Introduction: State and Non-state Relations in Governing toward Decarbonization

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Climate change poses an unprecedented threat to societies around the world. Yet more than 30 years of international climate diplomacy and governmental action have failed to sufficiently address the problem. The implementation of available know-how and technologies has been incremental and inadequate (Stoddard et al., 2021). The recent Intergovernmental Panel on Climate Change (IPCC) report put it starkly by stating that "unless there are immediate and deep emissions reductions across all sectors, limiting global warming to 1.5°C is beyond reach" (IPCC, 2022, p. v). This message is affirmed by the synthesis report of the United Nations Framework Convention on Climate Change (UNFCCC) ahead of the first global stocktake of the Paris Agreement, which calls for strengthened climate action toward systems transformations (UNFCCC, 2023). In other words, to achieve the goals of the Paris Agreement, the world needs to undertake large-scale societal transformations toward decarbonization. This, in turn, requires knowledge about how to mobilize actors toward achieving this goal in a just, legitimate, and effective manner.

This book explores how and under what conditions states – in collaboration with societal actors – can steer and govern in order to accelerate the large-scale decarbonization that is needed to reduce greenhouse gas (GHG) emissions. The transformation process is characterized by complexity, with action required at all jurisdictional levels and across societal sectors, bringing together states, sub-state (i.e., municipalities and regions) and non-state actors (i.e., businesses and civil society), often in various multi-stakeholder constellations. The Paris Agreement, which codifies the international response to climate change under the UNFCCC, puts the onus on states to decarbonize but also highlights the important roles of non-state actors (Bäckstrand et al., 2017; Nasiritousi and Bäckstrand, 2019). Since the Paris Agreement entered into force, the logic of climate governance thus calls for an "all-hands-on-deck" approach to mobilize a range of state, sub-state, and non-state actors (Bäckstrand et al., 2017).

This book places particular focus on understanding the interplay between state and non-state actors in the politics and governance of decarbonization in Sweden. The overarching assumption is that state and non-state relations can be both collaborative and conflictual. Yet the book argues that the post-Paris logic of climate governance promotes voluntary modes of governance that focus on more collaborative aspects of state and non-state relations. This reflects wider governance trends as exemplified by the rise of collaborative governance across different policy fields (Johnston et al., 2011). Collaborative governance refers to "a type of governance in which public and private actors work collectively in distinctive ways, using particular processes, to establish laws and rules for the provision of public goods" (Ansell and Gash, 2008, p. 545). The key features of this mode of governance are an emphasis on consensus-building through soft and voluntary forms of steering to catalyze action (Bäckstrand et al., 2010).

This book analyzes the interplay between state and non-state actors in Sweden and its potential to achieve decarbonization by empirically examining how the state governs through collaborative climate governance, which we define as a mode of climate governance that aims to foster collaboration, deliberation, and consensus between state and non-state actors. Collaborative climate governance is thus only one of several modes of governance that the state can employ in relation to nonstate actors. For instance, it can be employed by the state to complement traditional regulation and market governance. The rationale is to drive action forward by reducing conflicts with societal actors. Because of the large-scale changes required to achieve decarbonization targets, policymakers depend on buy-in and legitimacy from a wide range of societal actors and citizens. States have historically employed legislative, regulatory, and executive powers to steer societal actors toward common goals. Yet the scale of the climate crisis is so great that states need to mobilize multiple actors to achieve decarbonization in a legitimate and effective manner (Dryzek et al., 2003; Fischer, 2017; Koch, 2020). Collaborative modes of governance have thus complemented other modes of governance – regulatory and marketbased – to foster cooperative relations with various non-state actors (Nasiritousi and Grimm, 2022). The use of collaborative climate governance by the state does not suggest that relations with non-state actors are always cooperative; rather, it implies that the state is seeking to engage non-state actors in a normative quest for collaboration and consensus-seeking relations. In practice, this means that the regulatory state expands its roles to include acting as a broker, mediator, and orchestrator of collaborative climate governance. The act of governing thus becomes more diffuse and involves different interactions and relationships that need to be further investigated.

Unpacking these collaborative and conflictual dimensions of state and non-state relations for achieving deep decarbonization requires an in-depth examination of domestic contexts, actors, and institutional frameworks, as well as policies and relationships (Paterson et al., 2022). This book zooms in on the politics and governance of decarbonization in Sweden, an advanced industrialized welfare state, which is often portrayed as one of the most progressive green states in the world. The country is considered a frontrunner in international climate politics and is viewed historically as a pioneer in environmental politics as it established the world's first environmental protection agency in 1967 and hosted the first United Nations (UN) Conference on the Human Environment in 1972 (Bäckstrand and Kronsell, 2015; Burck et al., 2021) but still struggles to significantly reduce its GHG emissions to achieve its climate targets (see e.g., Government Bill 2023/24). Sweden exemplifies the grand societal struggles of industrialized countries to curb climate change in an era of multiple crises, highlighting the challenges and prospects of rapid decarbonization and the risks of various "carbon lock-ins" – a term we will return to in subsequent chapters.

Sweden can be seen as a test bed for implementing collaborative climate governance to achieve a decarbonized society. We regard Sweden as a critical case for decarbonization for various reasons. In 2015, in connection with the 21st Conference of Parties (COP21) to the UNFCCC in Paris, Sweden announced its goal to transform itself into one of the world's first fossil-free welfare states. Since 2017, the Swedish government has not only established a comprehensive Climate Policy Framework, including a Climate Act and the Swedish Climate Policy Council (SCPC), but it has also set up the multi-stakeholder platform Fossil Free Sweden (FFS) to mobilize and catalyze non-state and sub-state climate action among public and private actors (Marquardt and Nasiritousi, 2022; Nasiritousi and Grimm, 2022). In the context of the political culture of consensus and corporatism, collaborative governance is a key feature of national climate governance in Sweden. It operates, for instance, through multi-stakeholder platforms comprising non-state and sub-state actors taking on voluntary commitments to reduce GHG emissions. The state's mobilization of different public and private actors on multiple levels to achieve long-term and "deep" decarbonization is, however, characterized not only by cooperative action and collaborative relationships but also by tensions and conflicts over what a livable future in a decarbonized society could and should look like (Marquardt and Nasiritousi, 2022).

Historically, Sweden's success in reducing GHG emissions is often attributed to institutional aspects and policy styles such as a strong tradition of corporatism, characterized by close collaboration and deliberation between the state, industry, and labor unions, creating societal support for ambitious and long-term climate commitments (Kronsell et al., 2019; see also Chapters 3 and 4). At the same time, Sweden is the birthplace of climate activist Greta Thunberg and a confrontational youth protest movement. The Fridays for Future (FFF) climate school strikes have

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generated an unprecedented wave of global protests against insufficient political action to halt climate change. Concurrently, a movement known as the "Fuel protest" (*Bränsleupproret*) has gained many supporters who voice strong opposition to increasing fuel prices in Sweden, which has subsequently led to a rollback of key climate policies (SCPC, 2023). These protests remind us that the governance of decarbonization is rife with protest and contestation – even in a collaborative governance setting like in Sweden. In this book we theorize and empirically investigate the promises and pitfalls of the state's use of collaborative climate governance in Sweden to achieve long-term decarbonization with its national goal of becoming a fossil-free welfare state with net-zero emissions by 2045.

Attempts to decarbonize and transform societies toward sustainability have received much scholarly attention in recent years (Eckersley, 2020; Patterson et al., 2017; Scoones et al., 2020). Most of these debates revolve around technological innovations, policy instruments, and effective governance and regulatory frameworks. Industrialized countries and advanced welfare states like Sweden with high cumulative emissions trajectories are confronted with the challenge to decarbonize their economies while also aiming to ensure their high standard of living (Jordan et al., 2022). The challenge is complicated by the fact that the governance of large-scale decarbonization takes place in the context of interlinked global crises such as climate change and biodiversity loss, as well as geopolitical conflicts, threatened energy security, and pandemics. Faced with urgent threats such as the COVID-19 pandemic in 2020 or the cost-of-living crisis following Russia's largescale invasion of Ukraine in 2022, governments around the world struggle to tackle the "creeping" climate change crisis that while urgent is also more long term in nature. Within this context, state and non-state actors have to navigate the ongoing transformation away from carbon-based economies in an age of multiple and connected crises.

Taking stock of a vibrant field of scholarship on the politics and governance toward decarbonization, as well as climate action on the ground, the main contribution of this book is twofold. (1) Theoretically, we advance the research frontier in climate governance scholarship by bridging research fields on the politics of decarbonization, the role of the green or environmental state in fostering climate transition, as well as the roles of non- and sub-state actors in translating the goals of the Paris Agreement into visible decarbonization efforts. We thus advance the research frontier on the role of the state in governing toward decarbonization by orchestrating and mobilizing non-state and sub-state climate action in a multilevel governance context. Thereby, we illustrate how collaborative climate governance plays out in practice and reflect on the strengths and weaknesses of this mode of governance. (2) Empirically, we study Sweden, which has been advanced as

a leading example of a green welfare state and which adopted a goal of societal decarbonization at an early stage and is a test bed of collaborative climate governance (Kronsell et al., 2019). The book investigates these topics through a mixed methods design based on quantitative and qualitative methods, including semi-structured interviews, document analyses, and a survey.

In what follows, we explain why the complex relations between state and nonstate actors are crucial for understanding the implementation of the Paris Agreement. Subsequently, we explain in more detail the rationale, aim, and objectives of the book. Finally, we provide a brief overview of each chapter.

1.1 Why Collaborative Climate Governance Matters in a Global Context

A brief retrospect on global climate governance helps explain why collaborative climate governance and the intensifying interplay between state and non-state actors are theoretically and empirically relevant after more than 30 years of international climate diplomacy. It also demonstrates how the collaborative mode of governance has become a prominent feature of national, regional, and global climate politics over time.

Since 1992, the UNFCCC has been at the heart of negotiating a global response to climate change. The convention provides a framework for tackling climate change, and it is up to the highest decision-making body of the UNFCCC, the Conference of the Parties (COP), to hash out the details. The UNFCCC is a partydriven process, meaning that decision-making power is exclusive to national governments and governed on the basis of rule-making by consensus. In 1997, the landmark Kyoto Protocol was signed in Kyoto, Japan, and specified emission reduction for 37 industrialized countries and the European Union (EU). The protocol sets out a "targets and timetables" approach to reduce GHG emissions. The countries listed in Annex 1 (developed countries) were assigned individual emission reduction targets that were supposed to be reached according to a specific timetable, while non-Annex 1 countries (developing countries) were exempt from binding emissions targets. During the implementation period, emerging economies such as China significantly increased their GHG emissions to such an extent that the allocation of emission reduction targets (or the lack thereof) was seen as unfair by countries with more mature economies. Besides, the USA never ratified the Kyoto Protocol, meaning that the world's second largest emitter of GHG emissions at that time withdrew from the targets and timetables approach.

After failing to reach a new agreement at COP15 in Copenhagen in 2009, parties and the UNFCCC's newly appointed executive secretary, Christiana Figueres, started working on a new approach to global climate governance based on engaging and mobilizing voluntary commitments from non-state actors (Bodansky, 2010;

Nasiritousi, 2016). This new approach required more flexibility to accommodate a changing configuration of low-, middle-, and high-income countries, providing ambitious countries with the opportunity to move more quickly than others, and harnessing the participation of what is referred to as "non-Party stakeholders" in the accompanying decision to the Paris Agreement (UNFCCC, 2015b). This includes the UN's nine official constituency groups: business, local governments, NGOs, trade unions, farmers, indigenous people, women, youth, and science and technology communities (Kuyper and Bäckstrand, 2016). Transnational climate action proliferated after the failure to reach an intergovernmental treaty in Copenhagen (Bulkeley et al., 2014; Hoffmann, 2011). COP21, which was held in Paris in 2015, adopted the Paris Agreement (UNFCCC, 2015a) and ushered in a new era of global climate governance. It moved from a "regulatory" to a "facilitative" regime, as the design of the agreement allows for more flexible mitigation policies in which nonparty stakeholders play an important role in finding new and innovative solutions, as well as implementing existing mitigation goals (Hale, 2016). The Paris Agreement requires parties of the UNFCCC to submit plans called "Nationally Determined Contributions" (NDCs), in which they outline their targets and actions for achieving the goals of the convention. The NDCs are then reviewed and revised on a continuous basis, creating a "ratchet-up mechanism" intended to raise the ambition level over time. The Paris Agreement thus introduced a "pledge and review" system in contrast to the previous "targets and timetables" approach (Nasiritousi and Bäckstrand, 2019).

An important institutional innovation in the Paris Agreement is that the formal process provides multiple entry points for non-state actors to engage with the global climate change regime (Hsu et al., 2018). Framed as "hybrid multilateralism," there is an increasing alignment with the intergovernmental and transnational realm of target setting and climate commitments (Bäckstrand et al., 2017). For example, in the run-up to COP21, the Lima-Paris Action Agenda (LPAA) was launched in 2014 to generate a positive momentum toward COP21 by catalyzing non-state climate action (Widerberg, 2017). The UNFCCC secretariat and national governments increasingly orchestrate transnational climate action (Hale and Roger, 2014; Hickmann et al., 2021). Subsequently, the Global Climate Action Portal (GCAP) was set up as a platform to showcase commitments made by cities, regions, companies, investors, and civil society organizations to mitigate and adapt to climate change. The LPAA and GCAP have morphed into the Global Climate Action Agenda, which continues the process of making the UNFCCC more inclusive (Bäckstrand et al., 2021).

The implementation of the Paris Agreement with its bottom-up structure, which rests on buy-in, cooperation, and joint collective action by public and private actors, appears particularly well suited for countries like Sweden with its long tradition of

cooperation between the state, market actors, and civil society. Internationally, it provides the opportunity to form smaller clubs of like-minded countries to strive for ambitious climate actions in specific fields, such as short-lived climate pollutants, as we will illustrate in Chapter 3. Domestically, the Paris Agreement's voluntary and bottom-up structure with aspirational goals is congruent with the Swedish corporativist tradition of working closely with domestic societal stakeholders in industry, trade unions, and civil society to develop new policies (Kronsell et al., 2019). As an EU member state, Sweden is also affected by supranational governance. The European Green Deal (EGD), the EU climate law, and the European Union's (EU) Fit for 55 climate package are conceived as the hitherto largest legislative packages that aim at deep decarbonization by engaging state, substate, and non-state actors across all sectors (Oberthür and von Homeyer, 2023). These different interactions thus represent the context through which collaborative governance plays out.

Nevertheless, the collaborative and facilitative nature of the post-Paris climate governance runs the risk of marginalizing other actors and avoiding issues of contestation when it comes to where, how, and by whom emissions should be reduced (Marquardtet al., 2022). By focusing on win-wins, consensus, and voluntary action, collaborative climate governance runs the risk of "neutralizing the opposition and radicalism of environmental movements and function as a technique for sustaining the unsustainable" (Jernnäs and Lövbrand, 2022, p. 54). This book highlights the importance of examining state and non-state relations to understand how climate governance is shaped, and its potential consequences, in the quest for decarbonization.

1.2 Aim of the Book

The aim of this book is to analyze how complex large-scale transformative processes that rest upon strong interaction between the state and non-state actors are governed in an advanced welfare state such as Sweden, which has been heralded as a progressive green state in scholarly research (Bäckstrand and Kronsell, 2015; Eckersley, 2004; Meadowcroft, 2011). Based on the findings from a three-year research project on the interplay between the state and non-state actors in governing toward a decarbonized society in Sweden, we examine the complex and dynamic relationship between state and non-state action to tackle the climate crisis and govern toward decarbonization in the context of the EGD, UN climate diplomacy, and the Global Climate Action Agenda. Specifically, the book examines how, why,

This book builds on findings from a three-year research project funded by the Swedish Research Council for Sustainable Development (Formas): Climate action in the post-Paris landscape: The role of non-state initiatives in the transformation of Sweden into a fossil-free welfare state (ACTS 2017–01889), led by Stockholm

and with what effects the state employs collaborative climate governance with a plethora of non-state and sub-state actor constellations to govern decarbonization in Sweden. Empirically, the book takes stock of Sweden's efforts to achieve "deep" decarbonization and assesses the country's progress toward being a fossil-free welfare state by 2045 by focusing on the contribution of state and non-state action. The overall objective is to understand the prospects and limits for the state in employing collaborative climate governance to achieve decarbonization. To do so, the specific research questions are the following:

- How does the state use collaborative climate governance to steer society toward decarbonization?
- Who is included and who is left out when the state seeks to mobilize non-state and sub-state actors (e.g., municipalities, businesses, and civil society organizations, individually or through networks) toward decarbonization?
- What conflicts, contestation, and discursive struggles arise in the politics and governance toward decarbonization?
- Under what conditions can collaborative climate governance achieve societal transformation toward decarbonization?

Responding to the research questions, the book makes theoretical, empirical, and methodological contributions to research on the interplay between the state and non-state actors and the limits and prospects for states to employ collaborative governance to achieve decarbonization. By critically examining the interaction between the state and the multitude of voluntary collaborative climate governance efforts proliferating in the post-Paris landscape, it goes beyond the Swedish context and provides valuable policy insights for other – particularly industrialized – countries that struggle to decarbonize.

1.3 Theoretical, Methodological, and Empirical Contributions

Translating the goals of the Paris Agreement into concrete action on the ground requires coordination and collaboration across multiple levels and sectors of society. The transformation from a fossil-dependent to a decarbonized society is, however, a highly contested endeavor. Critics of the collaborative and participatory governance approach point at serious limitations and blind spots, arguing that calls for collaboration often remain symbolic and simulative (Blühdorn and Deflorian, 2019). Incumbent actors or veto players with vested interests in preserving the status quo will resist change, costs and benefits may be unevenly distributed in the

University and involving researchers from Linköping University and Vrije Universiteit Amsterdam. In addition, Formas funded a 12-month project related to ACTS: Climate action in a state of crisis: How Swedish collaborative climate change initiative manage to navigate through the COVID-19 pandemic (2020–02865).

process of decarbonization, and currently disenfranchised groups risk being excluded from the process (Scoones et al., 2015). Heightened attention to the distributional consequences of climate change is illustrated by the rising prominence of movements demanding just transitions and climate justice (Allan, 2021). For example, while city dwellers may experience few changes to their daily routines, for rural communities, whose economies are heavily reliant on carbonintensive factories (e.g., steel makers or paper mills), the transformation toward a decarbonized society may threaten their livelihoods.

The state plays a pivotal role in initiating, catalyzing, and steering the transformation toward a fossil-free society and ensuring a just and sustainable transition through hierarchical regulation, as well as new modes of voluntary and soft modes of governance (Bäckstrand and Kronsell, 2015; Eckersley, 2020). Garnering support from all levels and sectors of society and addressing points of friction require states to deploy a diverse toolbox for coordinating, orchestrating, and convening non- and sub-state climate action in local, national, regional, and global settings. Work on the environmental state (Duit et al., 2016) and the green state (Bäckstrand and Kronsell, 2015; Dryzek et al., 2003; Eckersley, 2004) highlights the economic imperative that states face as they are dependent on economic activities that result in negative environmental impacts. Thus, the modern state must secure revenues from resource use from industrial extraction while also regulating the industrial processes that cause harm (Hildingsson et al., 2018). Capital will be relocated if states pursue certain climate policies, such as high carbon taxes and the banning of fossil fuel subsidies (Johnstone and Newell, 2018). States are situated in a polycentric governance setting with existing and rising powers engaged in geopolitical competition. Thus, states must negotiate with labor and capital to secure legitimacy.

The theoretical contribution of this book is to advance the research frontier on interdisciplinary scholarship on (a) the governance of transformation and the transition to fossil-free societies; (b) the prospects for green, environmental, or ecological states to steer toward achieving societal decarbonization; and (c) the strengths and weaknesses of collaborative climate governance to translate the goals of the Paris Agreement into visible decarbonization efforts. These three dimensions are integrated in the an overarching analytical framework outlined in Chapter 2. We thus advance the research frontier on the role of the state in steering and governing decarbonization by orchestrating and mobilizing non-state and sub-state climate action in a collaborative, multilevel governance context. Based on a mixed methods design, the book contains unique qualitative and quantitative empirical material comprising a database of non-state climate commitments, interviews with key stakeholders, and survey data. Empirically, we investigate Sweden, which ranks among the most progressive states in the world when it comes to climate change

ambitions. In the expanding scholarship on green and ecological states, Sweden is regarded as a leading example of a green welfare state with the potential to become a decarbonized state (Kronsell et al., 2019). Yet, despite strong legislative action in response to the climate crisis, Sweden also faces deep social and political challenges on the road to a decarbonized future.

1.4 Key Terms and Concepts

"Collaborative climate governance" refers to a mode of governance that seeks to stimulate and harness the plethora of individual and/or collective climate action by actors or networks, partnerships, and constellations of non-state and sub-state actors (cities, companies, regions, civil society, trade unions) operating at various jurisdictional levels (local, national, regional, and global) and across sectors (industry, trade, agriculture). Conceptually the term overlaps with notions of "polycentric governance" (Jordan et al., 2022) and "new modes of governance" (Bäckstrand et al., 2010) that contain overlapping sites of public and private authority. Normatively, collaborative climate governance aims to foster decarbonization through collaborative action.

The kind of change envisaged from this collaborative action varies. Terms such as "sustainability transition" (Avelino et al., 2016), "socio-ecological transformation" (Blühdorn, 2020), "socio-technical transition" (Geels, 2010), "decarbonization," "low-carbon transition," or "green transformations" cover a broad spectrum of processes related to fundamental socio-technical changes in response to global environmental threats such as climate change. The terms "transition" and "transformation" are frequently used interchangeably in both scholarly debates and in practice. Yet Linnér and Wibeck (2019, p. 25) argue that "transition" is captured by the notion of passage from one state to another. In contrast, "transformation" implies "change in form or shape," illustrated by the concept of metamorphosis (the transformation from pupa to caterpillar and then butterfly). The distinction is a basis for assessing the degree and scale of a green transformation, planned or facilitated, orchestrated or accelerated by states (Eckersley, 2020, p. 4). The choice of terminology therefore has political implications for what kind of change is envisaged at the end-state.

Transformations are complex and involve multiple social, institutional, economic, cultural, and technological systems. Sustainability transformations emerge from the interplay and coevolution of human and ecological systems. They involve ecological, economic, and social goals, as illustrated in the 2030 Agenda for Sustainable Development (Patterson et al., 2017). A related concept is "green transformation" – the "process of structural change which should bring the economy within planetary boundaries" (Scoones et al., 2015, p. 3). Furthermore, the

literature on governance toward sustainability or sustainable development grapples with long-term transformations (Meadowcroft, 2007).

Decarbonization is only one of many changes required for transformation (Bernstein and Hoffman, 2018). While decarbonization is a process toward achieving a low-carbon society with minimal output of carbon dioxide emissions, the political goal may differ and can be captured by different terms such as "carbon neutrality," "climate neutrality," "net-zero emissions economy," or "fossil-free." Even if many of these terms overlap and are often used interchangeably, they can have very different implications for climate action. The differences stem from which GHG emissions are included in the targets and the extent to which offsets and negative emission technologies (including carbon removal such as afforestation and direct air capture with carbon storage) are included. While some countries primarily focus on carbon dioxide, other countries include a wider set of GHGs in their climate targets (Buylova et al., 2021). Sweden's aim to become a "fossil-free welfare state" by 2045 implies an effort to ultimately phase out fossil fuels altogether, which could be described as deep decarbonization. However, Sweden's Climate Policy Framework has been formulated in terms of climate neutrality, whereby offsets can be used for up to 15 percent of GHG emissions (Government Bill 2016/17). This means that territorial GHG emissions in Sweden should be reduced by at least 85 percent by 2045. Moreover, Sweden aims to achieve net-negative emissions thereafter through, for example, supplementary measures such as carbon sinks (SCPC, 2022). In essence, then, Sweden has a climate neutrality goal that is enshrined in law while using the narrative of a fossil-free society to motivate climate action among non-state actors and citizens. While noting their different meanings, we mainly use the term "decarbonization" but also refer to a fossil-free society and climate neutrality to describe Sweden's process of reducing its use of fossil fuels, also mitigating other GHG emissions and increasing carbon sinks. As this book revolves around the role of the state in governing toward decarbonization, climate change mitigation rather than climate adaptation is in focus.

In terms of actors that initiate and implement climate action or challenge insufficient commitments, we distinguish between state, non-state, and substate actors and include both individual actors and networks. By "states," we refer to government institutions and bureaucracies at the national level. States have been recognized as such under international law and thereby enjoy sovereignty. "Non-state actor" is a term that can encompass a number of entities, such as civil society organizations, scientific communities, indigenous groups, and businesses. Subnational actors are actors such as municipalities and regions that can act independently of the state (Bernstein and Hoffmann, 2018; Nasiritousi, 2016). All these actors and individuals can act on their own or form partnerships, initiatives, and networks to act jointly. Such examples include multi-stakeholder platforms, public-private partnerships, and private initiatives, as well as protest groups and social movements that demand more urgent climate action. The various actors who participate in different governance activities, and on what terms and with what effect, differ. This book examines these relationships in more detail.

1.5 Structure of the Book

The following nine chapters analyze the interplay between the state and non-state actors embedded in an institutional context that we frame as a collaborative climate governance setting. The book examines the multiple and complex relationships between actors that shape Sweden's efforts to decarbonize, which are summarized in several distinct governance relations – regulation, orchestration lobbying/agenda setting, and contestation. While Chapter 2 advances the analytical framework and theoretical and conceptual arguments of the book, Chapters 3 to 9 focus on various relationships between the state and non-state actors in the governance and politics of decarbonization that are illustrated through novel empirical findings from Sweden. We specifically examine interactions between the state on the one hand and civil society (*Fridays for Future*), the private sector (*Haga Initiative*), a multistakeholder initiative (*Fossil Free Sweden*), and subnational government authorities (*Klimatkommunerna* and *Ekokommunerna*) on the other.

Chapter 2 advances the analytical framework of the book, focusing on the role of the state in governing large-scale decarbonization through collaborative climate governance with close interactions of non-state and sub-state actors, networks, and multi-stakeholder partnerships in the various governance relations referred to above. We provide a coherent framework rooted in theoretical and conceptual debates on the multitude of relations between the state and non-state actors in the governance of climate change. By connecting these governance relations to three evaluative themes of the politics of decarbonization (justice, effectiveness, and legitimacy), we theorize how the state shapes decarbonization processes in a landscape of non-state and sub-state climate action. The chapter situates the book's contributions to the wider scholarship and highlights the theoretical debates that the empirical chapters will revisit.

Chapter 3 examines Sweden's efforts to decarbonize from an international perspective by illustrating the multilevel governance context in which Swedish climate action takes place. It maps Sweden's GHG emission trends and energy portfolio in a historical context, assesses the impact of the EU's climate and energy policy, and tracks Sweden's participation in various international climate initiatives and networks. The chapter also examines how Sweden's climate policy and politics

relate to, and are influenced by, global initiatives and the EU's climate and energy legislation such as the European Climate Law and the Fit for 55 climate package.

Chapter 4 examines the role of the state in collaborative governance, as well as the mix between hard (regulation) and soft modes of governance (orchestration) to achieve decarbonization in Sweden. The chapter focuses on state-led transformation and critically examines Sweden's progress toward its overarching goal to become the first fossil-free welfare state by 2045. It investigates Sweden's national strategies and governance modes to achieve decarbonization and overcome carbon lock-ins through institutional, economic, technological, and behavioral transformation. It concludes that Sweden's path to decarbonization - like many other countries – resembles more of an incremental transition limited to certain sectors rather than the wholesale transformation to a fossil-free society.

Chapter 5 employs a survey to ask whether the efforts of various climate networks as part of collaborative climate governance are perceived as effective. Sweden is known for being a corporatist state in which dialogue with stakeholders is a key feature of policy development. This can also be seen in the way that the Swedish government has developed its policies for decarbonization by establishing the multi-stakeholder initiative FFS as a flagship. However, there are numerous other climate networks that are led by non-state and sub-state actors and operate independently of state action. This chapter outlines a set of multi-actor networks that work to contribute to achieve Sweden's climate targets and assesses them in terms of perceived effectiveness. By studying the perceptions of key stakeholders, this chapter seeks to understand the contributions of various climate networks to Swedish decarbonization beyond measurable emission reductions, thereby paving the way for critical reflections about the role of collaborative climate action in broader governance arrangements.

Chapter 6 analyzes the regional and sectoral differences in the actors that engage in climate change networks. Over the past 20 years, an increasing number of cities, regions, companies, investors, and other non-state and subnational actors have voluntarily committed to reducing their GHG emissions. Such actions could help reduce the implementation gap. Along with the increase in commitments and the growing number of venues through which non-state actors can cooperate in order to govern climate change, it is necessary to track and evaluate such efforts. This chapter assesses the voluntary commitments made by Swedish municipalities, regions, and multi-stakeholder partnerships to decarbonize by reducing GHG emissions.

Chapter 7 investigates how Swedish municipalities understand net-zero emission reduction targets. Cities and local governments are positioned on the frontline of collaborative climate governance. They consume a high volume of the world's energy and face potentially large-scale disruption from climate change, such as changes in precipitation levels and sea-level rise. The chapter employs emissions data from the national inventory to examine the emission profiles of Swedish municipalities, revealing a disparity in the extent to which cities contribute to national GHG emissions.

Chapter 8 looks at the local politics of carbon lock-in. It starts from the premise that the Swedish climate policy agenda is embedded in a strong collaborative discourse due to its corporativist tradition. While this collaborative strategy promises green jobs and industrial competitiveness, the Swedish net-zero emission goal poses significant challenges to cities and regions that are dependent on fossil fuel-intensive industries for local employment and tax revenues. This chapter examines how the "job vs. climate debate" plays out in the Swedish city of Lysekil, a coastal settlement with a long industrial tradition and home to Scandinavia's largest oil refinery. Although the local politics of carbon lock-in in Lysekil are highly material and deeply entangled with the city's physical environment, this chapter primarily focuses on its discursive dimensions, sheds light on the challenge to reimagine a life and society beyond fossil fuels, and demonstrates how carbon lock-ins are entangled with deep issues of identity.

Chapter 9 employs a survey to examine how different climate networks across industry and civil society sectors have coped with the COVID-19 pandemic. The pandemic has had far-reaching effects on society and triggered restrictions on human activities in an unprecedented way. To limit the spread of COVID-19, governments implemented various rules and regulations to limit people's freedom of movement. A subsequent economic recession and a political debate dominated by the pandemic have affected the ability of civil society networks to mobilize street protests and advocate for the transformation of society. Given their reliance on mass meetings and advocacy, climate activists and multi-stakeholder climate networks have had to adapt in various ways in terms of their goals, arguments, and strategies to continue their efforts to tackle the climate crisis. We examine the interplay between the two crises and the extent to which the COVID-19 crisis has affected activities of different climate networks and potentially opened windows of opportunities for policy change.

Finally, in the concluding Chapter 10, we revisit our research questions and summarize the key theoretical contributions and empirical findings in three consecutive steps. First, we synthesize findings on the multiple interactions between the state and non-state actors in collaborative climate governance. Second, we discuss the limits and prospects of collaborative climate governance and the role of the state therein. Third, we outline the implications for the politics and governance of decarbonization beyond Sweden and formulate avenues for future research. We take stock of recent policy developments to assess the prospects for achieving decarbonization in Sweden and conclude the book by carefully outlining lessons for future research and policy action to accelerate deep decarbonization.

References

- Allan, J. (2021). The New Climate Activism: NGO Authority and Participation in Climate Change Governance, Toronto: University of Toronto Press.
- Ansell, C., and Gash, A. (2008). Collaborative governance in theory and practice. Journal of Public Administration Research and Theory, 18, 543–571.
- Avelino, F., Grin, J., Pel, B., and Jhagroe, S. (2016). The politics of sustainability transitions. Journal of Environmental Policy & Planning, 18, 557–567.
- Bäckstrand, K., Khan, J., Kronsell, A., and Lövbrand, E. Eds. (2010). Environmental Politics and Deliberative Democracy: Examining the Promise of New Modes of Environmental Governance, Cheltenham: Edward Elgar Press.
- Bäckstrand, K., and Kronsell, A. (2015). The green state revisited. In K. Bäckstrand and A. Kronsell, eds., Rethinking the Green State: Environmental Governance towards Climate and Sustainability Transitions, London: Routledge and Earthscan, pp. 1–23.
- Bäckstrand, K., Kuyper, J. W., Linnér, B.-O., and Lövbrand, E. (2017). Non-state actors in global climate governance: From Copenhagen to Paris and beyond. Environmental Politics, 26(4), 561-579.
- Bäckstrand, K., Kuyper, J., Nasiritousi, N. (2021). From collaboration to contestation? Perceptions of legitimacy and effectiveness in post-Paris climate governance. Earth System Governance, 9, 100115. 10.1016/j.esg.2021.100115.
- Bernstein, S., and Hoffmann, M. (2018). The politics of decarbonization and the catalytic impact of subnational climate experiments. Policy Sciences, 51, 189-211.
- Blühdorn, I. (2020). The legitimation crisis of democracy: Emancipatory politics, the environmental state and the glass ceiling to socio-ecological transformation. Environmental Politics, 29, 38–57.
- Blühdorn, I., and Deflorian, M. (2019). The collaborative management of sustained unsustainability: On the performance of participatory forms of environmental governance. Sustainability, 11, 1–17.
- Bodansky, D. (2010). The Copenhagen climate change conference: A postmortem. American Journal of International Law, 104, 230–240.
- Bulkeley, H., Andonova, L., Betsill, M., et al. (2014). Transnational Climate Change Governance. Cambridge: Cambridge University Press.
- Burck, J., Hagen, U., Höhne, N., Nascimento, L., and Bals, C. (2021). Climate change performance index: Results 2021, Bonn: Germanwatch, NewClimate Institute and Climate Action Network.
- Buylova, A., Fridahl, M., Nasiritousi, N., and Reischl, G. (2021). Cancel (out) emissions? The envisaged role of carbon dioxide removal technologies in long-term national climate strategies. Frontiers in Climate, 63, 1–16.
- Dryzek, J. S., Downes, D., Hunold, C., Schlosberg, D., and Hernes, H.-K. (2003). Green States and Social Movements: Environmentalism in the United States, United Kingdom, Germany, and Norway, Oxford: Oxford University Press.
- Duit, A., Feindt, P. H., and Meadowcroft, J. (2016). Greening Leviathan: The rise of the environmental state? Environmental Politics, 25, 1–23.
- Eckersley, R. (2020). Ecological democracy and the rise and decline of liberal democracy: Looking back, looking forward. Environmental Politics, 29, 214–234.
- Eckersley, R. (2004). The Green State: Rethinking Democracy and Sovereignty, Cambridge, MA: MIT Press.
- Fischer, F. (2017). Climate Crisis and the Democratic Prospect: Participatory Governance in Sustainable Communities, Oxford: Oxford University Press.

- Geels, F. W. (2010). Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy*, 39, 495–510.
- Government Bill 2023/24:1. (2023). Budget proposition för 2024. Utgiftsområde 20 Klimat, miljö och natur.
- Governmental Bill 2016/17:146. (2016). Ett klimatpolitiskt ramverk för Sverige.
- Hale, T., and Roger, C. (2014). Orchestration and transnational climate governance. *The Review of International Organizations*, 9, 59–82.
- Hickmann, T., Widerberg, O., Lederer, M., and Pattberg, P. (2021). The United Nations Framework Convention on Climate Change Secretariat as an orchestrator in global climate policymaking. *International Review of Administrative Sciences*, 87, 21–38.
- Hildingsson, R., Kronsell, A., and Khan, J. (2018). The green state and industrial decarbonisation. *Environmental Politics*, 28(5), 909–928.
- Hoffmann, M. J. (2011). Climate Governance at the Crossroads: Experimenting with a Global Response after Kyoto, Oxford: Oxford University Press.
- Hsu, A., Widerberg, O., Weinfurter, A., et al. (2018). Bridging the emissions gap: The role of non-state and subnational actors. In *Emissions Gap Report 2018*. United Nations Environment Programme.
- IPCC. (2022). Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA.
- Jernnäs, M., and Lövbrand, E. (2022). Accelerating climate action: The politics of nonstate actor engagement in the Paris regime. *Global Environmental Politics*, 22, 38–58.
- Johnston, E. W., Hicks, D., Nan, N., and Auer, J. C. (2011). Managing the inclusion process in collaborative governance. *Journal of Public Administration Research and Theory*, 21, 699–721.
- Johnstone, P., and Newell, P. (2018). Sustainability transitions and the state, *Environmental Innovation and Societal Transitions*, 27, 72–82, 10.1016/j.eist.2017.10.006.
- Jordan, A., Lorenzoni, I., Tosun, J., et al. (2022). The political challenges of deep decarbonisation: Towards a more integrated agenda. *Climate Action*, 1, 1–12.
- Koch, M. (2020). The state in the transformation to a sustainable postgrowth economy. *Environmental Politics*, 29, 115–133.
- Kronsell, A., Khan, J., and Hildingsson, R. (2019). Actor relations in climate policymaking: Governing decarbonisation in a corporatist green state. *Environmental Policy and Governance*, 29, 399–408.
- Kuyper, J. W., and Bäckstrand, K. (2016). Accountability and representation: Nonstate actors in UN climate diplomacy. *Global Environmental Politics*, 16, 61–81.
- Linnér, B.-O., and Wibeck, V. (2019). Sustainability Transformations across societies: Agents and Drivers across Societies, Cambridge: Cambridge University Press.
- Marquardt, J., and Nasiritousi, N. (2022). Imaginary lock-ins in climate change politics: The challenge to envision a fossil-free future. *Environmental Politics*, 31, 621–642.
- 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), e791. https://doi.org/10.1002/wcc.791.
- Meadowcroft, J. (2011). Engaging with the politics of sustainability transitions. *Environmental Innovation and Societal Transitions*, 1, 70–75.
- Meadowcroft, J. (2007). Who is in charge here? Governance for sustainable development in a complex world. *Journal of Environmental Policy & Planning*, 9, 299–314.

- Nasiritousi, N. (2016). Shapers, brokers and doers: the dynamic roles of non-state actors in global climate change governance. Thesis (PhD). Linköping University.
- Nasiritousi, N., and Bäckstrand, K. (2019). International climate politics in the post-Paris era. Nordic Economic Policy Review, 13, 21-62.
- Nasiritousi, N., and Grimm, J. (2022). Governing toward decarbonization: The legitimacy of national orchestration. Environmental Policy and Governance, 32, 411-425.
- Oberthür, S., and Von Homeyer, I. (2023). From emissions trading to the European Green Deal: The evolution of the climate policy mix and climate policy integration in the EU. Journal of European Public Policy, 30(3), 445–468.
- Paterson, M., Tobin, P., and VanDeveer, S. D. (2022). Climate governance antagonisms: Policy stability and repoliticization. *Global Environmental Politics*, 22, 1–11.
- Patterson, J., Schulz, K., Vervoort, J., et al. (2017). Exploring the governance and politics of transformations towards sustainability. Environmental Innovation and Societal *Transitions*, 24, 1–16.
- Scoones, I., Leach, M., and Newell, P. (2015). The Politics of Green Transformations, London: Taylor & Francis.
- Scoones, I., Stirling, A., Abrol, D., et al. (2020). Transformations to sustainability: Combining structural, systemic and enabling approaches, Current Opinion in Environmental Sustainability, 42, 65–75.
- SCPC. (2023). Annual report of the Swedish Climate Policy Council 2022.
- SCPC. (2022). Annual report of the Swedish Climate Policy Council 2022.
- 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, 653-689.
- UNFCCC. (2015b). Decision 1/CP.21.FCCCC/CP/2015/L.9/Rev.1.
- UNFCCC. (2015a). Paris Agreement. FCCCC/CP/2015/L.9/Rev.1.
- UNFCCC. (2023). Technical dialogue of the first global stocktake. Synthesis report by the co-facilitators. FCCC/SB/2023/9.
- Widerberg, O. (2017). The "Black Box" problem of orchestration: How to evaluate the performance of the Lima-Paris action agenda. Environmental Politics, 26, 715–737.