The State and Collaborative Climate Governance: Prospects and Limitations

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10.1 Introduction

Tackling the climate crisis has become one of humanity's most urgent concerns. The Intergovernmental Panel on Climate Change's (IPCC, 2023) sixth synthesis report reinforces the urgency to accelerate greenhouse gas (GHG) emission reductions, which need to be cut by more than half by 2030 in order to stand a reasonable chance to limit the average global temperature increase to 1.5°C compared to preindustrial levels. However, the path to achieving these targets is highly uncertain, ill-defined, and contested. A synthesis report from the United Nations Framework Convention on Climate Change (UNFCCC) ahead of the first global stocktake of the Paris Agreement argues that implementation must accelerate across all fronts to make progress toward achieving the goals of the Paris Agreement and halt the climate crisis (UNFCCC, 2023). Despite decades of research into human-made climate change and the uptake of climate-friendly technologies in recent decades, political struggles, vested interests, and various carbon lock-ins prevent or delay urgently needed climate action (Hulme, 2020; IPCC, 2022; Seto et al., 2016; Stoddard et al., 2021).

To foster deep decarbonization, overcome carbon lock-ins, and escape from political inertia, effective climate governance and policy needs to be founded upon collaboration between state and non-state actors, joint efforts, as well as synergies across all societal sectors, stakeholders, and jurisdictional levels. As argued in the introduction to this book, this is central particularly since the Paris Agreement was adopted in 2015 with its direct call for climate action by cities, regions, companies, civil society, and other non-state actors in global, national, regional, and local contexts. The UNFCCC Global Climate Action Portal is arguably the most visible manifestation of a collaborative climate governance model. However, the success or failure of implementing the Paris Agreement depends on states adopting ambitious Nationally Determined Contributions (NDCs) and national climate policy and legislation. Advanced industrialized welfare states like Sweden increasingly adopt a collaborative multi-stakeholder approach to mobilize businesses, cities, trade unions, and civil society to achieve climate targets and decarbonization. A report by the Swedish Climate Policy Council (SCPC, 2023) emphasizes the importance of state-led efforts to collaborate with societal actors to increase synergies and minimize conflicts between climate action, energy security, welfare provision, growth, and job creation. Along these lines and complementing traditional regulatory interventions, Sweden has developed a collaborative approach to tackle the climate crisis by, for instance, close industry-state cooperation to achieve industrial decarbonization by using sectoral roadmaps for fossilfuel competitiveness (Nasiritousi and Grimm, 2022).

In light of the slow progress toward achieving the goals of the Paris Agreement and given the failure of states to sufficiently address the climate crisis and rapidly decarbonize, facilitative and collaborative climate governance has emerged as a critical model for decarbonization both globally and nationally (Jernnäs and Lövbrand, 2022). Beyond voluntary modes of governance, the state plays a pivotal role in terms of setting norms and targets by regulating non-state actors and by enforcing the implementation of decarbonization (Duit et al., 2016; Eckersley, 2004; Gough and Meadowcroft, 2011). A core argument in the academic literature and policy debates is that the state has a unique role to play in actively steering, governing, and managing deep decarbonization and the transformation to a fossil-free society (Jordan et al., 2022; SCPC, 2023). What this means for the interplay between state and non-state actors and the prospects and limitations of such a state-led collaborative approach are at the heart of this book.

To conceptualize the multiple relations between the state and non-state actors, we developed an analytical framework in Chapter 2 to guide the empirical chapters. The framework distinguishes between regulation, orchestration, lobbying/agenda setting, and contestation as central relations between the state and the multitude of non-state actors. To better account for how these relationships unfold and how state and non-state actors interact to achieve decarbonization, Sweden - conceived as a leading green welfare state – serves as an illustrative case of collaborative climate governance (Bäckstrand and Kronsell, 2015). At COP21 in Paris in 2015, Sweden declared that it aimed to be the first fossil-free welfare state in the world. In 2017, the goal was backed up by the adoption of the Climate Policy Framework, containing mid-term goals and a net-zero target by 2045, a Climate Act, and the Swedish Climate Policy Council (SCPC). We regard Sweden as a critical case for decarbonization for various reasons: the country has developed a legacy of being an environmental pioneer with the first environmental protection agency in the world; it introduced a carbon tax early in the 1990s; and it relies on strong public support for climate policy. Moreover, since 1990, Sweden has decoupled its GHG

emissions from GDP growth and reduced its territorial GHG emissions by more than 30 percent.

As the first country in the world, a cross-party parliamentary committee recommended that Sweden adopts a national consumption-based emissions goal. For consecutive years, the Climate Change Performance Index (CCPI) has ranked Sweden among the world's top countries (Burck et al., 2022). Sweden is also among the world's best-performing countries on governance-related indicators such as corruption levels, trust in government, and regulatory quality. Hence, by accelerating institutional, technological, economic, and behavioral transformation, Sweden is presumably a success case for large-scale decarbonization. However, in practice, Sweden suffers from a widening implementation gap: given the annual emission reductions of 1–2 percent instead of the 8–10 percent required, Sweden is at risk of attaining neither its mid-term nor long-term climate targets. Hitherto, the decarbonization of Sweden represents more of an incremental transition in certain sectors rather than a wholesale transformation to a fossil-free society.

Sweden's response to climate change reflects its political culture founded on collaboration, corporativism, and stakeholder participation to reach a broad societal consensus for addressing political issues. We have mapped Sweden's national strategies and governance modes to achieve decarbonization and overcome carbon lock-ins through institutional, economic, technological, and behavioral transformation (see Chapter 4 for details). This entails, for instance, accelerating market and technological innovations toward carbon neutrality, reforming institutions political leadership for climate policy integration, and enabling climate-friendly consumption behavior and lifestyles. The state has a legacy of close engagement with non-state and sub-state actors. Such a governance arrangement paves the way for various modes of interaction across multiple jurisdictional levels and acknowledges the increasing relevance of non- and sub-state actors, as also observed globally (Bäckstrand and Kuyper, 2017; Marquardt et al., 2022; Nasiritousi, 2016; Widerberg and Stripple, 2016).

This book has examined how, why, and with what effects the state employs what we frame as collaborative climate governance through numerous multi-sectoral networks, partnerships, and constellations of individual companies, cities, and regions, and civil society actors. The cooperative approach of climate policymaking in Sweden's political system also reflects the global approach of a facilitative, synergetic, and collaborative climate governance model promoted by the UNFCCC and beyond (Jernnäs and Lövbrand, 2022). The collaborative approach was adopted in order to implement the 2015 Paris Agreement (Chan et al., 2019; Hale, 2016; Marquardt et al., 2022) with non- and sub-state actors taking on voluntary climate commitments in a system of "hybrid multilateralism" (Bäckstrand and Kuyper,

2017). From a normative perspective, the collaborative governance setting is underpinned by inclusive, participatory, and deliberative ideals to increase the democratic legitimacy of climate action (Bäckstrand et al., 2010; Dryzek and Pickering, 2017).

This book has analyzed how large-scale transformative processes are governed in an advanced welfare state like Sweden characterized by strong interaction between state and non-state actors, and evaluated to what extent decarbonization is effective, legitimate, and just. We asked how the state uses collaborative climate governance to steer society toward decarbonization; who is included and who is excluded when the state seeks to mobilize non-state and sub-state actors toward decarbonization; what conflicts, contestation, and discursive struggles arise when governing toward decarbonization; and under what conditions collaborative climate governance can achieve deep societal decarbonization (Jordan et al., 2022). In what follows, we revisit our research questions and summarize our findings in three consecutive steps: First, we outline the multiple interactions between state and nonstate actors, synthesizing our findings based on the chapters in this book. Second, we discuss the limits and prospects of collaborative climate governance and the role of the state therein. Third, and finally, we outline the implications for the politics and governance of decarbonization beyond Sweden and formulate avenues for future research.

10.2 Multiple Interactions between the State and Non-state Actors

The role of non-state actors and calls for their contribution to decarbonization have been a central theme in scholarly research (Nasiritousi and Bäckstrand, 2019; Newell et al., 2012; Okereke et al., 2009). The state's role in promoting decarbonization has changed and diversified as it is expected to perform multiple roles, ranging from traditional "command and control"-like functions, including regulation, enforcement, resource allocation, and implementation, to more facilitative modes of steering, including orchestration and participation in networked types of governance such as multi-stakeholder partnerships (Nasiritousi and Grimm, 2022). In Chapter 2, we advance an analytical framework to conceptualize the multitude of relations and interactions between the state and non-state actors and evaluate whether a mix of top-down regulatory approaches and bottom-up voluntary initiatives can contribute to an effective, legitimate, and just transformation.

Parallel with a long-standing political culture of collaborative governance in Sweden, the state has acted as a regulator through the early adoption and enforcement of climate and energy policies and legislation. Sweden's handling of the oil crises in the 1970s demonstrates the importance of a strong state actively intervening and implementing policies to foster a transformation toward a fossil-free electricity system (see Chapter 3). Sweden promotes a strong regulatory state to achieve decarbonization by shifting societal priorities and goals toward energy independence and net-zero emissions as illustrated by the adoption of the 2017 Climate Policy Framework. Yet, particularly after the Paris Agreement and the announcement of the multi-stakeholder platform Fossil Free Sweden (FFS) in 2016, the Swedish government has increasingly adopted orchestration strategies to accelerate decarbonization by encouraging voluntary climate commitments by the industrial sector and other societal actors (see Chapter 4). The state thus aims to provide incentives and a supportive regulatory framework under which decarbonization can be accelerated.

Following the same logic as the UNFCCC Global Climate Action Portal, an online repository of voluntary climate commitments from about 40,000 actors (cities, regions, investors, businesses, civil society), Sweden has relied on orchestration by setting up multi-stakeholder platforms such as FFS to encourage input and contributions from a variety of non-state actors (Chan et al., 2018). In practice, carbonintensive industries such as steel and cement as well as businesses in other fields like forestry or energy are predominant when formulating roadmaps toward decarbonization (Brodén Gyberg and Lövbrand, 2022). FFS is designed as an open platform that mainly leaves it up to carbon-intensive industries to develop 22 sector-specific roadmaps for fossil-fuel competitiveness to achieve decarbonization and the netzero target by 2045. The Social-Democratic-Green coalition government, which established FFS, and the subsequent Conservative-Liberal minority government (which relies on support from the populist right-wing Sweden Democrats) agree that FFS is key to achieving decarbonization. Thus, the state's efforts to formulate goals and ambitions largely depend on voluntary targets and self-regulation by industry actors in the cement, steel, agricultural, and mining sectors for implementing the climate targets. While regulation and orchestration illustrate two important poles on a continuum of state-driven governance approaches to foster decarbonization, there are also other significant relations between non-state actors and the state, increasing the complexity of interactions. Both businesses and civil society actors use modes of lobbying and agenda setting to advocate for more ambitious climate action or raise opposition to it. For example, the Haga Initiative, a business network comprising large companies, promotes more ambitious and faster emissions reduction through public campaigns and events (see Chapter 5). In addition, protests and other forms of public confrontation point to the role of contestation engendered by civil society when engaging with the state, for instance through the Fridays for Future (FFF) movement, Extinction Rebellion, and KlimatSverige.

Decarbonization is a complex process involving both top-down steering and bottom-up pledge-making. Relations can go in multiple ways and rest upon a variety of actors. The shift to hydropower, nuclear energy, and non-fossil-fuel domestic heating system in the aftermath of the oil crises in the 1970s marked an unintentional climate policy by the regulatory state that helped decarbonize the heating and electricity system (see Chapter 3). In contrast, the government's call for industry, municipalities, trade unions, and civil society to sign up for the FFS initiative exemplifies the state in its role as an orchestrator. Bottom-up governance such as lobbying and agenda setting for a growth-and business-oriented transition has been at the core of climate business networks such as the Haga Initiative, which calls for more stringent regulation in order to achieve a stable long-term investment climate. In contrast, civil society groups like FFF have mobilized mass street protests to criticize the Swedish government's failure to comply with its national climate targets and the goals of the Paris Agreement (see Chapter 8).

Figure 10.1 illustrates how multiple governance relations between the state and other actors can have both positive and negative effects. In reality, the various relations are not exclusive to the different stakeholders presented in the figure. Sweden's embeddedness in global and multilevel governance, particularly in EU climate and energy legislation, is examined in Chapter 3. In the next section we summarize the findings on the links between collaborative climate governance and the three evaluative themes – effectiveness, legitimacy, and justice.

Although we distinguish between these relationships in this book for analytical reasons, Sweden's decarbonization process vividly illustrates that in practice such relations heavily overlap, influence, and shape each other. This means that the state's efforts to implement decarbonization are accompanied by lobbying and contestation from different actors, as well as state-driven orchestration and regulation. The city of Lysekil is an excellent example in this regard as it demonstrates both different forms of collaborative and confrontational relations (see Chapter 8 for details). These relations highlight the limitations of either top-down or bottom-up governance to achieve decarbonization: on the one hand, state-driven climate action relies on implementation by non-state and sub-national actors. Chapters 6



Figure 10.1 Actor groups, relations, limits, and prospects of collaborative climate governance

and 7 show that the capacity and willingness to take climate action are unevenly distributed across Sweden. On the other hand, large-scale government investments, such as the Industry and Climate Leap for the transformation to fossil-free steel, require strong political commitments and the capacity for financial risk that often only the state is willing to provide (see Chapter 4). In other words, more attention needs to be paid to the distribution of tasks and responsibilities between different societal actors to achieve decarbonization in various political settings.

10.3 Limits and Prospects of Collaborative Climate Governance

In this book we have investigated the role of the state and the limits and prospects of collaborative climate governance to achieve deep decarbonization. More specifically, we have asked how the state employs collaborative climate governance to steer decarbonization; which actors are included or excluded when the state seeks to mobilize non-state and sub-state actors toward decarbonization; what conflicts, forms of contestation, and discursive struggles thereby emerge; and under what conditions collaborative climate governance can contribute to societal decarbonization. We have examined how large-scale decarbonization, which rests upon strong interaction between state and non-state actors, is governed in Sweden. Finally, we have evaluated the outcomes of collaborative climate governance through three evaluative themes – effectiveness, legitimacy, and justice.

At first glance and compared to other countries, Sweden's collaborative climate governance approach seems to be a great success. Given the country's strong track record in terms of domestic climate policymaking (Burck et al., 2022; Hildingsson and Khan, 2015) and its active involvement in international environmental governance (Lundqvist, 2018), Sweden has been portrayed as a climate leader that has historically managed to reduce its domestic GHG emissions and has developed a progressive policy framework to tackle climate change. Primarily triggered by the impact of the oil crises in the 1970s, Sweden has managed to cut its emissions by more than one-third since 1990, with the most significant cuts in energy production, heating, and industry (see Chapter 3). As of today, Sweden is active in various international climate collaborations and "clubs" and was the first country to announce its aim to become a fossil-free welfare state. To achieve its net-zero vision, Sweden developed its collaborative governance model based on multistakeholder participation. This approach is most prominently embodied in the government's multi-stakeholder platform FFS, which contains 22 sectoral roadmaps for fossil-fuel competitiveness that have enabled the industrial sector to adopt voluntary climate commitments by highlighting win-win solutions and framing decarbonization as a strengthened form of competitiveness for businesses (Nasiritousi and Grimm, 2022).

This book demonstrates that the state plays a crucial role in fostering collaborative climate governance and providing opportunities for decarbonization. It holds the potential to mobilize voluntary action and increase commitments and buy-in over time by multiple actors. For example, over half of Sweden's 290 municipalities have joined climate-related city networks or the multi-stakeholder initiative FFS (see Chapter 6). More specifically, we found that 39 Swedish municipalities announced net-zero emissions targets at the time of data gathering. This provides an argument for the targets' potential feasibility. At the same time, this increases the pressure on other municipalities that are less ambitious or undecided concerning climate action (see Chapter 7). Notably, the survey data presented in Chapter 5 shows strong support among stakeholders such as cities and businesses for more platforms to facilitate collaborative climate action. They view collaborative climate governance as an opportunity to exchange knowledge, cooperate, and engage in joint efforts to tackle climate change. However, the perceived effectiveness varies between networks and mainly depends on whether actors view transformation as desirable. Networks are not primarily seen as vehicles to reduce emissions but can indirectly impact climate mitigation through the political role they play.

At second glance, Sweden's collaborative climate governance model to achieve the mid-term goals and the 2045 net-zero target also faces significant challenges and limitations. Most notably, Sweden is struggling to overcome economic, technological, and institutional carbon lock-ins (particularly in carbon-intensive sectors), reduce its relatively high per capita consumption-based emissions, and substantially transform its energy-intensive industries (see Chapters 3 and 4). The limitations in collaborative climate governance also become apparent in how climate change commitments and advancements are distributed across Sweden. Regarding the case of sub-state action, we observe a bifurcation in Swedish climate action among municipalities: While urban, southern, and relatively large municipalities adopt more voluntary climate commitments in collaborative initiatives, rural, northern, and sparsely populated municipalities are less well represented in city networks. In addition, several municipalities that harbor heavy-emitting industries are hesitant to join national or international cooperative climate initiatives. Consequently, a vast swathe of Sweden is not part of the seemingly inclusive collaborative governance effort to achieve decarbonization (see Chapter 6). The city of Lysekil exemplifies the challenges of the climate networks (see Chapter 8). Lysekil is home to Scandinavia's largest oil refinery - Preemraff - and is consequently one of Sweden's most carbon-intensive municipalities.

Moreover, voluntary and bottom-up climate action does not lend itself to standardization. Net-zero emissions targets of Swedish municipalities serve as a case in point as they are extraordinarily heterogenous and hamper comparison, tracking, or evaluation, which raises questions about their effectiveness, transparency, and accountability. Decarbonization targets become somewhat arbitrary as there are no coherent guidelines or definitions of their operationalization. Cities use different definitions for deciding and justifying which emissions they include or exclude in their calculations. This creates skepticism concerning the ability to achieve deep decarbonization or reach climate targets that would not have been reached anyway. Chapter 5 also emphasized that reducing GHG emissions is not ranked as the top priority for stakeholders to engage in collaborative climate governance. Instead, the collaborative governance model helps stakeholders to build relations, develop capacity, and exchange knowledge, which is essential for climate action. Still, on its own, collaborative climate governance is unlikely to contribute to significantly reducing GHG emissions.

Collaborative climate governance builds on the idea that the climate crisis can only be solved collectively, highlighting various forms of participation, inclusion, and the involvement of multiple societal actors. While this approach should ensure that no one is left behind or ignored, it struggles to address more disruptive voices, confrontational approaches, and contestation. In this book, we have explored both the inclusive nature of Sweden's collaborative governance setting and the role of contestation. While a significant attention has been paid to who is on board and included in networks of collaborative climate governance, it seems equally important to consider who is excluded, voiceless, and not part of the participatory process. Modes of exclusion became apparent in fossil-dependent regions like Lysekil, where public dialogue about the city's future was limited (Chapter 8). More generally, many rural areas in Sweden are not participating in national and international networks of collaborative climate governance, which reinforces the urban - rural divide (see Chapter 7). Limitations in democratic participation were precipitated by the pandemic, when street protests were limited in size and social movements such as FFF struggled to make their voice heard due to the restrictions (see Chapter 9). Notably, the collaborative climate governance model relies heavily on dialogue with societal actors (i.e., businesses, municipalities, and civil society actors). Yet, as Chapter 4 showed, there have been fewer efforts to engage with the public in contested issues. While the collaborative model gave momentum, particularly among heavy-emitting industries, to develop roadmaps for decarbonization, there is a risk that such measures are not anchored among citizens, thus risking a backlash if climate action is not viewed as democratically legitimate. Given these illustrative examples, it is crucial not only to ask whether transformation is possible but also to problematize what kind of transformation actors envisage and who would benefit and who might lose.

With its strong emphasis on voluntary action, collaboration, and consensus building, Sweden is struggling to achieve national and EU climate targets. Thus, Sweden's limited success confirms that "the glass ceiling of transformation is

deeply embedded in the very structures of the modern state" (Hausknost, 2020, p. 33). The institutional, technological, and behavioral carbon lock-ins examined in Chapter 4 remain unresolved challenges. While actors feel engaged and responsible for the transformation (Chapter 5), change happens incrementally rather than through systemic, deliberate, and game-changing practices. Yet, even in a highly collaborative setting like Sweden, the model of collaborative climate governance provokes conflicts, tensions, and calls for more urgent action, most notably articulated by FFF protesting on the streets and Extinction Rebellion blocking highways. The effects of the collaborative approach are thus highly context specific and do not exclude opportunities for more radical change. "Bottom-up" governance leaves room for context-sensitive practices, building on local initiatives and political preferences, perhaps suited to ownership and buy-ins. It provides space for forerunners with innovative ideas, eager to create transformative change. But voluntarism also creates a form of heterogeneity that is impervious to evaluation, offering scope for greenwashing and releasing some pressure from the state to steer large-scale transformations. Also, it often remains at the experimental stage, with pockets of transformative behavioral change rather than a demonstration of structural change.

While collaborative climate governance has the potential to drive climate action forward, it has clear limitations in terms of its effectiveness, legitimacy, and justice. Collaborative climate governance can forge support and drive momentum among societal actors, but it suffers from limited participation, exclusion, and a lack of effectiveness in terms of total GHG emission reductions. As demonstrated by the analytical framework in this book, we advance an integrated perspective for considering the interplay between state and non-state actors when evaluating the limits and prospects of collaborative climate governance. We argue that collaborative climate governance is no substitute for state-led regulatory intervention to achieve decarbonization. Moreover, the state plays a crucial role in securing democratic and public legitimacy for large-scale decarbonization and a just transition in order to avoid citizens being excluded from the collaborative setting. Contemporary political developments such as the rise of right-wing populism, climate skepticism, demands to abandon national climate targets, a rollback of climate ambitions in countries like Sweden and Great Britain, and the Liberal-Conservative government's weakening of climate legislation will significantly constrain Sweden's prospects of achieving decarbonization (see Chapter 4).

10.4 Going beyond Sweden and Avenues for Future Research

The scale of the climate crisis demands multidimensional, multi-stakeholder, and multilevel solutions to effectively achieve deep and rapid decarbonization (Lazarus, 2009; Levin et al., 2012). Not surprisingly, tackling global climate change

has been a decades-long endeavor involving multiple modes of governance. The shift from a regulatory to a facilitative global climate governance regime in 2015 has consolidated a cooperative and collaborative governance model based on "all hands on deck" (Hale, 2016) and "hybrid multilateralism" (Bäckstrand and Kuyper, 2017). Yet governing decarbonization in Sweden illustrates that a collaborative model is not simply a promising approach, a win-win solution, and a unique opportunity to tackle the climate crisis but has significant limitations. These limitations are not exclusive to Sweden and should be regarded as a call to critically reflect on collaborative climate governance from a broader international perspective and in through cross-country comparisons.

Drawing on the comprehensive empirical findings derived from Sweden's road to decarbonization, we can carefully formulate lessons about governing decarbonization more broadly. The inherent trade-offs and conflicts that accompany large-scale societal transformation can be observed all around the world which underscores the broader relevance of our analytical framework and empirical findings. Sweden - portrayed as an advanced green welfare state in the Global North - has addressed the climate crisis through state-led strategies of technological development and ecological modernization at the expense of profound institutional and behavioral changes. The industrial transition is a key element of corporativism with a legacy of strong collaboration between the state, organized labor, and industry actors in Sweden. This predominant focus on industrial decarbonization and technology-driven transformation through close engagement with the industrial sector is underpinned by a discourse of ecological modernization (Bäckstrand and Lövbrand, 2019; Marquardt and Nasiritousi, 2022). This is not exclusive to countries in the Global North, as exemplified by initiatives such as the Green New Deal in the USA, and the Global South, as articulated in India's commitment to achieving carbon neutrality by 2070. For Sweden, the EU's Green Deal, the European Climate Law, and the Fit for 55 climate package epitomize the EU's increasing importance in enforcing GHG emissions reductions and decarbonization goals.

Advanced industrialized democracies like Sweden, Germany, and the UK have significantly reduced their territorial emissions in recent decades but are struggling to bring down carbon-intensive consumption patterns. This reminds us that the formidable challenge lies in curbing consumption-based emissions and overcoming the remaining carbon lock-ins, which represent a more complex endeavor for the future (Blühdorn, 2020; Buschmann and Oels, 2019; Hausknost, 2020; Seto et al., 2016). While Sweden was the first country in the world to propose a national goal for consumption-based emissions in 2022, it has not yet materialized beyond the recommendations of the parliamentary investigatory committee. The global prevalence of market-based economies facilitates innovation and entails the risk of

exporting costs and emissions while maintaining unsustainable lifestyles and consumption patterns. Although Sweden, which has a strong consensus-based tradition, endeavors to minimize broader societal controversies and conflicts, there are instances of contention stemming from individuals and (newly emerging) societal groups such as FFF which advocate for urgent climate action. Thus, there needs to be a greater focus on the role of power and societal and distributional conflicts related to and emerging from attempts to decarbonize societies.

What are the implications for the politics and governance of decarbonization? The book complements the literature on multilevel and polycentric governance by focusing on the relations between the state and non-state actors that shape the form and speed of decarbonization. Our findings are in line with green state scholarship, which argues that the modern state - with its capacity for collective action and authority to allocate resources and maintain legitimacy – is uniquely equipped to deal with decarbonization compared to other actors. By engaging in collaborative climate governance, the state can lower the threshold for actors such as carbonintensive industries or cities to adopt climate targets. However, depending on the relations between the state and non-state actors, such collective action can produce different outcomes for legitimacy, justice, and effectiveness. The approach encourages voluntary action by non-state actors to complement state action, thereby achieving decarbonization as envisioned by Sweden's FFS initiative. At the same time, the way in which achievements are gauged becomes vague and fragmented, as data from Swedish cities and municipalities shows. The multi-stakeholder approach aims to increase public legitimacy by inviting societal stakeholders to participate and deliberate. Yet societal groups such as indigenous people struggle to participate on an equal level. Finally, concerns about social justice are critical for decarbonization policies but often remain unheard due to the structural exclusion of marginalized groups.

Our findings from Sweden pave the way for future research on collaborative climate governance arrangements. In particular, we encourage scholars to (1) scrutinize the gap between ambitious pledges, climate policy commitments, and institutional effects, (2) reflect upon democratic innovations and other new modes of participation to meaningfully engage with contestation in a collaborative governance setting, and (3) further investigate the role of crises in climate governance.

(1) Collaborative climate governance between a state of fragility and institutionalization: While the collaborative climate governance model successfully raised ambitions to reduce GHG emissions by various actors on multiple levels, it remains to be seen whether and how these targets, announcements, pledges, and commitments will translate into tangible action (Hsu et al., 2019). Tackling long-term challenges such as climate change requires moving from ambitions and

commitments to implementation and institutionalization - from political statements, rhetoric commitments, and awareness to substantial policy reforms, stronger climate laws, new organizational structures, and implementation capabilities, as well as behavioral transformation such as shifting to climate-friendly norms, practices, and routines and enabling green consumption behavior. While this book delivers some initial insights into how, for example, cities and municipalities operationalize their climate change ambitions, more emphasis should be placed on the political, economic, and regulatory conditions under which these developments occur and the broader societal contexts in which they are embedded. Societal decarbonization is more than an administrative act; it is a highly political process. A better understanding of the political conflicts, vested interests, power structures, and the actors involved in the governance of decarbonization will help us identify the gaps between high ambitions and slow implementation. A fruitful endeavor for future research is to merge ideas on collaborative climate governance with scholarship on institutionalization and the revamping of political institutions in light of climate change (Dubash, 2021; Marquardt et al., 2023; Patterson, 2022).

An important research question is how the collaborative model can endure in times of multiple crises and political shifts toward authoritarian populism and narratives of climate skepticism and climate policy delay. Also climate policy rollbacks in democracies like Sweden and the UK have to be addressed when dealing with the opportunities and limitations of a collaborative governance approach. Comparative studies could highlight how political contexts matter for more or less successful state-led efforts to strengthen collaborative climate governance. Sweden's Liberal-Conservative government coalition that gained power after the elections in September 2022 has weakened some of its climate policy, blaming it for increasing costs of living and rising fuel prices. This will most likely lead to an increase in GHG emissions, according to the SCPC (2023). Moreover, the government readily admits that mid-term and long-term climate targets are not likely to be achieved due to lowered climate policy ambition (see Chapter 4). However, the rolling back of policy is being criticized by business actors in the transport and industrial sectors, who have already committed to decarbonization efforts.

As collaborative climate governance can build coalitions of actors interested in accelerating decarbonization, future research should investigate whether and how policy reversal or rollback becomes more difficult as businesses and civil society actors are locked into decarbonization. Ultimately, the governance of decarbonization must necessarily entail deep structural changes to infrastructure, investments, and behaviors and should therefore be institutionalized. As elaborated in this book, the state is an indispensable actor as it regulates and orchestrates societal decarbonization and potentially can help accelerating technological, institutional, economic,

and behavioral transformation. An ambitious green state can mobilize non-state actors to accelerate decarbonization but also risks relying heavily on incumbent actors and veto players who promote a "business as usual" approach and reinforce carbon lock-ins. A state that has low climate ambitions can be pushed by non-state actors to be more ambitious if they have invested in decarbonization. To accelerate decarbonization, the state must have a strong vision and ambitious targets by engaging not only with non-state actors but also maintaining public legitimacy by addressing the distributional concerns of decarbonization.

(2) Innovating collaborative governance to deal with contestation: A dedicated focus on the role of conflicts, confrontation, contestation, and politicization in collaborative climate governance opens up another highly relevant avenue for future research. Most obviously, the role of veto players, incumbent actors, and roadblocks to decarbonization have to be seriously considered when engaging with collaborative forms of governance. In addition, conflicts should not be reduced to destructive resistance and opposition to decarbonization. Instead, conflicts can precipitate attempts to reform and innovate collaborative climate governance for example, based on research about democratic innovations such as mini-publics, citizens assemblies, participatory budgeting, and other deliberative modes of active participation in political decision-making. Open deliberative forums for debate would acknowledge different perspectives, concerns, and motivations for resistance, as demonstrated in the case of Lysekil (Chapter 8). At the same time, confrontational civil society movements like FFF give voice to marginalized groups such as youth or indigenous people, thereby bringing issues to political debates that were formerly not at the forefront (Marguardt and Lederer, 2022; Palonen, 2003; Pepermans and Maeseele, 2016). In a multilevel and polycentric governance setting in which various jurisdictions and actors can enable or obstruct decarbonization, the engagement and inclusion of citizens are key to securing the public legitimacy of decarbonization. Exploring democratic and deliberative modes of engagement is thus essential for the legitimacy and effectiveness of collaborative climate governance.

(3) Tackling climate change in an age of multiple crises: During the course of writing this book, the world has seen multiple and interlinked crises, most notably the COVID-19 pandemic and Russia's war on Ukraine. These existential and imminent threats to human life and security can be contrasted with the long-term global collective action problem of climate change. Crises can be used to block and slow efforts to decarbonize, but they can also be turned into an opportunity to overcome carbon lock-ins, accelerate societal transformations, and help establish sustainable production and consumption patterns. We clearly see signs of increased debates and focus on accelerating decarbonization and renewable

energy transition in light of multiple cascading crises, but it is still too early to comprehensively evaluate the effects of these recent crises. For example, bold predictions about hopes and fears in early debates about the COVID-19 pandemic rarely materialized (Dupont et al., 2020; Manzanedo and Manning, 2020; Obergassel et al., 2021). While Sweden successfully decarbonized its electricity and heating system in response to the oil crises in the 1970s (see Chapter 3), our findings on the effects of the COVID-19 pandemic on the work of various climate change networks as part of collaborative climate governance have revealed few substantial effects. The pandemic had a rather marginal impact on non-state activities, with the exception of FFF (see Chapter 9). The movement was hardest hit at a time when it managed to mobilize both young and old citizens to demonstrate on the streets and put pressure on political decision-makers. We encourage future research to further explore the role of external shocks and crises in climate governance. These disruptive events can become "critical junctures" (Capoccia and Kelemen, 2007) or "windows of opportunity" (Kingdon, 2003) for political reforms toward decarbonization. However, without deliberative planning, the long-term effects might fade or even lead to societal rebound effects and a backsliding into unsustainable production systems and consumption patterns (Bodenheimer and Leidenberger, 2020).

To conclude, collaborative climate governance has spread across different governance sites with the promise of acting as a catalyst for accelerated climate action and decarbonization. By empirically examining state-led efforts to regulate and orchestrate collaborative climate governance in Sweden, we have shed light on the promises and limitations of relying on such an approach. While engaging industry and cities to formulate roadmaps and set targets for decarbonization has been relatively successful, the outcome of such engagement has been confined to an incremental transition in certain sectors rather than societal, institutional, and behavioral transformation. As such, the collaborative governance model is well suited to the dominant ideologies and practices in Sweden in which the state has primarily focused on technological and economic transformation and less on behavioral transformation (i.e., changing lifestyles and consumption behavior) and institutional transformation (reforming institutional frameworks and integrating the climate targets across all policy fields).

The state has not succeeded in overcoming major carbon lock-ins, such as a lack of climate policy integration, insufficient policies to reach climate targets, bottlenecks in electrification, grid development, public transport, and declining public support for more stringent climate policy in the wake of war, rising fuel costs, and recession (see Chapter 4). While the model of collaborative climate governance has come under significant pressure due to multiple crises and the weakening of climate policies, research on the merits and limitations of the model to achieve decarbonization needs to be further explored in a cross-country and multilevel governance context. We should critically reflect on whether, how, and under what conditions collaborative governance is sufficient to achieve deep and rapid decarbonization and how it can be complemented by other governance models. We hope this book helps to trigger debates on how and whether collaborative climate governance can achieve effective, legitimate, and just decarbonization in Sweden and beyond.

References

- Bäckstrand, K., Kahn, J., Kronsell, A., and Lövbrand, E. (2010). *Environmental Politics and Deliberative Democracy: Examining the Promise of New Modes of Governance*, Cheltenham: Edward Elgar.
- Bäckstrand, K., and Kronsell, A. (eds.). (2015). *Rethinking the Green State. Environmental Governance towards Climate and Sustainability Transitions*, London: Routledge.
- Bäckstrand, K., and Kuyper, J. W. (2017). The democratic legitimacy of orchestration: The UNFCCC, non-state actors, and transnational climate governance. *Environmental Politics*, 26(4), 764–788.
- Bäckstrand, K., and Lövbrand, E. (2019). The road to Paris: Contending climate governance discourses in the post-Copenhagen era. *Journal of Environmental Policy & Planning*, 21(5), 519–532.
- Blühdorn, I. (2020). The legitimation crisis of democracy: Emancipatory politics, the environmental state and the glass ceiling to socio-ecological transformation. *Environmental Politics*, 29(1), 38–57.
- Bodenheimer, M., and Leidenberger, J. (2020). COVID-19 as a window of opportunity for sustainability transitions? Narratives and communication strategies beyond the pandemic. *Sustainability: Science, Practice, and Policy*, 16(1), 61–66.
- Brodén Gyberg, V., and Lövbrand, E. (2022). Catalyzing industrial decarbonization: The promissory legitimacy of fossil-free Sweden. *Oxford Open Climate Change*, 2(1), 1–10.
- Burck, J., Hagen, U., Höhne, N., Nascimento, L., and Bals, C. (2022). *Climate Change Performance Index: Results 2022*, Berlin: Germanwatch.
- Buschmann, P., and Oels, A. (2019). The overlooked role of discourse in breaking carbon lock-in: The case of the German energy transition. *Wiley Interdisciplinary Reviews: Climate Change*, 10(3), 1–14.
- Capoccia, G., and Kelemen, R. D. (2007). The study of critical junctures: Theory, narrative, and counterfactuals in historical institutionalism. *World Politics*, 59(3), 341–369.
- Chan, S., Falkner, R., Goldberg, M., and van Asselt, H. (2018). Effective and geographically balanced? An output-based assessment of non-state climate actions. *Climate Policy*, 18(1), 24–35.
- Chan, S., van Asselt, H., Iacobuta, G., and Niles, N. (2019). Promises and risks of nonstate action in climate and sustainability governance. *WIREs Climate Change*, 10 (January), 1–8.
- Dryzek, J. S., and Pickering, J. (2017). Deliberation as a catalyst for reflexive environmental governance. *Ecological Economics*, 131, 353–360.
- Dubash, N. K. (2021). Varieties of climate governance: The emergence and functioning of climate institutions. *Environmental Politics*, 30(supplement 1), 1–25.

- Duit, A., Feindt, P. H., and Meadowcroft, J. (2016). Greening Leviathan: The rise of the environmental state? *Environmental Politics*, 25(1), 1–23.
- Dupont, C., Oberthür, S., and von Homeyer, I. (2020). The Covid-19 crisis: A critical juncture for EU climate policy development? *Journal of European Integration*, 42(8), 1095–1110.
- Eckersley, R. (2004). *The Green State: Rethinking Democracy and Sovereignty*, Cambridge, MA: MIT Press.
- Gough, I., and Meadowcroft, J. (2011). *Decarbonizing the Welfare State*, Oxford: Oxford University Press.
- Hale, T. (2016). "All hands on deck": The Paris Agreement and nonstate climate action. *Global Environmental Politics*, 16(3), 12–22.
- Hausknost, D. (2020). The environmental state and the glass ceiling of transformation. *Environmental Politics*, 29(1), 17–37.
- Hildingsson, R., and Khan, J. (2015). Towards a decarbonized green state? The politics of low-carbon governance in Sweden. In Bäckstrand, K., and Kronsel, A. (eds.), *Rethinking the Green State: Environmental Governance towards Climate and Sustainability Transitions*, London: Routledge, pp. 156–173.
- Hsu, A., Höhne, N., Kuramochi, T. et al. (2019). A research roadmap for quantifying non-state and subnational climate mitigation action. *Nature Climate Change*, 9(1), 11–17.
- Hulme, M. (2020). One earth, many futures, no destination. One Earth, 2(4), 309-311.
- IPCC. (2022). Climate Change 2022: Impacts, Adaptation and Vulnerability Summary for Policymakers, Geneva: Intergovernmental Panel on Climate Change.
- IPCC. 2023. *Climate Change 2023. AR6 Synthesis Report.* IPCC. 2023. Climate Change 2023. AR6 Synthesis Report. www.ipcc.ch/report/ar6/syr.
- Jernnäs, M., and Lövbrand, E. (2022). Accelerating climate action: The politics of nonstate actor engagement in the Paris regime. *Global Environmental Politics*, 22(3), 38–58.
- Jordan, A., Lorenzoni, I., Tosun, J. et al. (2022). The political challenges of deep decarbonisation: Towards a more integrated agenda. *Climate Action*, 1(1), 1–12.
- Kingdon, J. W. (2003). Agendas, Alternatives, and Public Policies, Boston: Addison-Wesley Longman Inc.
- Lazarus, R. J. (2009). Super wicked problems and climate change: Restraining the present to liberate the future. *Cornell Law Review*, 94(5), 1153–1233.
- Levin, K., Cashore, B., Bernstein, S., and Auld, G. (2012). Overcoming the tragedy of super wicked problems: Constraining our future selves to ameliorate global climate change. *Policy Sciences*, 45(2), 123–152.
- Lundqvist, L. J. (2018). Sweden and Ecological Governance: Straddling the Fence, Manchester: Manchester University Press.
- Manzanedo, R. D., and Manning, P. (2020). COVID-19: Lessons for the climate change emergency. *Science of the Total Environment*, 742, 140563.
- Marquardt, J., Fast, C., and Grimm, J. (2022). Non- and sub-state climate action after Paris: From a facilitative regime to a contested governance landscape. *WIREs Climate Change*, 13(5), 1–22.
- Marquardt, J., Fünfgeld, A., and Elsässer, J. P. (2023). Institutionalizing climate change mitigation in the Global South: Current trends and future research. *Earth System Governance*, 15, 100163.
- Marquardt, J., and Lederer, M. (2022). Politicizing climate change in times of populism: An introduction. *Environmental Politics*, 31(5), 735–754.
- Marquardt, J., and Nasiritousi, N. (2022). Imaginary lock-ins in climate change politics: The challenge to envision a fossil-free future. *Environmental Politics*, 31(4), 621–642.

- Nasiritousi, N. (2016). Shapers, Brokers and Doers: The Dynamic Roles of Non-state Actors in Global Climate Change Governance. Dissertation, Linköping University Press.
- Nasiritousi, N., and Bäckstrand, K. (2019). *International Climate Policy in the Post-Paris Era* (Nordic Council of Ministers, ed.). Copenhagen: Nordic Economic Policy Review.
- Nasiritousi, N., and Grimm, J. (2022). Governing toward decarbonization: The legitimacy of national orchestration. *Environmental Policy and Governance*, 32(5), 375–449.
- Newell, P., Pattberg, P., and Schroeder, H. (2012). Multiactor Governance and the Environment. *Annual Review of Environment and Resources*, 37(1), 365–387. doi:10.1146/annurev-environ-020911-094659.
- Obergassel, W., Hermwille, L., and Oberthür, S. (2021). Harnessing international climate governance to drive a sustainable recovery from the COVID-19 pandemic. *Climate Policy*, 21(10), 1298–1306.
- Okereke, C., Bulkeley, H., and Schroeder, H. (2009). Conceptualizing climate governance beyond the international regime. *Global Environmental Politics*, 9(1), 58–78.
- Palonen, K. (2003). Four times of politics: Policy, polity, politicking, and politicization. *Alternatives*, 28(2), 171–186.
- Patterson, J. J. (2022). *Remaking Political Institutions: Climate Change and Beyond*, Cambridge: Cambridge University Press.
- Pepermans, Y., and Maeseele, P. (2016). The politicization of climate change: Problem or solution? *Wiley Interdisciplinary Reviews: Climate Change*, 7(4), 478–485.
- SCPC. (2023). Annual Report of the Swedish Climate Policy Council 2023. www.klimatpo litiskaradet.se/en/report-2023/.
- Seto, K. C., Davis, S. J., Mitchell, R. B. et al. (2016). Carbon lock-in: Types, causes, and policy implications. *Annual Review of Environment and Resources*, 41, 425–452.
- Stoddard, I., Anderson, K., Capstick, S. et al. (2021). Three decades of climate mitigation: Why haven't we bent the global emissions curve? *Annual Review of Environment and Resources*, 46(1), 653–689.
- UNFCCC. (2023). Technical Dialogue of the First Global Stocktake. Synthesis Report by the Co-facilitators. FCCC/SB/2023/9. https://unfccc.int/documents/631600.
- Widerberg, O., and Stripple, J. (2016). The expanding field of cooperative initiatives for decarbonization: A review of five databases. *Wiley Interdisciplinary Reviews: Climate Change*, 7(4), 486–500.