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The anchoring effect of climate change acts: a policy streams analysis of Ireland's climate act reform

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ABSTRACT

The number of political jurisdictions introducing climate change acts (CCAs) has grown in recent years. As framework legislation, CCAs seek to exert anchoring effects on climate policy development by establishing general goals, principles and obligations that subsequent policies to reduce emissions must uphold. Despite expansive research on the negotiation of CCAs, limited analysis exists of factors shaping their anchoring effect or how tensions aligning other climate policies with CCA requirements are managed. This article addresses this by utilizing Kingdon's multiple streams framework to analyze the negotiation of the Irish Climate Action and Low Carbon Development (Amendment) Act 2021, a CCA with contentious provisions for sectoral emissions ceilings. It examines how political agreement was secured on the need for stronger climate action (problem stream), the concept of the Act (policy stream), and individual provisions (political stream). The analysis nevertheless indicates that different interpretations of 'the problem' emerged in discussions on the impacts of sector emissions ceilings and carbon taxation. Consensus in the political stream equally proved challenging where representatives used the Act's provisions to question other parties' commitments to climate action, just transition and procedural fairness. The article highlights two broader considerations for the anchoring effect of CCAs: the importance of maintaining a consistent focus on climate change to prevent problems with policies to address climate change from dominating CCA debates; and whether to restrict CCAs to general principles that diminish their anchoring effect compared with incorporating detailed obligations that may increase political tensions over the CCA and future policies.

Key policy insights:

- The ability of climate change acts (CCAs) to generate a sustained anchoring effect on other policies targeting emissions in specific sectors is critical to many national netzero strategies.
- This requires maintaining political consensuses on the seriousness of climate change as a policy problem and on CCAs as an appropriate policy solution during the negotiation of future climate policies introduced to achieve the CCA's objectives.
- More prescriptive CCAs have more anchoring potential but can create obstacles to cross-party cooperation because of their greater ramifications for individual sectors and regions.
- The negotiation of CCAs has the potential to lead to longer-term convergence of climate policy norms that aid the anchoring effect of CCAs but fragile political consensuses may lead to difficulties negotiating future policies.

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1. Introduction

The number of political jurisdictions adopting climate change acts (CCAs) has grown steadily in recent years (Averchenkova et al., 2021; Nash et al., 2021). As framework legislation, CCAs create overarching goals and institutional structures with the intention that these will exert a clear and sustained *anchoring effect* on the introduction and design of future climate policies to reduce emissions in specific sectors (Christoff & Eckersley, 2021; Muinzer, 2020; Nash & Steurer, 2019, 2021, 2022). Existing research on CCAs has centred mainly on examining factors enabling and shaping their negotiation (Bailey et al., 2021; Carter & Jacobs, 2014; Lorenzoni & Benson, 2014) or how changes in government and economic conditions have influenced their emphasis and political sustainability (Gillard, 2016; Lockwood, 2013). However, limited attention has been paid to exploring factors shaping the ability of CCAs to influence the adoption of future *supporting* climate policies, such as emissions pricing or standards, that aim to reduce emissions from individual sectors or activities, or how tensions aligning these supporting policies with the requirements of CCAs are managed (Inderberg & Bailey, 2022; Lockwood, 2021).

Research that has been conducted on the anchoring effect of CCAs indicates that alignment tensions increase where existing policies enjoy strong stakeholder and political support (Inderberg & Bailey, 2022), when reforms to supporting policies create adverse economic impacts (Arning & Ziefle, 2020; Inderberg & Bailey, 2022; Meckling & Nahm, 2019), or where vulnerabilities exist in political leadership or the mandates created by CCAs (Solorio, 2021; Torney, 2019). This research has focused mainly on tensions that have arisen during attempts to reform individual supporting policies, for example the challenges faced by the New Zealand government in reforming its emissions trading scheme following the introduction of the Zero Carbon Act in 2019 (Inderberg & Bailey, 2022). For CCAs to maintain a strong long-term anchoring effect, however, they need to influence climate policy on more than a policy-by-policy basis. They also need to cement an enduring perception among decision-makers that climate change merits strong action and to promote long-term inter-party cooperation on measures to meet the CCA's goals (Karlsson, 2021; Rietig & Laing, 2017). However, integrated analysis of how problem perception, debates on proposed policy responses and the willingness of political parties to cooperate on climate change combine to influence the potential for CCAs to exert a clear and sustained anchoring effect on future climate policy-making has not so far been explored.

The aim of this article, accordingly, is to analyze the main factors influencing the ability of CCAs to exert a strong and continuing influence on the development of national climate policy. To pursue this, we utilize Kingdom's multiple streams framework in conjunction with the anchoring policy perspective to analyze the legislative passage of the Irish Climate Action and Low Carbon Development (Amendment) Act 2021 (Kingdon, 1995). Analysis of the negotiation of other national CCAs using the multiple streams framework (Carter & Childs, 2018; Carter & Jacobs, 2014; Lorenzoni & Benson, 2014; Nash, 2021; Nash & Steurer, 2022) has revealed how the prospects for radical policy change improve when three major 'streams' converge: broad recognition exists on the seriousness of the problem; agreement emerges on CCAs as a policy response; and there is willingness for cross-party cooperation on the issue (Herweg et al., 2015; Kingdon, 1995). However, these studies rarely probe whether any one stream is most decisive to the legislative passage of CCAs or the implications of tensions between these streams for the ability of CCAs to exert a strong and consistent anchoring effect on the introduction and design subsequent supporting policies, a shortfall we address by combining the streams and anchoring policy perspectives.

The Climate Action and Low Carbon Development (Amendment) Act 2021 was selected for analysis because it contained several features that go beyond those typically found in CCAs. Of particular note was the creation of emissions ceilings for individual sectors of the economy, a provision which provoked intense debate over their implications for agriculture and transport and some regions of Ireland (Houses of the Oireachtas, 2021). Most CCAs are restricted to setting a long-term emissions target and carbon budgets for the country as a whole rather than for specific sectors. The Act therefore represents an instance of a CCA designed with the intention of creating a strong agenda for specific sectoral reforms.

Section 2 explores the utility of examining the anchoring effect of CCAs using the multiple streams framework. In Section 3, we outline relevant features of Ireland's political system and climate policy framework and

the research strategy used. Section 4 analyzes debates on the Act in the Dáil of the Irish Parliament using the multiple streams perspective and framework, before Section 5, which discusses the insights gained on the anchoring effects of CCAs. Section 6 offers conclusions.

2. Anchoring policy and multiple streams perspectives on climate acts

Following the Kyoto Protocol in 1997, many governments introduced framework legislation to guide their national mitigation and adaptation strategies. This first generation of laws sought to 'define a strategic approach to climate policy' (Muinzer, 2020, p. 13) but most had imprecise goals and limited influence over target setting or the introduction of mechanisms to deliver climate goals (Casado-Asensio & Steurer, 2016; Torney, 2019). During the late-2000s a second generation of CCAs emerged (Nash & Steurer, 2019), led by the South Australian Climate Change and Greenhouse Emissions Reduction Act, 2007 (Christoff & Eckersley, 2021) and UK Climate Change Act, 2008 (Lockwood, 2021). Although the provisions of CCAs vary (Muinzer, 2020; 2021; Nash & Steurer, 2019), they typically establish new obligations and accountabilities aimed at guiding future climate policy-making:

- A legally binding long-term mitigation target, typically net-zero emissions and periodic carbon budgets to create milestones towards achievement of the long-term goal.
- The establishment of independent committees with statutory powers to scrutinize and advise governments on climate policy along with requirements for governments to follow, or justify departures from, their advice.
- Legal duties for governments to commit to the CCA's provisions, with the possibility of litigation should goals not be met, and to submit periodic reports to legislatures reviewing policies to meet carbon budgets and adaptation goals, actions to address shortfalls and responses to climate committee reports (Nash et al., 2021).

The anchoring policy perspective conceptualizes how CCAs define general goals, principles and rules that aim to ensure future policies are consistent with, and contribute towards achieving, the CCA's goals (Inderberg & Bailey, 2022). The perspective's underpinning idea is that certain categories of policy ('written plans, principles, support schemes, laws or regulations issued by a government that create expectations, goals, and rules and regulations defining what needs to be achieved, when, by whom, and through what mechanisms'; Inderberg & Bailey, 2022, p. 2) are established with the intention of influencing the design and political feasibility of other policies (termed supporting policies) affecting the issue in question (Kosti & Levi-Faur, 2019). Such policies may also seek to embed norms and ideals in order to steer the direction of future policies and to strengthen their political resilience by specifying functional links between the anchoring policy and other policies. Their 'anchoring' function thus refers to their capacity to steer the provisions of other policies that create detailed instruments for achieving the anchoring policy's goals (Inderberg, 2020). The extent of this influence may be determined by several factors, including the strength of cross-party support for the anchoring policy and the inclusion of more ambitious and rigid requirements, though this may increase the anchoring policy's exposure to conflict during its negotiation because of the precedents created. It may also increase the chances of political challenges during the negotiation of future supporting policies (Inderberg & Bailey, 2022). Conversely, less prescriptive anchoring policies may be less contentious to negotiate but exert a weaker influence on future policy-making in that area.

Anchoring legislation has been used extensively in environmental policy, from European Union framework directives that set general environmental protection requirements to the Canadian Environmental Protection Act 1999 that underpinned the On-Road Vehicle and Engine Emission Regulations SOR/2003/2 (Bogaart, 2014; Reid & Aherne, 2016). In climate policy, the Renewable Energy (Electricity) Act 2000 (Australia) provided a framework for the Renewable Energy Agency Act 2011 and Building Energy Efficiency Disclosure Act 2010 (Kallies, 2021), while UK Climate Change Committee reports contributed to advancing a ban on the sale of new petrol and diesel cars from 2040 to 2035 (Shapps & Kwarteng, 2021).

However, resistance to the alignment of supporting policies with CCAs can occur where the policy status quo enjoys strong stakeholder or political support (Bailey et al., 2021; Lockwood, 2013). Prior to the UK Climate Change Committee report, vehicle manufacturers had persuaded the UK government to adopt the 2040 date for banning new petrol and diesel cars. Similarly, Inderberg and Bailey (2022) examined tensions surrounding efforts to price biogenic emissions in the New Zealand Emission Trading Scheme (NZETS). The scheme began operating in 2008 as New Zealand's main mitigation policy. However, although agriculture comprised 48 percent of the country's emissions, attempts to price biogenic and fertilizer emissions following the introduction of the Zero Carbon Act in 2019 led to disputes between the Labour-led government and National Party opposition despite cross-party support for the Zero Carbon Act (Bailey et al., 2021). A compromise for voluntary industry action with pricing of agricultural emissions in the NZETS from 2025 diffused the issue temporarily but failed to persuade National to support the NZETS Reform Act (Khan & Johansson, 2022).

Inderberg and Bailey's (2022) study centred on tensions aligning an existing climate policy with a CCA but did not directly consider how the Zero Carbon Act influenced political attitudes towards climate change as a policy problem (Carter & Jacobs, 2014) or the challenges of securing cross-party cooperation (Gillard, 2016). Although inter-party conflict over climate policy is unlikely to dissipate entirely with agreement of a CCA, the political accords developed might reasonably be predicted to ease negotiations on subsequent emissions-reduction legislation (Averchenkova et al., 2021; Flaschland & Levi, 2021). Two immediate points emerge from considering the coupling of problem perception, policy options and political considerations on the anchoring potential of CCAs. First, tensions between CCAs and individual supporting policies may arise for different reasons and require different forms of management. For example, policy disputes can occur over supporting policies that involve high or unevenly distributed costs despite continued political agreement to cross-party working. Supporting policies that apply market-based mechanisms may also prompt ideological clashes between political parties despite consensus on the need for regulation. Variations in the management of tensions between CCAs and supporting policies, meanwhile, include publishing scientific updates to reassert the gravity of the climate problem, offering policy concessions to lessen the socioeconomic implications of supporting policies, and incremental strengthening of supporting policies to make each reform less politically contentious (Inderberg & Bailey, 2022).

Second, the three factors identified as influencing the anchoring effect of CCAs on supporting climate policies (problem perception, policy options and political considerations) align with the main components of Kingdon's multiple streams framework (Kingdon, 1995). In his original formulation, Kingdon argued that coupling of three streams is often essential to issues becoming prominent on policy agendas and windows of opportunity opening for policy change. The *problem stream* refers to recognition that an issue requires policy attention, the *policy stream* relates to discussion of policy solutions among policy-makers, experts and lobby groups, while the *politics stream* concerns the role changes in government, political party positioning, legislative developments and public opinion in shaping political priorities (Howlett et al., 2015; Rawat & Morris, 2016). Kingdon (1995) argued that policy change is more likely when there is a simultaneous desire to address the issue, agreement on a policy solution and influential coalitions come together to support change.

Translating Kingdon's streams to the CCA context, the *problem stream* factors enabling CCA adoption centre on recognition by political actors that climate change is a serious policy problem that demands strong action (Carter & Jacobs, 2014; Pralle, 2009). The *policy stream* involves agreement that CCAs offer a policy approach which is: 'technically feasible, a good fit with dominant values and the current mood, financially workable; and [has] political support' (Nash & Steurer, 2022, p. 466), while the *political stream* encompasses convergence in the motivations and agendas of political parties (incorporating political priorities, perceptions of national interest and electoral incentives) towards inter-party cooperation on the CCA and future supporting policies (Carter & Childs, 2018; Lorenzoni & Benson, 2014)

Despite criticisms of Kingdon's framework for inadequacy in its assessment of the independency of streams and temporal shifts within individual streams, and an excessive focus on agenda setting over decision-making and implementation (Lorenzoni & Benson, 2014), it has been used productively to understand various factors affecting CCA negotiation (Carter & Jacobs, 2014; Nash, 2021; Nash & Steurer, 2022). Carter and Jacobs (2014) used the framework in conjunction with punctuated equilibrium models to examine the political, institutional and paradigm changes that enabled passage of the UK CCA in 2008. They chronicled periods of stability and flux in debates on the CCA in response to public attitudes, events (particularly the Stern Review), activist campaigning, and a competitive consensus on climate change between the main political parties (Lockwood, 2013).

Lorenzoni and Benson (2014) combined a streams perspective with discursive institutionalism to explore how entrepreneurial actors from within and outside formal politics crafted normative ideas about climate mitigation into a discursive agenda that normalized the idea of a CCA. Nash (2021) similarly deployed a streams approach to understand the negotiation of ambitious legislation in multi-level governance systems using the example of the Climate Change (Scotland) Act (2009), while Nash and Steurer (2022) probed how interactions between the problem, policy and political streams shaped the replacement of a largely symbolic CCA in Denmark with a more substantive act in 2020 and how the amended act remained politically contentious after the policy process moved from agenda-setting to decision-making.

While these studies examined stream coupling during CCA negotiation, the long-term anchoring effect of CCAs depends on continued alignment of the problem, policy and politics streams across multiple subsequent negotiations on supporting policies. For example, tensions between the policy and politics streams hampered the New Zealand government's efforts to introduce mandatory pricing for biogenic agricultural emissions (Bailey et al., 2021), while Gillard (2016) examines how frictions between problem perception, politics and policy caused by a change in government and austerity contributed to the emergence of less morallycentred and more cost-conscious climate mitigation discourses in the UK. Lockwood (2013) argued that this eroded the act's efficacy, though pressure to set less ambitious carbon budgets was resisted (Gillard, 2016).

The anchoring effect of CCAs is thus likely to depend on aligning the problem, policy and politics streams over prolonged periods, embedding general institutional leanings towards strong mitigation action and stream alignment at specific junctures during negotiations on each supporting policy. The prospects for achieving these conditions may be influenced inter alia by the views of key policy-makers, the prioritization of climate change relative to other issues when supporting policies are debated, public opinion, media coverage and the nature of the supporting policy (Averchenkova et al., 2021; Dupont et al., 2020). Combining the anchoring policy and multiple streams perspectives to analyze legislative debates on the effects of CCA design features on supporting policies thus promises to shed new light on the long-term impacts of CCAs beyond the negotiation of CCAs themselves (Gillard, 2016; Lockwood, 2021).

3. Background and methods

The Climate Change and Low Carbon Development (Amendment) Act 2021 was introduced to the Irish Houses of the Oireachtas 'to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a climate resilient, biodiversity rich and climate neutral economy by no later than the end of 2050' (Houses of the Oireachtas, 2021). It coincided with the adoption of the European Union Climate Law in 2021 ((EU) 2021/1119), which also established a 2050 net-zero target for the EU, but directly implemented the EU's Climate Regulation (EU) 2018/1999, as the 2021 EU Law was still being debated when the Act was passed (Official Journal of the European Union, 2018, 2021). The Act's main provisions to achieve its goals included: (i) a commitment to promote climate justice; (ii) changes to the functioning of the Climate Change Advisory Council; (iii) the creation of carbon budgets and emissions ceilings for each sector of the economy; (iv) reporting by ministers to a joint parliamentary committee; (v) a requirement for local authority development plans to consider climate action and (vi) extending the remit of the Climate Action Fund (Houses of the Oireachtas, 2021).

In so doing, the Act strengthened provisions on carbon budgets and climate justice contained in the original Climate Action and Low Carbon Development Act 2015 (Houses of the Oireachtas, 2015). The inclusion of statutory sectoral emissions ceilings, a feature absent from most CCAs, provides the first justification for selecting the Act to analyze tensions affecting the prospects for CCAs to influence future climate policy-making because of their potential impact on agriculture and transport in a predominantly rural country. The second relates to how inter-party tensions within the Irish parliament affected coupling of the problem, policy and political streams during the Act's negotiation (Robbins et al., 2020). Of particular note is that the government proposing the 2021 Act was a coalition between Fine Gael, Fianna Fail and The Green Party, three parties with ideological and historical differences. Additionally, the government held only a small majority over the main opposition parties: Sinn Fein, Labour, People Before Profit-Solidarity Alliance and Social Democrats, while 15% of members were Independents who sometimes formed voting blocs.

This research employed a sequential qualitative content analysis of Dáil debates on the Act (Table 1).

Approximately 30 hours of debate were analyzed using videos and transcripts published on the Irish government website. These sources were preferred to interviews as a way of capturing the dynamics of the debates without researcher influence, social desirability bias, or viewpoints being distorted by uneven access to different political parties (Sovacool et al., 2018). The first stage used thematic content analysis of the debate transcripts to identify and catalogue recurring themes. These were then categorized according to which of Kingdon's streams (problem, policy, or political) they corresponded with most closely using the coding system outlined in Table 2 (Rooduijn & Pauwels, 2011). The significance of themes was then interpreted based on the frequency with which topics were debated and the intensity of debates, for example, where prominent points of discussion emerged (Krippendorff, 2018). Each interpretation was verified and adjusted where necessary by the research team, including categorizing some contributions into multiple streams where clear shifts in emphasis occurred.

4. Three streams analysis

4.1. Problem stream

The Dáil debates indicated general consensus about the need for greater climate action and the Act's main principles, except for dissent from some independents from the Rural and Regional groups. The case for action was framed principally in response to Ireland's high per capita emissions and its obligations under the Paris Agreement, which the Green Party leader and Minister for the Environment, Climate and Communications, Eamonn Ryan stressed during the Second Stage reading while also underlining the consensual nature of the Act:

I am glad it is time that the Bill is read a Second Time. But it is not just our party: the key point is that it is consensual and that it is broadly accepted ... I am very proud of the Oireachtas and the way we set up an Oireachtas joint committee to work on this on a participative, collective and collaborative basis. (Dáil Éireann, 2021a)

Sinn Féin, the largest opposition party, similarly stressed the importance of joint working and long-term cooperation:

This is landmark legislation which will outlive any one administration, so it is important we get it right at this stage. It is important to set the targets and the framework to get us there. (Dáil Éireann, 2021a)

Beyond this general commitment, the debates were dominated by representatives asserting principles and priorities their parties believed should underpin Ireland's climate response. For example, Social Democrats petitioned for the Act to include a definition of 'just transition', while Sinn Féin and independents stressed the needs of rural constituents, the regional and social impacts of measures to reduce agricultural emissions, and the potential for disproportionate impacts on poorer sections of Irish society.

Disputes also emerged about the appropriateness of a unified EU strategy given Ireland's distinctive economic profile and whether climate action should be progressed through gradual reform or more radical changes to Ireland's social and economic goals:

We have a Bill that closes its eyes and ears to ... any challenge to fossil capitalism. Every step of the way, capitalist governments have refused to do ... what the science spells out. The EU targets ... do not meet the Paris targets and they will not be met. The Government targets we have in a climate action Bill brought forward by a Government including the Green Party do not even meet those inadequate EU targets. (Dáil Éireann, 2021b)

In contrast, the underlying problem of climate change was only discussed infrequently by TDs (Teachta Dála), and then mainly to reaffirm the Act's importance. Agreement on the main problem stream thus appeared to be assumed but the debates became more combative when discussing principles to guide future legislation (such

Table 1. Dáil debates on the Climate Change and Low Carbon Development (Amendment) Act 2021.

Date	21/04/2021	21/04/2021	3/06/2021	16/07/2021	16/07/2021
Process	Vote called for Reading	First Reading and Debate	Committee Stage	Report Stage	Papers sent to the Seanad Eireann

Table 2. Classification of themes into problem, policy and political streams.

Problem		Policy		Politics	
Description	Debate themes	Description	Debate themes	Description	Debate themes
Existence of climate change	General acceptance of climate change as a serious problem	Aims or targets in the Act	General acceptance of net zero, carbon budgets, advisory council and just transition	Government position on climate action	Cooperative working Strength/weakness of action Level of commitment to climate justice
Climate impacts	Few direct references	Consistency of provisions with Act's goals		Procedural correctness	Inclusion/exclusion of individuals from committee debates Acceptance/rejection of proposed amendments
Need for mitigation and adaption strategies	General acceptance of need for action Importance of just transition	Act's impact on constituents, sectors or regions	Concern over sectoral emissions for transport agriculture and effects of carbon taxation on less affluent	Government motivations or decisions	Allegiance to fossil-fuel capitalism Unwillingness to tackle big business or more affluent, higher emitting individuals
				Other political parties	Green Party controlling government policy Lack of realism by opposition parties

as just transitions) and the distributional effects of future policies. Such disputes are common in CCA debates because of the precedents they create for future legislation (Inderberg & Bailey, 2022) but nevertheless underscore the potential for some CCA provisions to become reframed as part of the problem where they challenge the status quo or core societal concerns (Knaggård, 2015). Although this did not prevent the Act's legislative passage, it raises questions about how far the problem focus on climate change that enabled collaborative working on the CCA might withstand inter-party disputes during the negotiation of future policies to support the Act's implementation.

4.2. Policy stream

Analysis of the policy stream similarly revealed cross-party agreement on the adoption of framework legislation to meet Ireland's climate goals. Most TDs accepted the Act's goals, principles and mechanisms but keener debate emerged over interpretation of the scientific and legal basis for its provisions and the consistency of some measures with just transition. On the first issue, Darren O'Rourke from Sinn Féin remarked during the Second Stage:

The Minister will have received correspondence in recent days from Professors John Sweeney and Barry McMullin and Dr Andrew Jackson outlining some concerns about the Bill, principally its failure, legally or scientifically, to place the commitment of the programme for Government for the period 2021 to 2030 on a secure statutory basis. They argue the language used is legally uncertain and could give rise to contradictory interpretations ... I ask that he might, in his concluding remarks, address the points raised and whether he intends to amend the section accordingly. (Dáil Éireann, 2021a)

The second area of debate on the policy stream focused on measures to achieve the Act's goals. Particular discussion surrounded increases in carbon taxation, where the Finance Act 2020 prescribed a tax of ϵ 100 per tonne of CO₂ by 2030 and the Finance Act 2021 increased the tax by ϵ 7.50 in 2022 to ϵ 41 per tonne. Sinn Féin argued



that flat-rate taxes penalized working people rather than incentivizing industry to reduce emissions. Sinn Féin TDs claimed that people were prepared for change but wanted a fair transition:

Ask most people what they think of when they hear climate action and reducing our emissions and many will answer it is one cost after another ... carbon tax, higher electricity and heating bills, and increased fuel costs at the forecourts. They will also point out how major corporations and vested interests have shirked their responsibilities, enabled by light touch regulation. (Dáil Éireann, 2021a)

People Before Profit-Solidarity similarly argued that, under the polluter pays principle and just transitions, higher costs should be borne by big emitters, no-one should be worse off and carbon-intensive industry employees should be guaranteed jobs in low-carbon sectors:

[This Bill] will confirm to ordinary people that the big industries do not have to make any sacrifices, but that ordinary people do. We will give people carbon taxes for using petrol or diesel but not free public transport. We will punish people if they heat their homes with oil or coal, but we will not fund the retrofitting of people's homes ... If all the Green Party has to offer is carbon taxes for ordinary people and a windfall for corporations, we will see a resurgence of climate denial. (Dáil Éireann, 2021b)

Reflecting disputes over the problem stream noted earlier, Regional and Rural independents argued that the Act disadvantaged rural areas. In addition to concerns about access to public transport, they criticized sectoral emissions ceilings for undermining Ireland's agricultural sector and rural areas. Danny Healey-Rae claimed this would spell 'the end of rural Ireland' (Second Stage), though Labour and other TDs tried to address this tension by stressing ways to promote a just transition:

There is a fair and just solution for farmers. Labour wants to create a farming and diversification scheme to boost farm families' incomes and promote alternative sustainable uses of farmland ... Such supports could include the reintroduction of the early retirement scheme, extending the second targeted agricultural modernisation scheme, TAMS II, beyond 2020, and implementing a standardised and simplified hedge cutting grant scheme. Helping farmers to diversify into areas such as biofuel and ensuring that such diversification is rewarded with a good living is vital. (Dáil Éireann, 2021a)

While analysis of the policy stream revealed multiple disagreements over how the Act's principles should be interpreted and applied in future policy, there was also significant evidence of suggestions being made on alternative ways to pursue its goals. These two trends combined indicate that securing consensuses for supporting legislation may prove challenging on some issues but also that the main parties' apparent willingness to work collaboratively to resolve disagreements may help to maintain the Act's anchoring effect (Lockwood, 2021).

4.3. Politics stream

Although the Act was generally debated in a co-operative spirit, speakers frequently took partisan stances on issues. Many disputes followed party lines but sometimes also transcended political affiliations as Fianna Fáil and Fine Gael TDs criticized their coalition partners, while opposition parties criticized what they saw as the government's reluctance to embrace deeper economic and social reforms. For example, People Before Profit-Solidarity's Brid Smith attacked the government for prioritizing economic concerns, while Social Democrats questioned the Act's proposed emissions targets:

I wondered how it might be possible that a government dominated by Fianna Fáil and Fine Gael could deliver on such a meaningful measure. I wondered how those in government at the highest level of the State might try every trick in the book ... in their unashamed prioritising of economic and business arguments to stop meaningful measures like the climate emergency Bill. (Dáil Éireann, 2021b)

We need to dispel the myth that this revised bill will be the most progressive in the world in implementing targets in primary legislation. Denmark has set a target to reduce emissions by 70% by 2030 in legislation, while the UK has committed to a 78% target by 2035 ... This must be the floor, not the ceiling of our ambition. (Dáil Éireann, 2021a)

Sinn Féin in turn challenged the Greens' role in the governing coalition and the government's record on environmental issues by criticizing the Act's costs for working people:

Many people see climate action as meaning very little other than additional charges on them and their families, forcing people to pay for things for which there is no alternative. The Minister's utterances in the past have simply added to the sense ... that the Green Party in particular is out of touch. He made references to vegetable or salad boxes on windows in the midst of a global pandemic or having two cars running in a village. (Dáil Éireann, 2021c)

Labour and Independents also attacked the government on equity and hypothesized about the Act's impacts on future policies affecting key economic sectors:

If we had a proper target for afforestation and a proper, fit-for-purpose forestry service to enable forestry licences for felling and growing to be procured in a timely fashion, that would feed into this climate agenda. It is not being considered in this legislation, because I am being told the idea of having a sectoral target for afforestation is a charge on the Exchequer. (Dáil Éireann, 2021c)

The Government does not seem to understand how rural Ireland operates. It is making decisions and imposing them on people in rural areas ... We are trying to get the message across ... that we are hearing from our constituents, but the Government that is made up of Fianna Fáil, Fine Gael and the Green Party is not listening to us. Fianna Fáil and Fine Gael seem to be very happy to let the Green Party run riot and to destroy rural Ireland. (Dáil Éireann, 2021d)

Fine Gael countered by criticizing opposition TDs for demanding that all interests be protected:

They want those who are affected to maintain their current income in all circumstances but the reality is that we have been using our planet profligately and we cannot compensate everyone. The definitions of justice offered by the Opposition include a requirement to be morally fair, reduce inequalities and protect people against financial hardship but a climate Bill cannot do all of those things ... Members opposite cannot say that they will not move an inch until all these requirements are met. (Dáil Éireann, 2021c)

In addition to sparring on ideological and policy issues, inter-party tensions surfaced over the procedures used to debate the Act, with accusations of a wholesale rejection of amendments and exclusion from joint committee discussions. The Green Party leader claimed that many amendments had been incorporated:

I am very proud of the way we set up an *Oireachtas* joint committee to work on a participative, collective and collaborative basis. The committee sat for 50 hours in private session and it had weeks of hearings when it brought in the best experts. It is time we read the Bill now on Second Stage, taking into account the 78 amendments the committee recommended, the vast majority of which have been implemented in the Bill. (Dáil Éireann, 2021a)

However, Sinn Féin and the Social Democrats argued that the government had refused to consider amendments from opposition TDs:

I am disappointed to see reflected in the Bill that the Government has taken nothing on board from the Committee Stage scrutiny ... Some 231 amendments from Opposition politicians were put forward and not only did the Minister refuse to accept any of them, he also failed to bring forward any of his own based on what was said at the Committee Stage hearings. (Dáil Éireann, 2021c)

Independents, meanwhile, claimed they were denied access to legislative scrutiny of the Act:

Only a select few could get into the climate change committee ... All of the sessions were held in private. No other view could be heard. The committee did not want to hear them. (Dáil Éireann, 2021a)

Although the Act was passed by an overwhelming majority, analysis of the political stream indicates that the political consensus behind its passage was fragile and strained. How far the disagreements were motivated by principled concerns or political rivalries remains unclear. Both will have featured in each party's evaluations, though the fact the coalition only held a slender Dáil majority contributed to a sense that weakening the government was a major goal for some parties. Whatever these motivations, the fractious consensus over the passage of the Act creates a challenging context for negotiating future legislation targeting emissions in specific sectors.

5. Discussion

The Irish Climate Action and Low Carbon Development (Amendment) Act 2021 was used to analyze how the problem, policy and political streams of climate policy-making influence the potential for CCAs to exert a clear

anchoring effect on supporting policies to achieve national climategoals. Alongside identifying challenges facing Irish governments on climate policy, this study provides a range of broader insights on the anchoring potential of CCAs.

First, the findings indicate reasonable security in perceptions about the urgency of climate change and its role in enabling the adoption of CCAs to anchor the design of future supporting policies (Inderberg & Bailey, 2022). However, this study also suggests that challenges can arise in maintaining cohesive definitions of 'the problem' during CCA negotiations as attention shifts towards the implications of CCA provisions. Following similar patterns to CCA debates in New Zealand and Denmark, the underlying problem of climate change attracted limited debate in the Irish Dáil compared with problems associated with how measures to achieve the Act's provisions would affect specific constituencies and sectors (Inderberg & Bailey, 2022; Nash & Steurer, 2021). The passage of CCAs in all three countries indicates that limited focus per se on the physical causes and effects of climate change need not threaten the capacity for CCAs to establish strong alignment pressures, provided disagreements over the policy precedents CCAs create do not overshadow the original motivation for adopting a CCA (Carver et al., 2017; Knaggård, 2015). Political disputes over targets and implementation approaches have occurred in Australia, however, where clashes over the economic effects of climate action eroded cross-party support for its CCA despite rhetorical backing for action by both the governing Labor Party and the main opposition Liberal-National Coalition (Pearse, 2023).

Second, analysis of the policy stream reveals the importance of distinguishing between support for a general policy approach and specific measures. There was little dissent in the Dáil against the concept of framework climate legislation but conflicts over sector emissions ceilings illustrate the challenges policy-makers face on whether to incorporate more detailed provisions within CCAs. Restricting CCAs to general provisions (such as long-term targets and mandatory reporting) may make adoption less politically contentious but weaken its anchoring effect on future climate policies. Conversely, proposing more detailed requirements strengthens the anchoring effect of CCAs but may make CCA adoption more politically controversial (Carter & Jacobs, 2014; Nash & Steurer, 2019). The evidence from this study indicates that more exacting provisions may not only spark conflicts during the negotiation of CCAS themselves but also create political fault lines that hinder securing agreement on future supporting policies. Conversely, in an example from another country, the proposal of weaker CCA provisions by the Norwegian government aided agreement on the adoption of its CCA but has diminished its anchoring effect (Johansen, 2018). Either way, the Irish case reveals the importance of considering how the policy and problem streams intertwine and evolve between CCA negotiation and discussions on supporting policies.

Third, isolating the effects of the political stream on the anchoring effect of CCAs remains challenging because of uncertainties over how far policy disputes are motivated by principled concerns about the CCA's implications or attempts to gain political advantage (Bailey & Compston, 2010; Heidar & Karlsen, 2018). The Irish case nevertheless indicates that aligning the political stream to bolster the long-term anchoring effect of CCAs can prove challenging where opposition parties seek to use climate policy to destabilize the government, even when there is limited polarization on the urgency of acting on climate change (Lockwood, 2013, 2021). How far political frictions during CCA negotiations affect debates on future supporting climate policies can only really be known through detailed tracing of subsequent policy debates. They did not impede the legislative passage of the Irish CCA but the evidence again suggests that CCAs with more specific requirements may increase the strain on political consensuses, especially when policy-makers debate detailed measures to reduce emissions. This is particularly true where governments hold slender majorities, are operating in coalitions, or are nearing the end of their terms of office.

One outcome of fragility in the political stream during CCA negotiations is that governments may need to rekindle political consensuses during debates on each new supporting policy. This may be especially challenging for more contentious supporting policies and require governments to approach reforms more incrementally, to offer more concessions, to defer controversial decisions and to introduce more safety valves to shield sectors from the effects of emissions-reduction policies (Inderberg & Bailey, 2022). The Irish Act also draws attention to the importance of cross-party involvement in decision-making as a way of maintaining trust and cooperation on supporting policies. Conversely, CCA negotiations may trigger a longer-lasting convergence in how different political parties discuss climate policy that reduces contestation over future supporting policies. Following Hall (1993), the institutionalization of new norms, goals and accountabilities for climate policy may create greater stability in the political stream and buffer the anchoring effect of CCAs during future policy debates. Although this is unlikely to prevent inter-party rivalry on contentious measures, the potential for cooperative action on climate change to become assimilated into the ideologies of major political parties indicates a potential avenue for future research. Such research could examine the nature and effects of temporal shifts in the political stream on the alignment pressures created by CCAs across multiple policymaking junctures (Carter & Jacobs, 2014; Rawat & Morris, 2016).

The first major test of the strength of political support for the Irish Act came in in July 2022 with the publication of sectoral emissions ceilings for 2021–2025 and 2026–2030 and debates on these ceilings by the Joint Committee on Environment and Climate Action (Government of Ireland, 2022; Houses of the Oireachtas, 2022). Although sector ceilings were agreed for most sectors, tensions over agriculture led to the sector being set a less demanding ceiling than other sectors – 25% reduction from 2018 levels. Even then, committee members expressed concerns that the ceilings were set in advance of plans being published on measures to help farmers reduce emissions and about delays in setting ceilings for land-use change, forestry and public transport. The approval of the ceilings indicates that political support for the CCA remained intact at that juncture. However, the fact the government felt the need to set lower targets for agriculture and defer decisions for other sectors suggests that the prospects for more a consensual approach to climate politics emerging in Ireland following the adoption of its CCA remain uncertain.

6. Conclusions

This article utilized Kingdon's multiple streams perspective to examine how the problem, policy and political streams of climate-policy-making combine to influence the anchoring effect of CCAs on the development of future policies to reduce emissions. Analysis of the Irish Climate Action and Low Carbon Development (Amendment) Act 2021 reaffirms the importance of aligning all three streams to creating conducive conditions both for the negotiation of CCAs and for increasing their impact on future climate-policy development. However, rather than establishing any single stream as pre-eminent, the findings underscore the reciprocity of their relationships. For example, preventing 'problems with the policy' from overshadowing attention to the underlying problem of climate problem is essential to convergence in the policy stream, while the provisions contained in CCAs influence both problem perception and the scope for cross-party consensus. Similarly, convergence of the politics stream was identified as strengthening the willingness of political parties to work through disagreements collaboratively to maintain the anchoring pressure that CCAs exert on future policy development. However, the results also reveal the challenges of maintaining coupling of the streams as debates progress from discussing general goals and accountabilities to debating detailed measures on how to reduce emissions. They also illustrate the difficulties of maintaining political accords where achieving CCA goals entails supporting policies that impose higher burdens on vulnerable groups, or where opposition parties seek to use climate policy to undermine governments. How CCAs reshape the problem, policy and political stream of climate policymaking over the long-term consequently forms an important priority for future research. This study indicates that the levels of ambition and prescription in CCAs can influence the prospects for aligning the problem, policy and political scheme and, thereby, the durability and anchoring potential of CCAs. However, more detailed tracing is needed of how coupling of the streams evolves – whether and why political consensuses persist or fragment – between the negotiation of CCAs, and how this influences the anchoring effects of CCAs on debates on future supporting policies.

The study also highlights the difficulties of disentangling the problem, policy and politics streams affecting the anchoring potential of CCAs. Although not a direct goal of this investigation, how political motivations permeate the problem and policy streams creates scope to refine the application of Kingdon's streams when studying far-reaching framework legislation such as CCAs. Finally, further investigation is required of

Other sectoral ceilings were: electricity 75%; transport 50%; commercial built environment 40%; residential built environment 45%; industry 35%; and other 50%. The public transport and land use and forestry ceilings were delayed for 18 months to assess new scientific information (Government of Ireland, 2022).

how the ambition and specificity of CCA provisions affect long-term alignment of the problem, policy and politics streams. This study suggests that more prescriptive CCAs can pose greater risks to cross-party cooperation if supporting policies implied in CCAs are seen to be over-onerous and inflexible to future developments, or as distributing burdens unfairly. Conversely, less prescriptive CCAs risk failing to drive climate policy development. CCAs are widely regarded as key legislative mechanisms for enhancing the ambition and consistency of national climate mitigation strategies. Deepening understanding of how the different streams of policymaking affect the ability of CCAs to exert robust and durable anchoring effects on climate policy development, and of how to manage obstacles to their anchoring effect, thus forms an important agenda for climate policy research.

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