, while the three case studies have shown how different types of parliamentary innovations operate in practice. Together, these show that parliamentary innovation in climate governance is neither uniform nor straightforward, but rather reflects diverse attempts to address the inherent tension between democratic responsiveness and long-term climate commitments.

The Austrian Parliamentary Budget Office demonstrates how innovations addressing information asymmetries can evolve and adapt to incorporate climate considerations. Initially established to provide independent fiscal analysis, the *Budgetdienst* expanded into environmental and climate assessment without creating separate organisational structures or recruiting specialised staff. Instead, economists developed competence in environmental analysis, integrating climate impact assessment into routine budgetary scrutiny. This shows that parliamentary innovations do not need to be rigidly designed around fixed mandates but can respond flexibly to emerging priorities when supported by cross-party consensus and sustained commitment. Moreover, the Austrian case also demonstrates that political will and a growing institutional culture can substitute for actual statutory authority, at least temporarily, though such arrangements may remain vulnerable to shifts in political consensus.

The Estonian experience with the dedicated online platform shows innovations expanding participation and deliberation beyond traditional electoral channels. By lowering barriers to citizen engagement through digital infrastructure, the Estonian parliament created new pathways for climate issues to enter parliamentary deliberation. The platform's success in generating high volumes of signatures and public debate demonstrates genuine citizen interest in climate governance, while its limitations reveal the inherent challenges of translating participation into policy impact. Notably for climate democracy across Europe, the minimal procedural requirements for processing citizen initiatives, combined with unclear accountability for follow-up, led to many initiatives simply disappearing into administrative processes without traceable outcomes. The Estonian case study underscores that the gap between participatory input and binding decision-making remains a persistent challenge for participatory innovations seeking to complement representative democracy.

Finally, the Irish accountability mechanisms embedded in the 2021 Climate Act amendments exemplify innovations responding to oversight deficits through enhanced monitoring and implementation capacity. Ireland's approach combined emission budgets and sectoral ceilings with multiple accountability types including legal obligations, political scrutiny through parliamentary committees, and an enhanced role for the independent Climate Change Advisory Council to create what interviewees described as cumulative pressure on ministers and civil servants. The case also reveals the tension between representation and accountability in climate governance: politicians felt their primary accountability was to current electorates and near-future elections rather than long-term climate commitments, therefore showing the enduring challenge of intergenerational justice in democratic systems across Europe. The Parliament deliberately chose to maintain the CCAC as advisory only, prioritising the legislature's representative role over binding future governments through expert authority with legal sanctioning power. Yet the Irish experience demonstrates that accountability mechanisms can sometimes work indirectly even when they fail directly. While no single mechanism proved decisive in compelling action, their combination has created regular touchpoints, keeping climate on the political agenda. Ireland has not rolled back its climate commitments, and the requirement for ministers and civil servants to frequently justify their actions maintains pressure for progress, even if it is at a slower pace than climate science demands.

Across all three cases, several common themes emerge that extend beyond their specific innovation types. First, formal institutional design sometimes matters less than implementation and ongoing

political commitment. The Austrian Budget Office operates effectively despite lacking statutory precise authority, while Ireland's carefully designed accountability mechanisms sometimes struggle to overcome political inattention. Second, innovations prove most effective when integrated into existing parliamentary processes rather than operating as separate structures. Austria's integration of climate analysis into budget scrutiny and Ireland's use of established committee procedures exemplify this approach, while Estonia's platform remains somewhat detached from parliamentary decision-making.

These cases also highlight how the identified types of parliamentary innovation are linked to RETOOL framework's dimensions of democracy (Brawley-Chesworth et al., 2024). Knowledge and expertise proves central across all three cases, whether through the technical capacity of Austria's Budget Office, the information flows enabled by Estonia's platform, or the role of Ireland's Climate Change Advisory Council. Yet expertise alone proves insufficient without mechanisms connecting knowledge to political decision-making and accountability. Similarly, representation manifests differently across contexts: Austria's innovation strengthens parliament's capacity to represent constituent interests through better-informed scrutiny, Estonia's platform creates new channels for citizen voice, and Ireland's mechanisms attempt to hold representatives accountable for climate commitments while respecting electoral mandates.

Looking forward, our findings suggest that effective parliamentary climate governance requires neither a single optimal institutional design nor the wholesale replacement of all existing structures and processes, but rather iterative adaptation of the existing representative institutions that balances long-term climate imperatives with democratic legitimacy. The unevenness of innovation adoption across member states indicates both the challenges of institutional reform and opportunities for mutual learning. As climate pressures intensify and public demands for accountability grow, parliaments that successfully integrate climate considerations into their core functions (e.g., legislation, scrutiny, representation, and deliberation) while maintaining broad political support will be better positioned to navigate the democratic challenges of climate transitions. The innovations documented in this report represent important experiments in reconciling the temporal mismatch between electoral cycles and climate commitments, though whether they prove sufficient to the scale and urgency of the climate crisis remains an open question that will shape European democracy and climate governance in the decades ahead.



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