Routledge
Taylor & Francis Group

Journal of Comparative Policy Analysis: Research and Practice

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/fcpa20

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To cite this article: Simon Schaub, Jale Tosun & Andrew J. Jordan (2024) Climate Action through Policy Expansion and/or Dismantling: Country-Comparative Insights: An Introduction to the Special Issue, Journal of Comparative Policy Analysis: Research and Practice, 26:3-4, 215-232, DOI: 10.1080/13876988.2024.2369640

To link to this article: https://doi.org/10.1080/13876988.2024.2369640

Published online: 30 Jul 2024.

Journal of Comparative Policy Analysis, 2024
Vol. 26, Nos. 3–4, 215–232, https://doi.org/10.1080/13876988.2024.2369640

Climate Action through Policy Expansion and/or Dismantling: Country-Comparative Insights: An Introduction to the Special Issue

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(Received 6 June 2024; accepted 13 June 2024)

ABSTRACT *Elected politicians and civil servants are key in developing climate policy. The articles in this special issue investigate factors that induce politico-administrative actors to adopt climate policies and dismantle anti-climate policies to advance decarbonisation. Politico-administrative actors have predominantly expanded climate policy and raised policy ambition in recent decades. However, economic crises and weakening public support may cause dismantling of climate policy and hamper policy ambition. Against this backdrop, articles in this special issue also study factors that propel climate policy dismantling. Together, the contributions show that interactions between politico-administrative actors and publics, organised interests, and international organisations shape climate and anti-climate policy change.*

Keywords: climate policy; policy expansion; policy dismantling; politics; anti-climate policy; comparative

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Introduction

The United Nations (UN) recognises climate change as one of the most pressing issues facing humanity. Together with the interlinked issues of air pollution and biodiversity loss, it constitutes what the UN Secretary-General António Guterres at the UN Environment meeting Stockholm+50 referred to as the "triple planetary crisis".[1] Climate change entails a rise in temperatures and shifts in weather patterns that will change the world's ecosystems and how humans live in it. Scientists agree that human activities, most importantly those that emit greenhouse gases (GHGs) into the atmosphere, are the main drivers of climate change (IPCC 2023). Consequently, meaningful action to mitigate climate change must address human activities that produce GHGs.

Since the adoption of the Paris Agreement in 2015 and the release of the Special Report on Global Warming of 1.5°C of the Intergovernmental Panel on Climate Change (IPCC) in 2018, a growing number of countries have established and committed to realising net zero emissions targets (Hale et al. 2022). As the Climate Action Tracker shows, having clearly defined net zero emissions targets is a necessary condition for delivering on them.[2] Merely having these targets in place, however, is insufficient for reducing GHG emissions and for decarbonisation – that is, lowering the carbon intensity of energy use (Hermansen et al. 2023). Often it takes public policies to achieve this goal, commonly referred to as climate policy. Climate policy includes a set of policy measures, also known as policy instruments, that aim to mitigate climate change, by promoting renewable energy for example (Dupont et al. 2024).

The comparative study of climate policy has mostly concentrated on the adoption of new policies to curb carbon emissions. In fact, the adoption of climate policies has surged since the signing of the Kyoto Protocol in 1997 (Hoppe et al. 2023). Countries in many parts of the world have gradually expanded their climate policy portfolios (Eskander et al. 2021). The increase in the number of climate policies adopted around the world is known as policy expansion (Benson and Jordan 2010; Knill et al. 2012; Bauer and Knill 2014; Steinebach and Knill 2017). However, even among countries with relatively similar socio-economic conditions, such as European member states of the Organisation for Economic Co-operation and Development (OECD), there is significant variation in how actively they have adopted climate policies (Schaub et al. 2022). Why countries differ is not yet well understood and, thus, addressing this question and shedding light on underlying political processes is important.

It is often politically more feasible to adopt new policies than to weaken or entirely dismantle those in place. Dismantling refers to the down-scaling or even complete termination of existing policy (Geva-May 2004; Jordan et al. 2013; Bauer and Knill 2014). Research has shown that it is difficult to dismantle policies but that dismantling still takes place, albeit less frequently (Bauer et al. 2012; Bauer and Knill 2014; Burns and Tobin 2020; Gravey and Jordan 2020; Brandsma et al. 2023).

The dismantling of climate policy represents a weakening of the efforts to mitigate climate change. Climate policies are often *regulatory* by nature, which is one reason why they are more vulnerable to dismantling. Regulatory policies impose direct and visible costs on target groups to achieve relatively diffuse and uncertain benefits. The combination of visible costs and diffuse benefits increases the likelihood of political opposition and thus the likelihood of dismantling of existing policies (Jordan and Moore 2020). Some countries have been more strongly subject to policy dismantling than others. For

instance, climate policy in Canada (Fankhauser et al. 2015), Australia (Crowley 2021), the United States (Bomberg 2021), Spain, and the Czech Republic (Gürtler et al. 2019) has been considerably dismantled at certain points in time.

Whereas the dismantling of climate policies weakens mitigation efforts, the dismantling of climate-harming policies (e.g. fossil fuel subsidies), also known as "anti-climate" policies (Compston and Bailey 2013), strengthens them. Dismantling these policies has been more difficult, which calls for paying more attention to the political processes that "protect" them.

Given the observed variation in the expansion of climate policy and the dismantling of climate and anti-climate policies, it is necessary to gain a better understanding of the drivers of and barriers to climate policy adoption and dismantling. Both are inherently political and thus require a better understanding of social and political mechanisms (Brutschin and Andrijevic 2022). Barriers to more ambitious climate policies are often not of a scientific or technological nature; rather, it is often the political process that determines the speed and stringency of policy measures (Jordan et al. 2022; Moore et al. 2024). Moreover, public acceptance influences their effective implementation. For example, emerging digital technologies are widely perceived to support the effort to achieve net zero by 2050 (Dwivedi et al. 2022).

The contributions in this special issue go a step further and explicitly aim to get a better grasp of the political drivers of and barriers to strengthening climate policy efforts to mitigate climate change. More precisely, they address two related research questions:

- Which factors facilitate climate policy expansion?
- Which factors facilitate the dismantling of climate policies and climate-harming policies?

Proposing, adopting, and implementing climate policy crucially depends on the willingness and capability of politico-administrative actors (Jordan et al. 2022; Boasson and Tatham 2023; Moore et al. 2024). Considering the increased academic attention paid to politico-administrative actors and their central role in climate policymaking, this editorial to the special issue focuses on the influence of these actors on both climate policy expansion and dismantling.

In the remainder of this editorial, we provide an overview of empirical patterns in climate policy expansion and dismantling, followed by insights on the influence of politico-administrative actors on climate policymaking. Subsequently, we discuss how far the contributions in this special issue identify factors that influence climate policy expansion and the dismantling of climate policies and climate-harming policies. Finally, we offer suggestions for future research based on the collective insights offered by the contributions.

Climate Policy Development: Empirical Patterns

Climate Policy Expansion

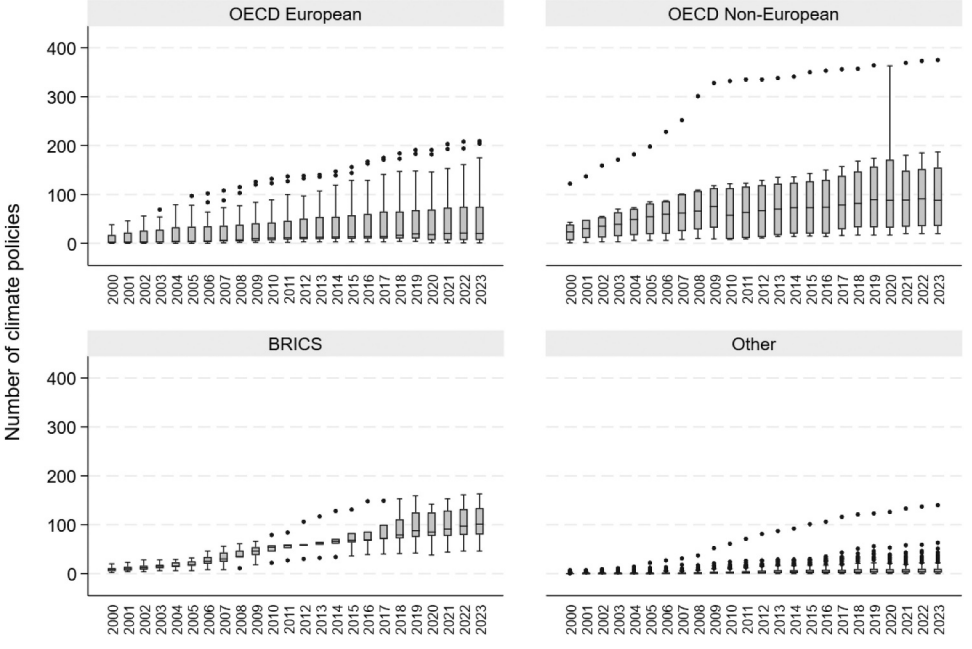
Many countries all over the world have developed climate policy portfolios and expanded their policy efforts to mitigate climate change. In the following, we provide

an empirical overview of this development based on data provided by the Climate Policy Database (CPDB). There are several databases that capture the different types of climate policy as they have been adopted by national governments over recent decades. One of them is the CPDB, which employs a comparatively broad definition of policy and includes several types of policy, such as laws, regulations, strategic documents, and roadmaps. It assembles climate policies from most existing publicly available climate policy databases (for an overview, see Schaub et al. 2022) with the help of country experts and thus represents the most encompassing database on climate policies (New Climate Institute, Wageningen University and Research, and PBL Netherlands Environmental Assessment Agency 2024).

Figure 1 shows that the number of climate policies in place increased between 2000 and 2023.[3] In particular, various non-European members of the OECD, as well as Brazil, Russia, India, China, and South Africa (BRICS), have developed large climate policy portfolios. In 2023, non-European OECD countries had on average 88 climate policies in place and BRICS countries 101 policies. European OECD countries have comparatively less climate policies in place (a median of 21 policies), which is a rather surprising observation.

Some countries have been especially active in expanding their climate policy portfolios. The United States has adopted the most climate policies, adding up to 375 policies in 2023. Germany and France have been the most active for European OECD countries, with 204 and 209 policies in 2023 respectively. China (N = 163) and India (N = 134)

Figure 1. Expansion of climate policies, by country groups



Source: Climate Policy Database.

exhibit the largest policy portfolios of the BRICS countries. Indonesia clearly stands out with the most policies (N = 140 in 2023) of all the other countries around the world. In fact, especially developing countries within this group often have no or only very few climate policies in place that aim at mitigation.

Overall, Figure 1 begs the question of what factors have stimulated so much climate policy expansion across so many parts of the world. Evidently, this is not a transitory empirical development; it has occurred over more than two decades. And yet even among countries with relatively similar socio-economic conditions, such as European OECD member states, there is significant variation in how actively countries have adopted climate policies, which may be explained by variation in the willingness and capability of political actors.

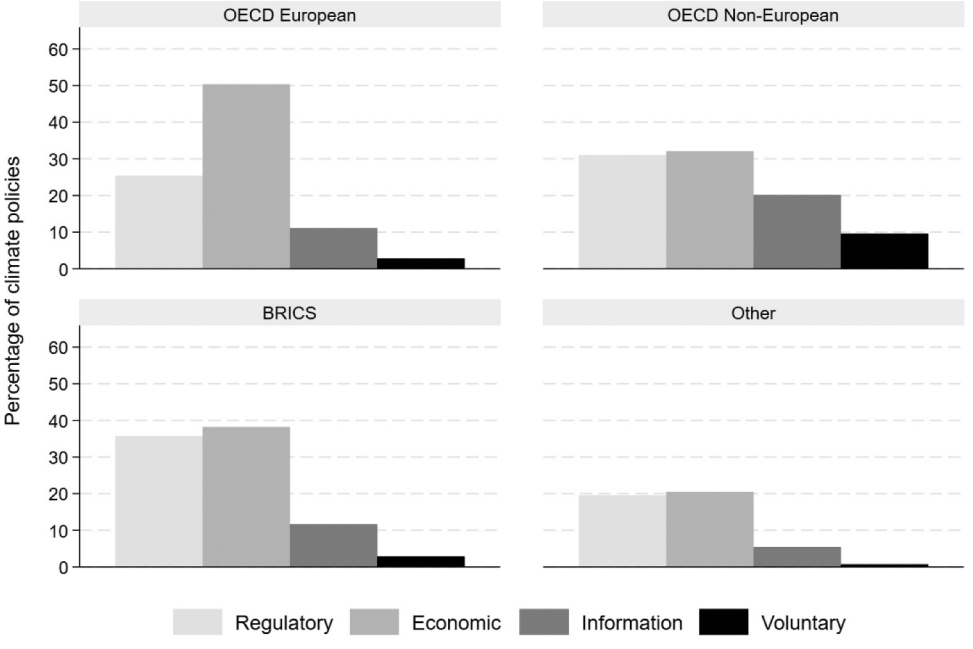
Climate policy as it exists today comprises a wide range of policy instruments. Originally, the design of climate policy reflected the notion of market failure and included instruments such as carbon pricing in the shape of carbon taxes or emissions trading systems. The next generation of policy instruments built on the notion of a socio-technological transition, highlighting the role of industrial change and innovations for reducing GHG emissions. According to this approach, climate policy needs to be conceptualised as mixes of sectoral policy interventions that collectively alter socio-technological systems. The latest generation of climate policy aims to ensure that the public supports them by compensating losers and ensuring a just transition towards a low/zero-carbon economy (Boasson and Tatham 2023).

In fact, countries differ in their use of policy instruments to mitigate climate change, as shown by Figure 2. In 2023, economic and regulatory instruments dominated countries' climate policy portfolios, followed by some margin by information-based and voluntary instruments. This is especially true of the OECD countries in Europe, as economic instruments (e.g. carbon price, feed-in-tariff, etc.) comprised 50 per cent of their total policies. These were followed by regulatory (25 per cent), information-based (11 per cent), and voluntary instruments (3 per cent).[4]

The pattern is different for non-European OECD members. Their policy portfolio includes a significantly lower share of economic instruments (32 per cent) and a comparatively higher share of information-based (20 per cent) and voluntary instruments (10 per cent). The United States' climate policy portfolio features especially high shares of information-based (36 per cent) and voluntary instruments (23 per cent), which may to some degree explain its high overall number of climate policies (see Figure 1). The BRICS countries employ the highest share of regulatory instruments (36 per cent) and about an equal share of economic instruments (38 per cent). Interestingly, less developed countries in the "other" group feature a similar pattern of policy instruments, with predominantly more regulatory and economic instruments and significantly fewer information-based and voluntary measures.

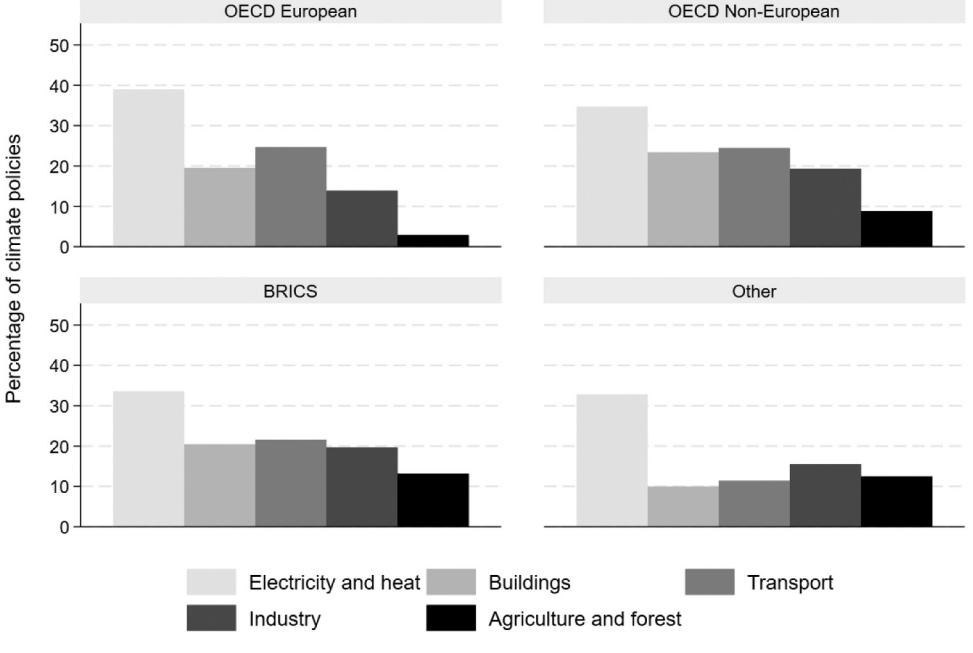
The generation of electricity and heat has been responsible for the largest share of GHG emissions. However, countries also need to reduce emissions in several so-called "hard-to-abate" sectors, such as buildings, transport, and agriculture, if they are to meet their climate targets. Figure 3 shows that the countries' climate policies in force in 2023 mostly addressed electricity and heat production – that is, they incentivised the production of renewable energy or the phaseout of coal energy. This holds truest in the European OECD countries, where 39 per cent of the climate policies addressed the

Figure 2. Types of policy instruments in countries' climate policy portfolios, by country groups



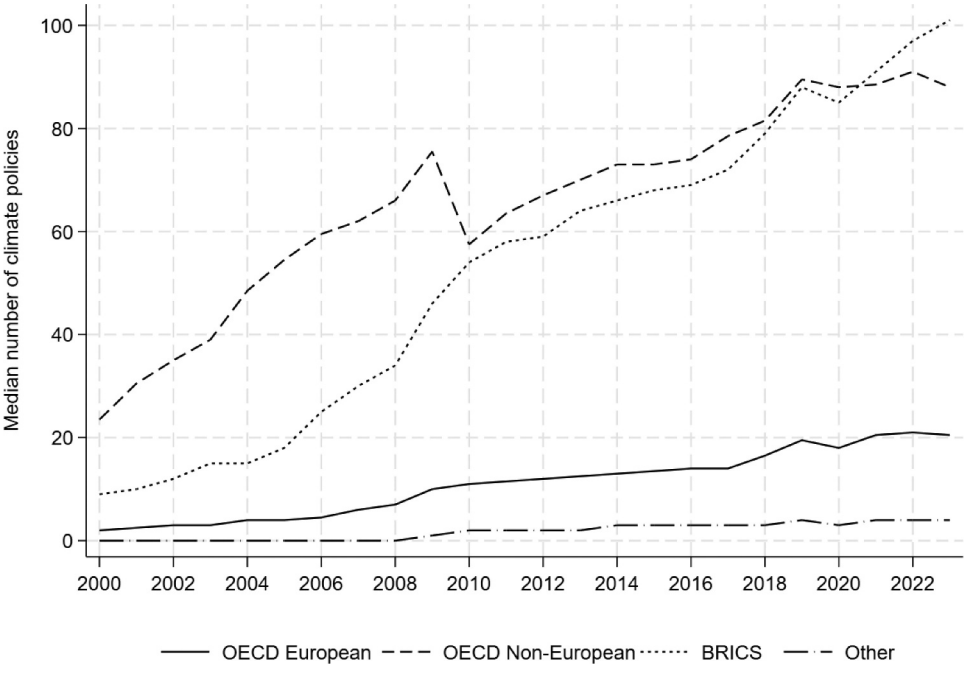
Source: Climate Policy Database.

Figure 3. Sectors countries address with their climate policy portfolios, by country groups



Source: Climate Policy Database.

Figure 4. Median number of climate policies in place between 2000 and 2023, by country groups



Source: Climate Policy Database.

energy sector. Transport tends to be addressed the second most often, regardless of whether the countries are OECD member states or BRICS, followed by buildings and industry. Policies relatively rarely address GHG emissions from agriculture and forests, especially those in force in European OECD countries.

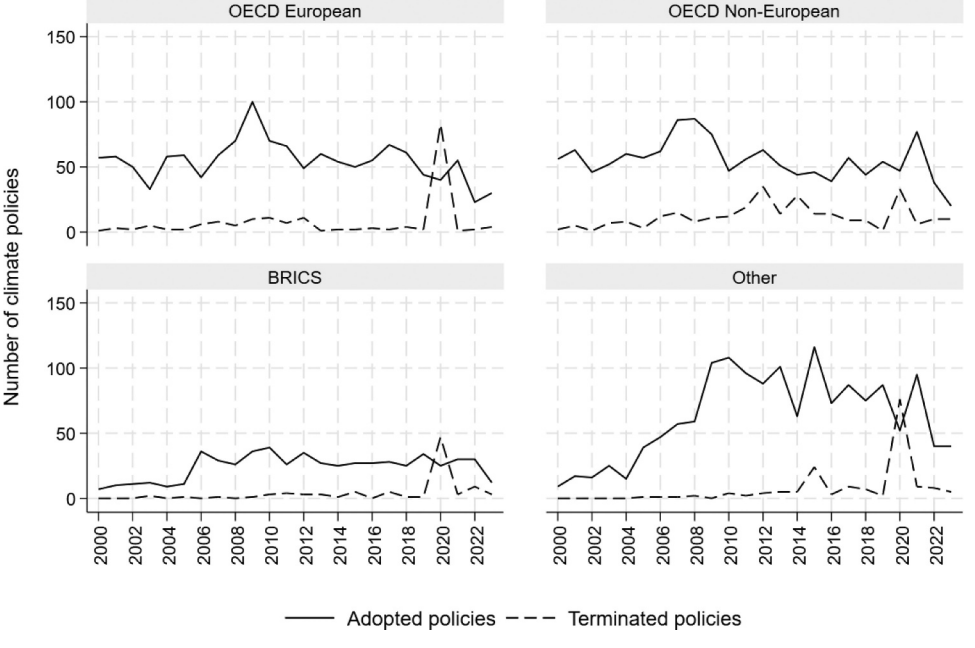
If they are to meet the global emissions reduction targets agreed in Paris in 2015, all countries must accelerate their climate action (Hermansen et al. 2023). Figure 4 shows that climate policy adoption has risen steadily across the OECD and BRICS countries. Adopting more climate policies does not necessarily translate into greater reductions of GHG emissions, as this may lead to administrative overburdening (Fernández-i-Marín et al. 2023). Another option is for countries to increase the stringency of their existing policies rather than to adopt new ones. Notably, Figure 4 shows that OECD countries have not accelerated their policy adoption since the signing of the Paris Agreement. Non-European OECD countries have always had higher adoption rates than their European counterparts, except for in 2009, when they had a negative adoption rate as they dismantled more policies than they adopted. Interestingly, BRICS countries (mostly China and India) significantly accelerated their rate of policy activity between 2005 and 2010 and again after the Paris Agreement, from 2016 onwards.

Climate Policy Dismantling

Empirical research on climate policy dismantling is still scarce, which can be explained by its relatively rare occurrence and the limited data availability. Climate policy research has mostly studied policy adoption; hence existing data mostly cover expansion rather than dismantling. The CPDB provides information on whether climate policies are still in force or were terminated at a certain point in time, which together give some indication on dismantling events in countries' climate policy development. Figure 5, based on CPDB data, compares the adoption and termination (i.e. the most severe form of dismantling) of climate policies over time.

Figure 5 provides at least three notable observations. First, policy adoption occurs much more frequently than policy dismantling. Second, policies tend to be terminated more frequently in non-European OECD countries than in their European counterparts. The increase in the number of dismantling events in 2012–2014 can mostly be attributed to changes in Australian climate policy. Many of the existing measures were dismantled after a change in government where the Labor-led governments of Kevin Rudd and Julia Gillard were replaced by the government of Tony Abbott of the Liberal Party (Tosun and Rinscheid 2021). Third, there was a significant spike in terminated policies in 2020 across all country groups. Apparently, termination in 2020 occurred relatively equally across various countries, which points to a time effect. Whether this observation is related to the simultaneous COVID-19 pandemic is an open question.

Figure 5. Comparison of newly adopted and terminated climate policies, by country groups



Source: Climate Policy Database.

Overall, many countries all over the world have expanded their policy efforts to mitigate climate change, and expansion outweighs dismantling. Furthermore, countries vary considerably in terms of climate policy expansion and dismantling. They differ in how actively they have adopted climate policies, in the instruments they have used to target emissions reductions, what sectors they have addressed predominantly, and whether they have experienced periods of policy dismantling. This raises the question of how this cross-national and temporal variation can be explained. Climate policy expansion and dismantling is first and foremost the actions taken by political actors, and therefore it is important to take a closer look at their influence on climate policy.

Political Actors in Climate Policymaking

Political actors are more numerous and diverse than one might initially think (Moore et al. 2024). The political actors that immediately come to mind are governments, which comprise heads of state and members of their cabinets. Research has shown that the leader of government impacts climate policy ambition. For example, climate policy in the United States, a presidential system, experienced shifts when Barack Obama entered office, just as it did when Donald Trump took over from him, followed by Joe Biden (Jotzo et al. 2018; Bailey 2019; South et al. 2021; Tosun and Rinscheid 2021). Likewise, when Justin Trudeau became Prime Minister in Canada, a parliamentary system, he started to pay more attention to climate policy – unlike his predecessor, Stephen Harper, who had pulled out of the Kyoto Protocol in 2011 (MacNeil and Paterson 2018; Tosun and Rinscheid 2021).

Cabinet members – that is, secretaries or ministers – also shape climate policy. Among these, ministers of finance are the key figures for facilitating climate action as they determine the budget of each policy domain (Franks et al. 2017). But they are not the only significant politicians: ministers of particular line departments are also important, especially those who are chiefly responsible for climate policy, of which the number has been growing worldwide (Averchenkova et al. 2017; Schaub et al. 2022; Hoppe et al. 2023). Since the largest share of emissions come from energy generation, energy ministers play an important role in designing and enacting climate policy (Tosun 2018). However, since climate change is an all-encompassing issue, other ministers, such as those for transportation, housing, or agriculture, are important as well. They are the ones who design legislation, typically via the administrative staff in the ministries which they lead. However, they also shape climate policy in complementary ways, such as through their framing of climate action (Robbins 2020).

Another group of elected politicians are members of the legislative branch, who either propose climate policies themselves or vote on the proposals put forth by members of the executive branch. Research has paid attention to this group by revealing how far the ideology of their respective parties matters for climate policies. In a comparative study, Hess and Renner (2019) showed that far-right parties of Germany, the Netherlands, and the United Kingdom are strongly opposed to a range of energy-transition policies, whereas the positions of such parties in France and Spain are more moderate and closer to those of centre-right parties. Green parties usually promote climate policies. In this context, an unusual observation reported by Tobin (2017) is that the Green Party in Australia blocked a climate policy proposal because it was not deemed ambitious

enough. Recent research has gradually shifted towards investigating individual members of the legislative body and how they discuss climate change in plenary debates, for example (Willis 2017; Debus and Himmelrath 2022).

A third group, bureaucrats and civil servants, plays a crucial role in designing and implementing climate policies (Biesbroek et al. 2018b; Knill and Steinebach 2023). They are the ones who draft climate policies, develop concrete policy measures and ensure that they are effectively implemented (Knill and Steinebach 2023). Bureaucrats interpret their roles differently and therefore differ in how they shape climate action. Those in Continental European countries tend to act according to a legalistic tradition by placing emphasis on the rule of law to ensure substantive policy implementation, which typically makes them less open to innovative solutions. Bureaucrats in Anglo-American countries generally perceive themselves as managers whose chief concern is to find the most efficient and effective solutions rather than to follow the law to the letter. Both roles have pros and cons and may lead to different results (Biesbroek et al. 2018a; Biesbroek et al. 2018b).

Steinebach (2023) shows among industrialised countries that those whose bureaucrats follow a more managerial approach tend to regulate air pollutants, a topic related to GHG emissions, more effectively. To what degree bureaucrats are shielded from political influences further determines the quality and effectiveness of climate policies (Knill and Steinebach 2023). Bureaucrats who can strike a balance between some degree of political autonomy and subordination to politically determined climate policy goals are expected to perform best (Wellstead and Biesbroek 2022).

Research on developing countries that have not completed their transition to democracy has alluded to the impact of bureaucracy on climate policies as well. A case in point is the study by Rahman and Giessen (2017), which illuminates how bureaucrats shape the design of forest-related climate policies in Bangladesh. Likewise, Ojha et al. (2016) have shown that the strategy of presenting climate change as a technical issue gives technocrats considerable leeway in proposing climate policy and circumventing politicisation of the issue at the stage when the proposals enter parliament.

Political actors do not act independently. Their preferences for climate policy are determined by their own (ideological) beliefs and their interactions with other actors, who all have their respective preferences for the design of climate policy. Here we want to note in particular their interactions with the public, organised interests, social movements, and international organisations.

In comparative politics, the concept of responsive government postulates a relationship between public opinion on an issue and a government's prospects for re-election (Dahl 1967). Bromley-Trujillo and Poe (2020), for instance, show that US states are more likely to adopt relevant climate policies where climate change is perceived as a problem and where attention to environmental issues is high. In comparative public policy, public opinion has predominantly been discussed against the backdrop of policy feedback. Stadelmann-Steffen and Eder (2021), for example, show that positive feedback effects, which depend on each country's current energy policy, either hinder or facilitate the energy transition.

Organised interests are political interests that have specific organisational units that work to influence public policy in different ways. We can roughly distinguish between economic and non-economic interests (Hubert 2024). Organised interests can act as

advocacy groups for facilitating or preventing climate action. Ylä-Anttila et al. (2020), for instance, show that in Australia, the pluralist system of interest intermediation enables anti-climate interest groups to delay or even block climate policy, whereas the corporatist system in Finland is characterised by continuous negotiations with unions and businesses, which can be compensated in return for their support of climate policies. Finnegan (2022) similarly shows that countries which combine interest group intermediation and proportional electoral rules feature the highest levels of climate policy stringency. Organised interests can also act as intermediaries – that is, as "go-betweens" that help policymakers to get a sense of the preferences and needs of the groups they represent (Tobin et al. 2023; Tosun et al. 2023).

An important impact on climate action in Europe, at least, can be attributed to the Fridays for Future (FFF) movement, which became active in 2018. This movement put pressure on policymakers in several countries to take more ambitious climate action. In this regard, Berker and Pollex (2023) show that all the German political parties have responded to FFF's popularity by placing greater emphasis on their climate policy profiles. But undoubtedly the most credible ally of this movement is the Green Party, which "owns" the issue of tackling climate change. Therefore, even if every German party has responded to the topic's elevated salience, the Green Party has benefitted most from it in electoral terms. Likewise, Germany's Green Party has been the strongest supporter of FFF's policy demands.

All domestic policymakers must deal with international climate cooperation and harmonise their work with commitments made to international frameworks such as the United Nations Framework Convention on Climate Change (UNFCCC). Policymakers in some countries take these commitments more seriously than in others. For example, least developed countries which rely on foreign aid have been directly influenced by international organisations and transnational actors, such as transnationally operating non-governmental organisations (NGOs) (Ojha et al. 2016). But even countries with large economies, such as China, Brazil, and India, could not resist international demands for addressing climate change by adopting appropriate legislation (Aamodt and Stensdal 2017).

In summary, we can expect publics, organised interests, social movements, and international organisations to play an important role in the decisions that political actors make regarding whether they should expand or dismantle climate policy.

Overview of the Contributions

The contributions to this special issue can be divided into three groups: first, those inspecting the factors that lead to climate policy expansion; second, those inquiring into the factors that result in attempts to dismantle climate policies; third, those assessing the dismantling of anti-climate policies.

Nascimento et al. (2023) investigate what climate policy expansion means for each country's GHG emissions. The point of departure for their analysis are the original Nationally Determined Contributions (NDCs) as the countries submitted them in the runup to the Conference of the Parties (COP) 21, as well as the updated ones. The authors assess the progress 25 countries have made towards meeting their commitments. Interestingly, their article shows that there is a gap between promising more ambitious mitigation efforts in the updated NDCs and actual climate policy expansion. In fact, almost one-quarter of the countries

submitted more ambitious, updated NDCs, even though they had not enacted policies that would put them in a position to meet their original targets. Equally interesting is their finding that most of these countries have higher national constraints, in particular, reliance on fossil fuels, which suggests that organised economic interests pose barriers to domestic climate policy expansion. The main contribution of this study to the special issue is that pledges to the UNFCCC do not automatically translate into climate policy expansion, and that the delivery on internationally made commitments depends on domestic climate politics.

Ollier et al. (2023) suggest that the successful completion of the energy transition depends not only on the expansion of corresponding policies, but also on the policy priorities of national governments. Against this background, in their comparative analysis of six EU member states, the authors show that governments' policy priorities follow a specific sequence, where cost concerns and system flexibility tend to appear later in the transition process. They further show that these shifting priorities may be followed by either expanding or dismantling renewable energy support schemes. Thus, emerging cost concerns in Spain led to a complete dismantling of these schemes, whereas Sweden, Germany, and France responded to similar changing priorities with incremental adjustments to their support schemes that resulted in a more stable policy environment for the energy transition. The tendency of policy priorities to compete and change over time makes successful energy transitions a challenge, which is why the authors argue that decision-makers should better anticipate these dynamics by enhancing the flexibility and durability of climate policies during the design phase (on this argument, see also Jordan and Moore 2020). Their paper supports the argument that policy designers should adopt a more sequential approach to design (Meckling et al. 2017). Considering that policy priorities often change following changes in power dynamics and actor coalitions, it would be helpful to take a closer look at the role of political actors when studying the impact of changing policy priorities on the energy transition.

Eskander et al. (2024) offer complementary insights by broadening the perspective so that it encompasses both policymakers and the behaviour of the targets of climate policies: companies. The authors investigate both country- and company-level net zero targets and find that in countries which introduce one, the likelihood of companies introducing their own voluntary targets increases, and vice versa. The main insight is that public policies do not eliminate the motivation for companies to adopt corporate standards. The influence of corporate target-setting on country-level targets further hints towards polycentric governance and the importance of non-governmental actors in advancing climate action (see also Jordan et al. 2018). How this relationship between governmental and non-governmental actors plays out in situations where there is a change in government and climate policies are dismantled offers an intriguing perspective for future research. Their article contributes to the special issue by showing that corporate actors do not oppose climate policy, which means that targeting them could be more effective than targeting individuals and asking them to change their behaviour.

The next article, by Schaffer and Magyar (2024), addresses precisely this point. The authors concentrate on citizen support for the energy transition in Germany and Switzerland. They show that exposure to renewable energies (solar panels and parks) enhances support for climate policy expansion. Being more vulnerable (in terms of costs) to more stringent climate policy, however, has a negative effect on policy support. The authors further show that general and political trust moderate these relationships. Trusting individuals tend to be more supportive, which amplifies the positive effect of exposure to renewable energies and dampens the negative effect of vulnerability on policy support for these individuals. However, this also means that it

will be difficult to receive support from individuals who are less trusting, which is a personal feature that cannot be changed easily. Policymakers in democracies depend on electoral support and they are therefore responsive to public opinion (Boasson and Tatham 2023). A potentially fruitful avenue for future research would be to investigate how decision-making by political actors interacts with citizen support and how these dynamics in turn influence climate policy.

The strategies for designing policies lie at the heart of the study by Nash (2024), which offers a comparison of climate policies in Austria, Germany, Denmark, and Sweden. More precisely, her study assesses which strategies for both policy expansion and dismantling address the climate–migration nexus. The empirical findings show that the policy discourse on climate and migration in these countries is dominated by migration prevention. This article contributes to the special issue by showing that perceptions about the long-term risk of climate change can impact whether the corresponding policies are expanded or dismantled.

Paterson et al. (2023) offer an improved understanding of which discursive strategies actors use to undermine net zero targets. Specifically, they investigate how right-wing populists seek to undermine the net zero goal and dismantle policies in six specific policy areas involved in pursuing net zero. Their article complements the special issue in two ways. First, it is issue-comparative rather than country-comparative. Their research design allows for capturing the different facets of climate policy, which the other contributions neglect as they focus on specific types of climate policy. Second, their article improves our understanding of the different ways in which the existence of right-wing populists can shape climate policy. In the present case, they concentrate on the discourse, which aligns with Nash's research perspective.

Discourse also features prominently in the contribution by Kenny (2023). Similar to Paterson et al. (2023), his article does not study policy dismantling directly but takes Donald Trump's announcement of withdrawing from international climate cooperation as an event which might have had an impact on public opinion on international climate agreements. Kenny's analysis of public opinion data collected for 38 countries reveals that the opinion on international climate cooperation depends on individual-level factors and tends to be more positive in liberal democracies, which are less dependent on fossil fuels for energy production. Consequently, his study shows that the most basic features of political systems matter for explaining how discourses on ending international climate cooperation affect public opinion and therefore public support for climate policy more generally.

Drake and Skovgaard (2024) concentrate on anti-climate policies and the extent to which they are dismantled. They investigate whether domestic political institutions insulating politicians from backlash and compensating those affected by reforms make subsidies easier to dismantle. Their findings for a set of OECD countries reveal that systems with proportional representation and high levels of corporatism tend to have lower levels of fossil fuel subsidies, indicating that it is more feasible in such political systems to dismantle anti-climate policies. Their study highlights the importance of organised interests for climate policymaking.

The Way Forward

Climate change is a reality that forces policymakers to take climate action (Tosun 2022). In this editorial, we have shown that the need to adopt climate policy has been accepted by governments worldwide, including those in the major GHG-emitting countries. In

fact, we showed that the number of climate policies enacted has increased, which indicates climate policy expansion. The contributions to this special issue have carried out comparative empirical research to characterise the steps that policymakers have taken to adopt climate policy. Overall, the empirical picture suggests that there has been increasing climate policy activity. This extends beyond public policies in the narrow sense, as Eskander et al. (2024) show by pointing to the adoption of corporate standards in countries with well-developed climate policies. However, the articles in this special issue collectively reveal that obstacles to climate policy exist at both the individual level and the level of the political systems.

The second line of inquiry addressed by this special issue concerns the dismantling of climate policies and the dismantling of anti-climate policies. Achieving the climate targets agreed in Paris in 2015 necessitates the adoption of more stringent climate policies. Nevertheless, it also requires that once adopted, climate policies are not severely dismantled, as has been observed in Australia and in Canada. On the other hand, it means that political actors will need to dismantle existing anti-climate policies that promote the exploration and use of fossil fuels. Previous research on policy dismantling and termination (Geva-May 2004; Bauer et al. 2012; Bauer and Knill 2014) has shown that, once adopted, it is exceedingly difficult to dismantle policies. This does not necessarily imply that it is also hard to dismantle anti-climate policies, but further investigation is required to determine whether it is easier to dismantle anti-climate policies or climate policies. Here, we could show that political leaders and groups exist which use discursive strategies to mobilise for climate policy dismantling. These strategies are often employed by right-wing populists who anticipate electoral gains from dismantling climate policies. Insulation from electoral losses and possibilities to compensate have been decisive for dismantling anti-climate policies, as Drake and Skovgaard (2024) have shown. Future studies may investigate whether these conditions also help to accelerate decarbonisation efforts and prevent the dismantling of climate policies.

Despite the insights offered by this collection, we can identify five ways in which the literature could be advanced. First, we need better data for measuring climate policy dismantling. While it is reasonable to assume that climate policy change predominantly corresponds to policy expansion, we still lack a reliable measurement of instances of policy dismantling. Second, there is also a lack of data for measuring the expansion and dismantling of "anti-climate" policies. Third, along similar lines, we need theoretical refinement as to whether climate policy expansion and dismantling are caused by the same factors or different ones. Fourth, the papers assembled in this special issue have addressed national climate policies, but we know from previous research that subnational levels are also active in climate policymaking. Fifth, we invite future research to focus more on strategies for overcoming opposition to more ambitious climate policy. Boasson and Tatham (2023) even argue that ensuring public support for climate policy represents a new approach to climate policy, which emerged from the fact that it is not only businesses which oppose more ambitious policies; sometimes the public does, too. In this context, it appears instructive to gain a better understanding of the origins of public discontent with climate policy and whether there exist specific patterns for the individual countries. Finally, climate policy represents only one area of policymaking. To learn about the drivers of and impediments to policy change in toto, it would be useful to compare climate policy-making processes with those in other policy domains.

Notes

1. https://unric.org/en/guterres-at-stockholm50-end-the-suicidal-war-against-nature/
2. https://climateactiontracker.org/methodology/net-zero-targets/
3. We present the policy development for European and non-European OECD countries as well as BRICS countries separately as these are the main GHG emitters. The countries in these groups are the following: OECD European: Austria, Belgium, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the UK; OECD non-European: Australia, Canada, Chile, Colombia, Israel, Japan, Korea, Mexico, New Zealand, Turkey, and the USA; BRICS: Brazil, Russia, India, China, and South Africa.
4. Percentages do not add up to 100 per cent for several reasons: first, some policies include more than one type of policy instrument; second, some policies include policy instruments other than the ones selected here; third, some policies do not contain specific policy instruments.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Funding

Funding was generously provided by the ERC [via the DeepDCarb Advanced Grant 882601] and the ESRC Centre for Climate Change and Social Transformations (CAST).

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References

Aamodt, S. and Stensdal, I., 2017, Seizing policy windows: Policy influence of climate advocacy coalitions in Brazil, China, and India 2000–2015. *Global Environmental Change*, **46**(3), pp. 114–125.

Averchenkova, A., Fankhauser, S., and Nachmany, M., 2017, Introduction, in: A. Averchenkova, S. Fankhauser, and M. Nachmany (Eds) *Trends in Climate Change Legislation* (Northampton, MA: Edward Elgar Pub), pp. 1–16.

Bailey, C. J., 2019, Assessing President Obama's climate change record. *Environmental Politics*, **28**(5), pp. 847–865.

Bauer, M. W., Green-Pedersen, C., Héritier, A., and Jordan, A., 2012, *Dismantling Public Policy: Preferences, Strategies, and Effects* (Oxford: Oxford University Press).

Bauer, M. W. and Knill, C., 2014, A conceptual framework for the comparative analysis of policy change: Measurement, explanation and strategies of policy dismantling. *Journal of Comparative Policy Analysis: Research and Practice*, **16**(1), pp. 28–44.

Benson, D. and Jordan, A., 2010, The expansion of EU climate policy and its future under the Lisbon treaty. *St Antony's International Review*, **5**(2), pp. 121–140.

Berker, L. E. and Pollex, J., 2023, Explaining differences in party reactions to the fridays for future movement – a qualitative comparative analysis (QCA) of parties in three European countries. *Environmental Politics*, **32**(5), pp. 755–792. doi:10.1080/09644016.2022.2127536

Biesbroek, R., Lesnikowski, A., Ford, J. D., Berrang-Ford, L., and Vink, M., 2018a, Do administrative traditions matter for climate change adaptation policy? A comparative analysis of 32 high-income countries. *Review of Policy Research*, **35**(6), pp. 881–906. doi:10.1111/ropr.12309

Biesbroek, R., Peters, B. G., and Tosun, J., 2018b, Public bureaucracy and climate change adaptation. *Review of Policy Research*, **35**(6), pp. 776–791. doi:10.1111/ropr.12316

Boasson, E. L. and Tatham, M., 2023, Climate policy: From complexity to consensus? *Journal of European Public Policy*, **30**(3), pp. 401–424. doi:10.1080/13501763.2022.2150272

Bomberg, E., 2021, The environmental legacy of President Trump. *Policy Studies*, **42**(5–6), pp. 628–645. doi:10.1080/01442872.2021.1922660

Brandsma, G. J., Pollex, J., and Tobin, P., 2023, Overlooked yet ongoing: Policy termination in the European Union. *JCMS: Journal of Common Market Studies*, **61**(5), pp. 1360–1376.

Bromley-Trujillo, R. and Poe, J., 2020, The importance of salience: Public opinion and state policy action on climate change. *Journal of Public Policy*, **40**(2), pp. 280–304. doi:10.1017/S0143814X18000375

Brutschin, E. and Andrijevic, M., 2022, Why ambitious and just climate mitigation needs political science. *Politics and Governance*, **10**(3), pp. 167–170. doi:10.17645/pag.v10i3.6156

Burns, C. and Tobin, P., 2020, Crisis, climate change and comitology: Policy dismantling via the backdoor? *Journal of Common Market Studies*, **58**(3), pp. 527–544.

Compston, H. and Bailey, I., 2013, Climate policies and anti-climate policies. *Open Journal of Political Science*, **3**(4), pp. 146–157. doi:10.4236/ojps.2013.34021

Crowley, K., 2021, Fighting the future: The politics of climate policy failure in Australia (2015–2020). *Wiley Interdisciplinary Reviews: Climate Change*, **12**(5), pp. e725.

Dahl, R., 1967, *Pluralist Democracy in the United States: Conflict and Consent* (Chicago, IL: Rand MacNally).

Debus, M. and Himmelrath, N., 2022, Advocates of climate action? The age of members of parliament and their activity in legislative debates on climate change. *Climate Action*, **1**(1), pp. 825. doi:10.1007/s44168-022-00017-2

Drake, E. and Skovgaard, J., 2024, Do political institutions influence the dismantling of fossil fuel subsidies? Lessons from the OECD countries and a comparative analysis of Canadian and German production subsidies. *Journal of Comparative Policy Analysis: Research and Practice*, **26**(3–4). doi:10.1080/13876988.2024.2328605.

Dupont, C., Moore, B., Boasson, E. L., Gravey, V., Jordan, A., Kivimaa, P., Kulovesi, K., Kuzemko, C., Oberthür, S., Panchuk, D., Rosamond, J., Torney, D., Tosun, J., and Homeyer, I. V., 2024, Three decades of EU climate policy: Racing toward climate neutrality? *WIREs Climate Change*, **15**(1), pp. 89. doi:10.1002/wcc.863

Dwivedi, Y. K., Hughes, L., Kar, A. K., Baabdullah, A. M., Grover, P., Abbas, R., Andreini, D., Abumoghli, I., Barlette, Y., Bunker, D., Kruse, C., Leona, C., Ioanna, D., Robert, M., De', R., Dubey, R., Fenby-Taylor, H., Gupta, B., He, W., Kodama, M., Mäntymäki, M., Metri, B., Michael, K., Olaisen, J., Panteli, N., Pekkola, S., Nishant, R., Raman, R., Rana, N. P., Rowe, F., Sarker, S., Scholtz, B., Sein, M., Shah, J. D., Teo, T. S. H., Tiwari, M. K., Vendelø, M. T., and Wade, M., 2022, Climate change and COP26: Are digital technologies and information management part of the problem or the solution? An editorial reflection and call to action. *International Journal of Information Management*, **63**(3), pp. 102456.

Eskander, S., Fankhauser, S., and Setzer, J., 2021, Global lessons from climate change legislation and litigation. *Environmental and Energy Policy and the Economy*, **2**, pp. 44–82. doi:10.1086/711306

Eskander, S., Higham, C., Hamley, M., Setzer, J., and Fankhauser, S., 2024, Testing the ambition loop: Do country- and company-level net-zero targets reinforce each other? A global comparison. *Journal of Comparative Policy Analysis: Research and Practice*, **26**(3-4). doi:10.1080/13876988.2024.2317949.

Fankhauser, S., Gennaioli, C., and Collins, M., 2015, The political economy of passing climate change legislation: Evidence from a survey. *Global Environmental Change*, **35**, pp. 52–61. doi:10.1016/j.gloenvcha.2015.08.008

Fernández-i-Marín, X., Hinterleitner, M., Knill, C., and Steinebach, Y., 2023, Bureaucratic overburdening in advanced democracies. *Public Administration Review*. doi:10.1111/puar.13725

Finnegan, J. J., 2022, Institutions, climate change, and the foundations of long-term policymaking. *Comparative Political Studies*, **55**(7), pp. 1198–1235. doi:10.1177/00104140211047416

Franks, M., Edenhofer, O., and Lessmann, K., 2017, Why finance ministers favor carbon taxes, even if they do not take climate change into account. *Environmental and Resource Economics*, **68**(3), pp. 445–472. doi:10.1007/s10640-015-9982-1

Geva-May, I., 2004, Riding the wave of opportunity: Termination in public policy. *Journal of Public Administration Research and Theory*, **14**(3), pp. 309–333. doi:10.1093/jopart/muh020

Gravey, V. and Jordan, A. J., 2020, Policy dismantling at EU level: Reaching the limits of 'an ever-closer ecological union'? *Public Administration*, **98**(2), pp. 349–362. doi:10.1111/padm.12605

Gürtler, K., Postpischil, R., and Quitzow, R., 2019, The dismantling of renewable energy policies: The cases of Spain and the Czech Republic. *Energy Policy*, **133**, pp. 110881. doi:10.1016/j.enpol.2019.110881

Hale, T., Smith, S. M., Black, R., Cullen, K., Fay, B., Lang, J., and Mahmood, S., 2022, Assessing the rapidly-emerging landscape of net zero targets. *Climate Policy*, **22**(1), pp. 18–29. doi:10.1080/14693062.2021.2013155

Hermansen, E. A. T., Boasson, E. L., and Peters, G. P., 2023, Climate action post-paris: How can the IPCC stay relevant? *npj Climate Action*, **2**(30), pp.1–8. doi:10.1038/s44168-023-00058-1

Hess, D. J. and Renner, M., 2019, Conservative political parties and energy transitions in Europe: Opposition to climate mitigation policies. *Renewable and Sustainable Energy Reviews*, **104**(2–3), pp. 419–428. doi:10.1016/j.rser.2019.01.019

Hoppe, J., Hinder, B., Rafaty, R., Patt, A., and Grubb, M., 2023, Three decades of climate mitigation policy: What has it delivered? *Annual Review of Environment and Resources*, **48**(1), pp. 615–650. doi:10.1146/annurev-environ-112321-103821

Hubert, D., 2024, The universe of organized interests, and D. Hubert (Ed) *Attentuated Democracy: A Critical Introduction to U.S. Government and Politics* (Montreal, Canada: Pressbooks), pp. 269–275.

IPCC, 2023, Summary for policymakers, in: IPCC (Ed) *Climate Change 2023 - Synthesis Report: Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (Eds)]* (Geneva, Switzerland: IPCC), pp. 1–34.

Jordan, A., Bauer, M. W., and Green-Pedersen, C., 2013, Policy dismantling. *Journal of European Public Policy*, **20**(5), pp. 795–805. doi:10.1080/13501763.2013.771092

Jordan, A., Huitema, D., van Asselt, H., and Forster, J., 2018, Governing climate change: The promise and limits of polycentric governance, in: A. Jordan, D. Huitema, H. van Asselt, and J. Forster (Eds) *Governing Climate Change: Polycentricity in Action?* (Cambridge: Cambridge University Press), pp. 359–383.

Jordan, A., Lorenzoni, I., Tosun, J., I Saus, J. E., Geese, L., Kenny, J., Saad, E. L., Moore, B., and Schaub, S. G., 2022, The political challenges of deep decarbonisation: Towards a more integrated agenda. *Climate Action*, **1**(1), pp. 281. doi:10.1007/s44168-022-00004-7

Jordan, A. and Moore, B., 2020, *Durable by Design? Policy Feedback in a Changing Climate* (Cambridge: Cambridge University Press).

Jotzo, F., Depledge, J., and Winkler, H., 2018, US and international climate policy under President Trump. *Climate Policy*, **18**(7), pp. 813–817. doi:10.1080/14693062.2018.1490051

Kenny, J., 2023, Disapproval of climate policy dismantlement: A comparative analysis of international public opinion on Donald Trump's withdrawal from the paris climate change regime. *Journal of Comparative Policy Analysis: Research and Practice*, **26**(3–4). doi:10.1080/13876988.2023.2262431.

Knill, C., Schulze, K., and Tosun, J., 2012, Regulatory policy outputs and impacts: Exploring a complex relationship. *Regulation & Governance*, **6**(4), pp. 427–444. doi:10.1111/j.1748-5991.2012.01150.x

Knill, C. and Steinebach, Y., 2023, Bureaucracy and environmental policy, in: H. Jörgens, C. Knill, and Y. Steinebach (Eds) *Routledge Handbook of Environmental Policy*, 1st ed. (London: Routledge), pp. 108–119.

MacNeil, R. and Paterson, M., 2018, Trudeau's Canada and the challenge of decarbonisation. *Environmental Politics*, **27**(2), pp. 379–384. doi:10.1080/09644016.2018.1414747

Meckling, J., Sterner, T., and Wagner, G., 2017, Policy sequencing toward decarbonization. *Nature Energy*, **2**(12), pp. 918–922. doi:10.1038/s41560-017-0025-8

Moore, B., Geese, L., Kenny, J., Dudley, H., Jordan, A., Alba Prados, P., Lorenzoni, I., Schaub, S., Enguer, J., and Tosun, J., 2024, Politicians and climate change: A systematic review of the literature. *WIREs Climate Change*, e908. doi:10.1002/wcc.908

Nascimento, L., den Elzen, M., Kuramochi, T., Woollands, S., Dafnomilis, I., Moisio, M., Roelfsema, M., Forsell, N., and Araujo Gutierrez, Z., 2023, Comparing the sequence of climate change mitigation targets and policies in major emitting economies. *Journal of Comparative Policy Analysis: Research and Practice*, **26**(3–4). doi:10.1080/13876988.2023.2255151.

Nash, S. L., 2024, Climate protection for migration prevention: Comparison of policy discourses on climate change and migration in Austria, Germany, Denmark, and Sweden. *Journal of Comparative Policy Analysis: Research and Practice*, **26**(3–4). doi:10.1080/13876988.2024.2304835.

NewClimate Institute, Wageningen University and Research and PBL Netherlands Environmental Assessment Agency, 2024, Climate policy database: Version 2023. https://climatepolicydatabase.org/.

Ojha, H. R., Ghimire, S., Pain, A., Nightingale, A., Khatri, D. B., and Dhungana, H., 2016, Policy without politics: Technocratic control of climate change adaptation policy making in Nepal. *Climate Policy*, **16**(4), pp. 415–433. doi:10.1080/14693062.2014.1003775

Ollier, L., Melliger, M., and Metz, F., 2023, How do governments' policy priorities change as the energy transition progresses? A cross-country comparison. *Journal of Comparative Policy Analysis: Research and Practice*, **26**(3–4). doi:10.1080/13876988.2023.2280270.

Paterson, M., Wilshire, S., and Tobin, P., 2023, The rise of anti-net zero populism in the UK: Comparing rhetorical strategies for climate policy dismantling. *Journal of Comparative Policy Analysis: Research and Practice*, **26**(3–4). doi:10.1080/13876988.2023.2242799.

Rahman, M. S. and Giessen, L., 2017, The power of public bureaucracies: Forest-related climate change policies in Bangladesh (1992–2014). *Climate Policy*, **17**(7), pp. 915–935. doi:10.1080/14693062.2016.1197093

Robbins, D., 2020, Climate change frame production: Perspectives from Government ministers and senior media strategists in Ireland. *Environmental Communication*, **14**(4), pp. 509–521. doi:10.1080/17524032.2019.1691620

Schaffer, L. M. and Magyar, Z. B., 2024, Comparative energy transition policy: How exposure, policy vulnerability and trust affect popular acceptance of policy expansion. *Journal of Comparative Policy Analysis: Research and Practice*, **26**(3–4). doi:10.1080/13876988.2024.2331166.

Schaub, S., Tosun, J., Jordan, A., and Enguer, J., 2022, Climate policy ambition: Exploring a policy density perspective. *Politics and Governance*, **10**(3). doi:10.17645/pag.v10i3.5347

South, D., Vangala, S., and Hung, K., 2021, The Biden administration's approach to addressing climate change. *Climate and Energy*, **37**(9), pp. 8–18. doi:10.1002/gas.22222

Stadelmann-Steffen, I. and Eder, C., 2021, Public opinion in policy contexts. A comparative analysis of domestic energy policies and individual policy preferences in Europe. *International Political Science Review*, **42**(1), pp. 78–94. doi:10.1177/0192512120913047

Steinebach, Y., 2023, Administrative traditions and the effectiveness of regulation. *Journal of European Public Policy*, **30**(6), pp. 1163–1182. doi:10.1080/13501763.2022.2070240

Steinebach, Y. and Knill, C., 2017, Still an entrepreneur? The changing role of the European Commission in EU environmental policy-making. *Journal of European Public Policy*, **24**(3), pp. 429–446. doi:10.1080/13501763.2016.1149207

Tobin, P., 2017, Leaders and laggards: Climate policy ambition in developed states. *Global Environmental Politics*, **17**(4), pp. 28–47. doi:10.1162/GLEP_a_00433

Tobin, P., Farstad, F. M., and Tosun, J., 2023, Intermediating climate change: The evolving strategies, interactions and impacts of neglected "climate intermediaries." *Policy Studies*, **44**(5), pp. 555–571. doi:10.1080/01442872.2023.2230899

Tosun, J., 2018, Investigating ministry names for comparative policy analysis: Lessons from energy governance. *Journal of Comparative Policy Analysis: Research and Practice*, **20**(3), pp. 324–335.

Tosun, J., 2022, Addressing climate change through climate action. *Climate Action*, **1**(1), pp. 571. doi:10.1007/s44168-022-00003-8

Tosun, J. and Rinscheid, A., 2021, The clean energy ministerial: Motivation for and policy consequences of membership. *International Political Science Review*, **42**(1), pp. 114–129. doi:10.1177/0192512120942303

Tosun, J., Tobin, P., and Farstad, F. M., 2023, Intermediating climate change: Conclusions and new research directions. *Policy Studies*, **44**(5), pp. 687–701. doi:10.1080/01442872.2023.2230900

Wellstead, A. M. and Biesbroek, R., 2022, Finding the sweet spot in climate policy: Balancing stakeholder engagement with bureaucratic autonomy. *Current Opinion in Environmental Sustainability*, **54**, pp. 101155. doi:10.1016/j.cosust.2022.101155

Willis, R., 2017, Taming the climate? Corpus analysis of politicians' speech on climate change. *Environmental Politics*, **26**(2), pp. 212–231. doi:10.1080/09644016.2016.1274504

Ylä-Anttila, T., Gronow, A., Karimo, A., Goodman, J., and da Rimini, F., 2020, Breaking the treadmill? Climate change policy networks and the prospects for low carbon futures in Australia and Finland. *Society & Natural Resources*, **33**(11), pp. 1380–1398. doi:10.1080/08941920.2020.1802540