



Nordic Council
of Ministers

Engaging the private sector in climate change mitigation

Comparison of different
approaches in the Nordic
region



Contents

Executive summary	4
Preface	5
1. Introduction	6
1.1 Climate law and policy framework	6
1.2 Public-private collaboration for green transition	7
1.3 Nordic government-led climate collaboration initiatives	8
1.4 Objectives and scope of this report	9
1.5 Methodology	10
2. Denmark	11
2.1 National climate targets	11
2.2 The Climate Partnerships (Klimapartnerskaber)	12
2.3 Experience	16
3. Finland	18
3.1 National climate targets	18
3.2 The Low-Carbon Roadmaps (Toimialakohtaiset vähähiilisyystiekartat)	19
3.3 Experience	22
4. Iceland	24
4.1 National climate targets	24
4.2 The Business Climate Roadmaps (Loftslagsvegvísar atvinnulífsins)	25
4.3 Experience	27
5. Norway	30
5.1 National climate targets	30

5.2 Business Climate Partnerships (Klimapartnerskap með næringslivet)	31
5.3 Experience	34
6. Sweden	36
6.1 National climate targets	36
6.2 Fossil Free Sweden (Fossilfritt Sverige)	37
6.3 Experience	41
7. Comparison and synthesis	43
7.1 Objectives	44
7.2 Sectoral coverage and participants	44
7.3 Access to information	45
7.4 Structure and organization	45
7.5 Use of outcomes	48
8. Concluding remarks	50
9. References	51
About this publication	58

Executive summary

This report presents the findings of a study of the various approaches taken by the Nordic countries to involve the private sector in national strategies to achieve climate targets. As part of their climate mitigation strategies, each Nordic country has engaged the private sector in climate action through specific government-led public-private collaboration initiatives. This is in alignment with the *Helsingfors Declaration on Nordic Carbon Neutrality of 2019*, which emphasized the importance of private sector engagement and the need to enable industry and business to take a leading role in the green transformation of the global economy.

The present report's primary objective was to analyze and compare the diverse strategies adopted by Nordic governments to seek input from the business and industry sectors in the form of roadmaps developed in coordination with public authorities. In all the Nordic countries such sector roadmaps are viewed as important components of public policies to achieve national climate targets.

This report builds on other projects addressing similar themes, specifically the report *The Road towards Carbon Neutrality in the different Nordic Countries*, published by the Nordic Council of Ministers in 2020. Since the publication of that report, substantial experience of public-private collaboration initiatives has been gained in each of the Nordic countries. The present report offers a chance to review the status of private sector roadmaps and to seek insights into best practices and lessons learned. The findings presented below were achieved through a combination of desk reviews and in-depth interviews and surveys among key actors and stakeholders. The data collection took place between December 2023 and April 2024.

Preface

The Nordic countries have set an ambitious goal for 2030: to become the world's most sustainable and integrated region. As a steppingstone towards achieving carbon neutrality well before mid-century, each of the five Nordic countries, Denmark, Sweden, Norway, Finland, and Iceland, has pledged to significantly reduce greenhouse gas emissions in all sectors of the economy by 2030.

To achieve their targets, all the Nordic governments recognize the importance of collaborating effectively with private sectors, and each has employed various approaches to engage the business and industry sector in making their national climate policy.

This report presents an outline and a comparison of selected innovative Nordic approaches adopted by public bodies in order to involve the private sector in efforts to achieve national targets through the development of sector roadmaps and other forms of contribution. The present project aims to study and understand these initiatives, including their scope, governance, and outcomes. It also seeks to assess their effectiveness and to share insights from participants and key stakeholders.

The results presented in this report are expected to contribute to continued public-private collaboration within the Nordic countries. The report is also intended to promote best practices, some of which could potentially be adopted in other countries or regions. Given the urgency of the climate problem, it is crucial for the public and private sectors to work together efficiently to implement the changes needed. This calls for deepening our understanding of the benefits, challenges, and limitations of public initiatives designed to engage the private sector in efforts to achieve national climate targets.

1. Introduction

The Nordic countries are widely recognized as global leaders in addressing climate change. Their commitment to mitigating climate change is characterized by ambitious national targets, by proactive measures to reduce greenhouse gas emissions in all sectors of the economy, and by strong support for research and technology. Each Nordic country has pledged to achieve carbon neutrality well before mid-century; Norway has set a target of becoming carbon neutral by 2030, Finland aims for carbon neutrality by 2035, Iceland by 2040, and Denmark and Sweden by 2045. Through national climate action plans, each country is actively working to accelerate the transition towards a low-carbon and fossil free economy (Nordic Council of Ministers, 2023).

1.1 Climate law and policy framework

Governmental climate efforts in all the Nordic countries are based on two pillars: European climate law and policy, and national climate law and policy. The European Union (EU) is committed to achieving carbon neutrality by 2050, aligning with the vision outlined in the European Green Deal, which was approved in 2020 (Council of the EU and the European Council, 2024). The European Climate Law, adopted in 2021, enshrined the climate neutrality target, along with an interim target of reducing greenhouse gas (GHG) emissions by 55% by 2030, compared to 1990 levels.

To meet these objectives, the EU has established a comprehensive framework of legislation and policy, recently updated through the *Fit for 55* package. This framework includes binding national targets for each EU Member State under the EU Effort Sharing Regulation (ESR), which covers emissions from road transport, buildings, agriculture, waste, and small industries. Member States are also committed to reducing net GHG emissions from the land-use, land-use change and forestry (LULUCF) sector, and to participating in the EU Emissions Trading System (EU ETS). In order to stimulate the private sector contribution to climate action and to harmonize market conditions, the EU has furthermore implemented various rules in the fields of climate and energy, including recent advancements in the legal framework on sustainable finance (European Commission, 2024).

Each Nordic country has enacted its own national general framework climate legislation, outlining long-term national climate objectives and the decision-making procedures intended to achieve them. Such legislation typically requires the government to develop and regularly update comprehensive climate action plans covering all sectors of the economy. General framework climate legislation is

increasingly recognized as a vital component of effective national climate policy. By codifying long-term targets, such legislation provides important signals for businesses and households as to the direction, pace, and extent of structural change needed to achieve national climate targets. This creates confidence, increases predictability, and facilitates informed decisions on investment and behavior (World Bank, 2020).

1.2 Public-private collaboration for green transition

Achieving carbon neutrality requires profound societal and economic transformations, including the transition from fossil fuels to renewable or clean energy across all sectors, the deployment of new technologies in various industries, and new approaches to food production. Both the Intergovernmental Panel on Climate Change (IPCC) and the Paris Agreement acknowledge that global climate objectives demand rapid transformation across all societies and sectors, and that this calls for the utilization of all available channels of climate financing (IPCC 2022). This report will refer to this transformation as the 'green transition'.

While the costs and efforts required are substantial, the green transition also presents opportunities. Governments have increasingly sought ways to mobilize private capital for climate action and to stimulate necessary behavioral changes by fostering an enabling environment for climate-friendly business investment. An example is provided by the 2019 *Helsinki Principles* adopted by The Coalition of Finance Ministers for Climate Action, which recognize the green transition's potential to benefit societies by driving technological innovation, improving human well-being, and accelerating economic growth (The Coalition of Finance Ministers for Climate Action, 2020).

In addition, effective collaboration between the public and private sectors is widely acknowledged as crucial to accelerate the transition towards carbon neutrality and a sustainable economy. In 2021, the EU adopted the EU Climate Law, its climate change framework legislation that includes a commitment by the Member States to engage with all sectors of the economy to develop sector-specific roadmaps charting the path to climate neutrality in various economic areas.

This approach has garnered significant support from private sector actors. For instance, during the negotiations for the EU Climate Law, The European Round Table for Industry (ERT), a forum comprising approximately 60 Chief Executives and Chairs of leading multinational companies in Europe, publicly endorsed EU's 2050 carbon neutrality target and stressed the necessity of introducing indicative sectoral roadmaps to reduce GHG emissions in Europe. In a February 2021 statement, the ERT outlined the opportunity it saw in such roadmaps, envisaging that:

'Sectoral Roadmaps would provide a strategy and "soft" policy guidance intended to:

- Deliver policy coherence for sectoral decarbonisation, ensuring an EU-wide approach and complementing the revised EU legislative framework;
- Synchronise policies to create sectoral markets for clean energy, build infrastructure and deliver supply;
- Support the EU's goal to gain competitive edge by being a first mover in the development of industries including the technologies that will enable the energy transformation and Europe's growth strategy;
- Offer sectoral platforms to engage all relevant actors to identify measures and pathways to reach Net-Zero Emissions in an open and transparent way;
- Be flexible and adaptable to allow for advances in climate neutral technologies as a general orientation tool rather than a planning exercise;
- Provide clarity to investors on the measures, aid investment and competitiveness support in order to mobilise the necessary investment in relevant industrial ecosystems' (ERT, 2021).

1.3 Nordic government-led climate collaboration initiatives

Nordic governments have emphasized the importance of involving the private sector in achieving climate targets, including through sectoral climate roadmaps. The *Helsingfors Declaration on Nordic Carbon Neutrality*, adopted by the Nordic Prime Ministers and the Ministers of Environment in 2019, strongly emphasized the role of the industry and business sectors in climate action and the necessity of incentivizing climate-related investment in the private sector. The declaration highlighted the need to 'enable Nordic industry and business to take a leading role in the green transformation of the global economy' (Nordic Council of Ministers, 2019).

While each Nordic country has initiated specific measures to stimulate private sector climate efforts, they have taken different approaches to involving the business and industry sectors in public policymaking. The report *The Road towards Carbon Neutrality in the different Nordic Countries*, published by the Nordic Council of Ministers in 2020, provided an overview of how governments in the Nordic countries had, at that time, sought input from business communities to contribute to national plans on carbon neutrality and GHG reductions. The report described such sectoral partnerships and roadmaps as 'cornerstones for the Nordics to reach carbon neutrality' and asserted that these partnerships 'play a critical role ensuring sector action and commitment to identify the most effective roadmaps' (Nordic Council of Ministers, 2020, p. 65). Furthermore, the report emphasized the need for increased knowledge sharing about best practices in other Nordic countries regarding sector engagement in national efforts to achieve carbon neutrality.

Building on the findings of the 2020 report, the present report seeks to further explore and compare selected public-private collaboration initiatives that have emerged in individual Nordic countries in recent years. Currently, governments in all Nordic countries have established some type of formal cooperation with various business and industry sectors, nearly all of which have resulted in the development of sectoral roadmaps for climate mitigation efforts in coordination with public authorities. These roadmaps vary in scope, content, and role in each country's national climate governance. This report serves as an opportunity to study these roadmaps and gather information on the actual experience of participants and stakeholders.

1.4 Objectives and scope of this report

The primary objective of this report is to analyze and compare the diverse strategies adopted by Nordic governments as they engage with the business and industry sectors in pursuit of national climate targets. The report primarily focuses on five specific government-led initiatives in Denmark, Finland, Iceland, Norway, and Sweden. While these initiatives differ, each is designed to promote and facilitate climate-related collaboration between the public and private sectors, and to stimulate the development of sectoral roadmaps intended to organize and prioritize measures aiming to achieve carbon neutrality. The examination of these specific examples is intended to highlight the varied characteristics of the approaches taken by each country and to shed light on how each initiative has been perceived by participants from both the public and private sectors. In this way, the project is expected to contribute to a better understanding of the possibilities and challenges of such collaborations.

The initiatives chosen as the main subjects of research for this project are:

Denmark: Climate Partnerships (*Klimapartnerskaber*)

Finland: Low-Carbon Roadmaps (*Toimialakohtaiset vähähiilisyystiekartat*)

Iceland: Business Climate Roadmaps (*Loftslagsvegvisar atvinnulífsins*)

Norway: Business Climate Partnerships (*Klimapartnerskap með næringslivet*)

Sweden: Fossil Free Sweden (*Fossilfritt Sverige*)

These initiatives have been selected as the subject of this report, being examples of specific government-led efforts to involve the private sector in achieving national climate targets. However, it is essential to emphasize that climate action in each of these countries involves a complex and dynamic interplay among various public and private actors. The initiatives selected represent only one aspect of the broader climate policy landscape in the Nordic region. Their examination is not intended to provide a comprehensive overview of how Nordic governments engage the private sector in climate action, but rather to showcase different approaches that can be

employed to encourage public-private collaboration on climate issues and to draw lessons from experience already gained.

By highlighting the distinctive features of these Nordic initiatives and gathering insights into how they have been perceived by a range of stakeholders, the project aims to make a meaningful contribution to the ongoing development of public-private collaboration on climate action within the Nordic region. Additionally, it is hoped that the project can serve as an inspiration and reference point for other countries seeking to engage the private sectors in the pursuit of climate targets.

1.5 Methodology

To gather information about each Nordic country's approach, a desktop study was conducted between December 2023 and February 2024. The research primarily involved collecting information from available reports and websites concerning the selected initiatives. Information was also gathered from reports published by the Nordic Council of Ministers addressing similar themes, as well as from reports issued by other international bodies.

In addition, in-depth interviews were conducted with selected informants from each Nordic country in order to gain deeper insights into the initiatives, best practices, and lessons learned. The informants were chosen with the assistance of government sector contacts in each country. To ensure a balance between the public and private sector, one informant representing each was interviewed from each country. Furthermore, a survey was sent out to key participants of the initiatives.

The interviews and survey were conducted online between February and April 2024. The interviews followed a semi-structured format, with a set of open questions sent beforehand to interviewees. The survey was administered through a web-based platform and distributed to relevant public and private sector participants. Participation in the survey varied among Nordic countries, with notably lower participation in Norway and Finland compared to the other three countries.

To maintain confidentiality, interviewees, survey respondents, and individuals contacted will remain anonymous and will generally be referred to as 'informants'.

The report was written by Hrafnhildur Bragadóttir, who also conducted the interviews.

2. Denmark

Key climate targets

Climate neutrality by 2050

50-54% GHG reduction by 2025, compared to 1990

70% GHG reduction by 2030, compared to 1990

2.1 National climate targets

The Danish Climate Act provides a framework for the country's climate policy. It sets a long-term target for Denmark to achieve climate neutrality by 2050 at the latest. This target is broken down into two interim goals: a 50-54% reduction in GHG emissions by 2025 and a 70% reduction by 2030, compared to 1990 levels.

The current government aims to accelerate the climate neutrality target to 2045 and to set an additional target of 110% emission reduction by 2050, compared to 1990 levels (Prime Minister's Office, 2022). To date, these new targets have not been incorporated into the Danish Climate Act.

The climate neutrality target encompasses all GHG emissions within Denmark, including LULUCF. Currently, Denmark does not plan to credit any reductions and removals achieved in other countries towards its climate neutrality target (Nordic Council of Ministers, 2023).

Under EU law, Denmark is committed to reducing emissions from sectors covered by the EU's Effort Sharing Regulation (ESR) by 50% by 2030, relative to 2005 levels (EU Commission, 2024).

In accordance with the provisions of the Danish Climate Act, the government is expected to continuously increase Denmark's climate ambitions. Guided by the vision of climate neutrality, it must regularly establish and revise ten-year interim targets. To implement these targets, the government is required to develop and annually update a comprehensive climate action plan. The most recent plan, published in September 2023, outlines economy-wide measures aiming to reduce net GHG emissions within Denmark and their current status (Ministry of Climate, Energy and Utilities, 2023).

2.2 The Climate Partnerships (Klimapartnerskaber)

Building on Denmark's longstanding tradition of public-private collaboration, the government has emphasized the importance of cooperation with the business sectors to achieve its climate targets. To formalize such collaboration, the government launched the Climate Partnerships initiative in November 2019, inviting key sectors of the Danish economy to participate.

2.2.1 Main objectives

The Climate Partnerships initiative aims to enhance dialogue and cooperation among the government, businesses, and trade unions in Denmark regarding the opportunities and barriers in transitioning to a green economy. It establishes a framework for structured cooperation between the public and private sectors, aiming to develop a shared vision for achieving Denmark's climate targets (Ministry of Industry, Business and Financial Affairs, Denmark, 2023). The initiative's core concept has been summarized as follows: The public sector provides long-term goals and stable regulatory conditions, while the private sector contributes the innovation, solutions, and investments necessary to meet these goals (State of Green, 2024).

A key aspect of this initiative is the establishment of the Green Business Forum, which includes representatives from both the public and private sectors along with independent experts. Through ongoing discussions within this forum, the Climate Partnerships are expected to strengthen the awareness and commitment of businesses and provide them with a platform to formally communicate their climate-related situations and aspirations to the government. Most importantly, the initiative allows them to propose specific policy measures aiming to remove barriers and facilitate climate-friendly investments by improving the regulatory and institutional environment. This is intended to support the implementation of the government's green ambitions, accelerate Denmark's green transition, and contribute to achieving the country's current and future climate targets (Ministry of Industry, Business and Financial Affairs, 2023).

The primary focus of the Climate Partnerships initiative is to ensure cooperation among key economic actors to achieve Denmark's national climate targets. However, the initiative also encompasses broader economic, societal, and environmental goals. These include boosting exports, creating employment opportunities, promoting prosperity, and reducing inequality. Furthermore, the initiative aims to maintain Denmark's international leadership in the green transition in a way that supports jobs, welfare, exports, and competitiveness (Ministry of Industry, Business and Financial Affairs, 2023).

2.2.2 Sectoral coverage

Initially, 13 distinct partnerships were established, collectively covering Denmark's most relevant business sectors in terms of GHG emissions (Prime Minister's Office, 2019). In 2021, the defense sector joined the initiative, expanding its scope to a total of 14 sectors (Ministry of Climate, Energy and Utilities, 2024).

Energy and utilities
Waste, water and circular economy
Energy intensive industries
Manufacturing
Life sciences and biotechnology
Food and agriculture
Inland transport
Aviation
Maritime transport - 'Blue Denmark'
Construction
Commerce
Service, IT and consulting
Finance
Defense

2.2.3 Role of participants

The role and organization of the Climate Partnerships and the Green Business Forum were initially outlined in two separate Terms of Reference (*Kommissorium*) issued by the Ministry of Industry, Business and Financial Affairs and the Ministry of Climate, Energy and Utilities in 2019 (Ministry of Industry, Business and Financial Affairs, 2019a, 2019b). These describe the purpose, mandate, and composition of the Climate Partnerships and the Green Business Forum, along with work procedures, timelines, and expected outcomes.

The roles of the collaboration participants have somewhat evolved since the issuance of the 2019 Terms of Reference. In April 2023, the government relaunched the Climate Partnership initiative and the Green Business Forum with new Terms of Reference, which include some adjustments to sharpen the focus on implementation and increase the business sector's involvement in climate policy (Ministry of Industry, Business and Financial Affairs, 2023).

Each of the 14 partnerships is led by a chairperson, appointed by the Danish government, typically representing leading companies within the relevant sector. The chairperson bears the primary responsibility for formulating the sector's vision and climate ambitions, as well as developing the partnership's proposals. Relevant business organizations form secretariats, one for each partnership, tasked with facilitating the development of proposals through activities like information gathering, analytical support, and organization of events.

As many partnerships span multiple industries, extensive coordination among diverse stakeholders is necessary. To ensure expertise when developing the proposals, the chairperson may recruit additional business leaders, and specialized working groups within sub-sectors may be established to address specific challenges.

Representatives from relevant ministries support the partnership, primarily from the Ministry of Industry, Business and Financial Affairs and the Ministry of Climate, Energy and Utilities. Their role is to provide input and guidance, including standardized formats and harmonized methodologies, particularly concerning the use of numbers and data.

While each partnership retains independent control over its proposal and roadmap development, oversight and monitoring are maintained by the Green Business Forum. The forum is composed of relevant ministers, chairpersons of the climate partnerships, business sector representatives, trade unions, and independent experts (including the chairperson of the Danish Climate Council). The forum is jointly chaired by the Minister for Industry, Business and Financial Affairs, the Minister for Climate, Energy and Utilities, and the Minister for Economic Affairs.

The Green Business forum serves as a platform for dialogue among government, business, labor stakeholders, and climate organizations regarding opportunities and challenges of the private sector's green transition. Meeting twice a year, the forum discusses concrete ways to achieve greenhouse gas reductions through both business sector efforts and governmental policy initiatives, along with discussing business opportunities for Danish companies related to the green transition.

2.2.4 Outcomes

In the 2019 Terms of Reference, the Climate Partnerships were tasked with submitting their ideas for their own GHG reduction measures and their proposals to the government for changes in the regulatory framework and for governmental measures. Specifically, the partnerships were required to:

- outline their level of ambition for GHG emissions reductions by 2030 and their vision for the sector's green transition;
- identify measures that the sector itself can take to reduce emissions under current framework conditions and with current or already known future technological solutions; and
- identify existing barriers to further GHG reduction and green competitiveness and provide recommendations on how to remove them.

In March 2020, the Climate Partnerships submitted their reports to the government, collectively comprising over 400 proposals and recommendations. While the reports are based on government guidelines and methodologies and are therefore somewhat similar in structure, the proposals and recommendations vary substantively. This variation reflects the unique conditions and opportunities for emission reductions that stem from differences across sectors in production methods, value chains, and demand (Ministry of Industry, Business and Financial Affairs, 2023). Further, overlaps exist between some proposals addressing cross-sectoral aspects because of the lack of coordination on substantive issues (The Danish Council on Climate Change, 2020).

The Climate Partnerships are viewed as an ongoing process with no specific end date. According to the 2019 Terms of Reference, the government was to assess whether and how the barriers reported by the Climate Partnerships could be addressed politically in its 2020 Climate Action Plan. The partnerships were expected to continue their work by developing sectoral roadmaps and maintaining continuous dialogue within the framework of the Green Business Forum. In 2021, one year after the submission of the Climate Partnerships' reports, sector-specific roadmaps were published for nearly all the sectors (Ministry of Climate, Energy and Utilities, 2024).

The recommendations and sectoral roadmaps are publicly accessible in Danish on the [website](#) of the Ministry of Climate, Energy and Utilities. Additionally, State of Green, a public-private partnership between the government and three leading business associations (Danish Industry, Green Power Denmark and Danish Agriculture and Food Council) operates a special [information website](#) about the Climate Partnerships, providing information in English about each partnership and its recommendations. As part of this information-sharing initiative, State of Green published The Climate Partnership Playbook in 2022, aiming to provide insights into

the experience of the Climate Partnerships and inspire other public-private collaboration initiatives (State of Green, 2022).

The Climate Partnerships continue to meet twice a year within the Green Business Forum to discuss relevant topics related to the green transition.

2.3 Experience

Based on informant feedback, the Climate Partnerships have contributed to several positive developments in Danish climate policy. All informants emphasized the vital role of public-private collaboration in achieving national climate targets and supported increased involvement of the private sector in shaping climate policy. While both public and private sector representatives seem to view the Climate Partnerships initiative as generally efficacious, most consider that it has thus far only moderately contributed to reducing net GHG emissions in Denmark. Nevertheless, several examples of recommendations directly influencing the formulation of concrete policy initiatives were mentioned (see also: State of Green, 2024).

The Green Business Forum's work appears to be seen as one of the initiative's most successful components, particularly its regular meetings involving public and private sectors representatives along with independent experts. The importance of dialogue between the government and private sectors was emphasized, especially when discussion takes place in small meetings, enabling more efficient sharing of information and perspectives than general participation procedures. A key factor in this success, according to one informant, is the direct involvement of company CEOs, who provide the government with a deeper understanding of the business sector's potential in achieving climate goals and its requirements in terms of regulation and funding.

Overall, there appears to be a relatively high level of trust between Denmark's public and private sectors, perhaps attributable in part to the longstanding tradition of such collaborations. However, some informants expressed concerns about diminishing trust, citing changes in post-COVID political priorities. Criticism was also voiced about an increasing lack of transparency from politicians regarding their climate objectives and plans.

Informants from the private sectors underscored their commitment and significant investment in the partnership, despite reportedly sometimes experiencing slow responses from the government, coupled with a seemingly growing lack of resources and commitment in the public sector. One informant mentioned that progress varies between climate partnerships — some experiencing significant advancement while others, particularly those reliant on municipal actions, are progressing more slowly. It was suggested that municipalities should have their own partnership to be more actively involved in cooperation to achieve national

climate targets. Engaging consumer perspectives more directly was also recommended in order to better address the entire value chain.

Among other challenges identified by informants is the difficulty of maintaining the partnerships' relevance amidst an evolving policy environment and increasing targets. Some informants seemed critical of the slow pace of decision-making and execution within the government and suggested honing the process, including clarifying the 'ownership' of the project and the responsibilities of relevant actors, along with implementing better follow-up procedures. Improving coordination between ministries and getting the Ministry of Finance more actively involved in the work were mentioned as factors that would be useful. Overall, there seems to be some uncertainty about the initiative's future. This may be having a chilling effect on new private sector initiatives, as it seems increasingly unclear how the recommendations will be used.

3. Finland

Key climate targets

Carbon neutrality by 2035

60% GHG reduction by 2030, compared to 1990

80% GHG reduction by 2040, compared to 1990

90-95% GHG reduction by 2050, compared to 1990

3.1 National climate targets

In 2019, the Finnish government announced its aim of achieving carbon neutrality in Finland by 2035 and becoming carbon negative soon after (Finnish Government, 2019). Three years later, this target was enshrined in the Finnish Climate Act, which lays down the objectives and establishes the framework for Finland's climate policy.

In addition to the goal of carbon neutrality by 2035, the Finnish Climate Act outlines national emissions reduction targets for the subsequent years: 60% by 2030, 80% by 2040 and 90% (with an aspirational target of 95%) by 2050, compared to 1990 levels. Under EU law, Finland is also committed to reducing emissions from sectors covered by the EU's Effort Sharing Regulation (ESR), including emissions related to road transport, heating of buildings, agriculture and waste management by 50% by 2030, compared to 2005 levels (EU Commission, 2024).

The commitment to carbon neutrality encompasses all GHG emissions and removals within Finland and will be realized solely with domestic actions, not with purchases of international carbon credits (Nordic Council of Ministers, 2023).

The Finnish Climate Act establishes a comprehensive climate policy planning framework, requiring the government to prepare several climate-related plans. These include a medium-term climate change policy plan to be drawn up by the government during each electoral term, and a long-term climate plan to be prepared at least once every ten years. The latest medium-term climate change policy plan was submitted to the Finnish Parliament in June 2022. The plan presents various measures intended to halve emissions from sectors covered by the ESR by 2030, achieving carbon neutrality by 2035 (Ministry of the Environment, 2022). The long-term climate plan is currently under development and is scheduled to be adopted no later than 2025 (Ministry of the Environment, 2024).

Each electoral term, the government moreover publishes a Climate and Energy Strategy covering the emissions trading, effort-sharing and land use sectors, energy sector maintenance and security of supply issues, and the functioning of energy markets. The government submitted this strategy to the Parliament in June 2022 (Ministry of the Environment, 2024).

3.2 The Low-Carbon Roadmaps (Toimialakohtaiset vähähiilisyystiekartat)

In pursuit of the 2035 carbon neutrality objective, the Finnish government has emphasized the need for cooperation with businesses and organizations in relevant sectors. In 2019, it launched a formal cooperation initiative, referred to as the Low-Carbon Roadmaps, the aim of which is to engage the private sector in the efforts needed to meet Finland's climate objectives.

3.2.1 Main objectives

The Low-Carbon Roadmaps initiative is intended to create a realistic strategy for Finland to attain its 2035 carbon neutrality objective. The initiative's core purpose is to gather and communicate information essential to understanding the scale, costs, and preconditions of the actions required. By furnishing the government with comprehensive data and insights on anticipated sectoral developments, emissions trajectories, energy consumption projections, and technology deployment timelines, the initiative is expected to guide the formulation of effective policies and strategies, particularly within the fields of climate and energy (Ministry of Economic Affairs and Employment, 2021, 2024).

The initiative is furthermore intended to create a platform for dialogue between the government and the private sectors and give the industries an opportunity to communicate what regulatory environment changes are needed for them to implement their climate goals. This has the co-benefit of empowering the industries in their own endeavors toward the development of a low-carbon economy, strengthening their dedication to emission reduction and thereby increasing their contribution to Finland's climate targets (Interviews, Finland).

3.2.2 Sectoral coverage

Preceding the establishment of the Low-Carbon Roadmaps, the chemical industry had already developed its own roadmaps to outline the sector's contribution to Finland's climate targets. With the formal introduction of the Low-Carbon Roadmaps initiative, additional sectors began developing roadmaps in late 2019 and early 2020. At first, the government initiative focused on four significant energy-intensive sectors, collectively responsible for over 90% of Finland's greenhouse gas emissions: the energy sector, the chemical industry, the forestry

sector, and the technology sector. Subsequently, nine other sectors were either invited to join or joined at their own initiative, resulting in a total of 13 sectors actively engaged in developing and publishing their individual roadmaps (Ministry of Economic Affairs and Employment, 2021). The current sectoral coverage is seen as comprehensive (Interviews, Finland).

Energy
Chemical
Forest
Technology
Food
Logistics and transport
Agriculture
Hospitality
Commerce
Textile
Sawmill
Construction and built environment
Property owners and developers

3.2.3 Role of participants

Early on, what was expected from the collaboration and how it would be carried out was relatively clear (Interviews, Finland). From the outset, it was established that the sectors themselves would have independent control over drafting and implementing their own roadmaps. This approach was deemed appropriate, as the sectors themselves have the best knowledge of the situation in their field. On the other hand, the Ministry of Economic Affairs and Employment had an important role in facilitating the work within the sectors. Operating under the principle of 'light coordination', the ministry offered support and guidance by various means, including by arranging discussions and seminars (Ministry of Economic Affairs and

Employment, 2021). The ministry consistently encouraged the sectors to establish ambitious yet realistic targets, encouraging them to evaluate their potential emission reductions and implementation timelines (Ministry of Economic Affairs and Employment, 2021, 2024a).

To ensure consistency and usability of the roadmaps in governmental policymaking, the Ministry of Economic Affairs and Employment issued instructions that were, according to informants, generally adhered to by the sectors and proved useful for the work. The instructions are available in Finnish at the ministry's website. The ministry also published a list of frequently asked questions intended for reference to assist the sectors in their work (Ministry of Economic Affairs and Employment, 2021).

Relevant sectoral ministries also actively participated in the initiative, overseeing roadmap efforts within their domains. These ministries included the Ministry of Transport and Communications, the Ministry of Agriculture and Forestry, the Ministry of Economic Affairs and Employment, and the Ministry of the Environment.

Internally, each sector appointed a project manager to oversee and coordinate the preparation of its roadmap. The project manager was supported by a steering group comprising representatives from member companies and key stakeholders. While the composition and function of the steering groups varied between sectors, their main task typically involved providing industry insights crucial to the preparation of the roadmaps.

Across all sectors, collaboration involved multiple stakeholders, including operators within the relevant sector, consultants, and trade association committees. Some sectors organized workshops, discussions, and other venues for participation, such as comment portals and member surveys, in order to gather additional views and insights from membership and stakeholders (Ministry of Economic Affairs and Employment, 2021).

3.2.4 Outcomes

Despite the challenges posed by the coronavirus pandemic, nearly all roadmaps were finalized according to schedule and made public in May and June 2020. The roadmaps can be accessed in Finnish at the [website](#) of the Ministry of Economic Affairs and Employment. In October 2020, the ministry published a report summarizing the key outcomes of the Low-Carbon Roadmaps initiative to date. Published in English the following year, it included summaries of the published roadmaps, a description of the work process, and information on further work. It also explores how the roadmaps will be utilized in climate and energy work towards a low-carbon Finland (Ministry of Economic Affairs and Employment, 2021).

Most roadmaps are structured into main content, outlining sector-specific strategies for GHG reductions within designated timelines, and supplementary content providing broader context and addressing various issues, including cross-sectoral opportunities. Each roadmap typically offers a comprehensive description of the current situation within the respective sector, evaluating available emission-reducing technologies and measures, and projecting achievable emission reductions. Scenario analyses, including business-as-usual and low-carbon scenarios, are employed to forecast future sectoral developments. By facilitating the identification of research and development funding needed over the next few years to support a low-carbon economy, such analysis is intended to aid the government in updating its climate and energy strategy in order to meet climate targets (Ministry of Economic Affairs and Employment, 2021).

Following the publication of the roadmaps, the government started preparing their updates. While updating the roadmaps is voluntary, at the time of writing this report multiple sectors are engaged in this process, which requires various new analyses and stakeholder dialogues. The update process was scheduled for completion in Spring 2024 (Ministry of Economic Affairs and Employment, 2024a).

3.3 Experience

Feedback from informants (notably fewer in Finland than in the other countries), indicates that in Finland the Low-Carbon Roadmaps initiative has been very effective and has played an important role in addressing climate change. Both public and private sector informants expressed a positive outlook on the initiative, highlighting the substantial efforts, resources, and determination invested by all involved parties. The issuance of the roadmaps according to schedule amid the societal disruptions caused by the coronavirus pandemic was specifically noted as demonstrating the commitment by both public and private sectors.

It was emphasized that Finland's business community is in general acutely aware of the escalating impact of climate change on business environments. Consequently, there is a strong inclination among businesses to actively participate in and contribute to the green transition and the ambitious 2035 carbon neutrality target. This proactive engagement is driven by the recognition of the competitive advantage to be gained by staying ahead of competitors and swiftly implementing new climate-friendly solutions. One informant noted that the key success of the Low-Carbon Roadmaps initiative was that the industry sectors were keen to use this platform to state loud and clear that they support the government's ambitious climate policy.

Informants reported a high level of trust between the public and private sectors, perhaps attributable to Finland's longstanding tradition of close collaboration and open dialogue. Also, the country's small size, coupled with its accessible administration and minimal hierarchy, was noted as a factor potentially

contributing to effective cooperation. Another factor specifically mentioned as helpful to the initiative was the Climate Policy Roundtables, regularly hosted by the Finnish government to create a common understanding across various societal sectors of how Finland can make a just transition to a carbon neutral society by 2035 (Finnish government, 2023).

There appears to be general satisfaction with the information-sharing and transparency surrounding the Low-Carbon Roadmaps initiative. A private sector informant noted that the industry felt well informed about the overall work and that the process was transparent. Information was accessible, and adequate opportunities existed for open dialogue with the government during specific meetings and the climate roundtables mentioned above.

While acknowledging the government's overall effective communication and support in the development of the roadmaps, it was noted by one informant that some labor associations would have wanted to be more involved in the process in order to ensure a more prominent discussion of social aspects in the roadmaps.

Although establishing a direct correlation between roadmap proposals and actual climate policy proves challenging, informants generally seemed to consider that the roadmaps have influenced the government's climate and energy policy. However, one private sector informant mentioned frustration voiced by some industries about inadequate government responses to their proposals. Additionally, some sectors seem to have encountered difficulties in effectively implementing the roadmaps, particularly due to challenges related to reaching out to small and medium-sized enterprises (See: Ministry of Economic Affairs and Employment, 2021).

Other challenges cited by informants include the situational differences between sectors, which pose obstacles to developing harmonized instructions and guidance on the use of methodologies, numerical data, and other aspects.

4. Iceland

Key climate targets

Carbon neutrality by 2040

Independence from fossil fuels by 2040

National target of 55% reduction in Effort Sharing emissions by 2030, compared to 2005

4.1 National climate targets

In 2017, the Icelandic government announced its goal of becoming carbon neutral by 2040 (Government of Iceland, 2017). Four years later, this goal was codified in the Icelandic Climate Change Act. In 2021, the government furthermore declared its ambition to make Iceland independent of fossil fuels by 2040 (Government of Iceland, 2021). While all domestic sectors are in principle included in the targets, the role of the LULUCF sector is still being discussed, including aspects relating to the need for improved data (Nordic Council of Ministers, 2023).

Currently, Iceland does not intend to rely on international carbon credits to achieve its carbon neutrality goal, but the matter is under consideration by the government (Ministry of the Environment, Energy and Climate, 2024).

In its most recent Nationally Determined Contribution (NDC) under the Paris Agreement, submitted in February 2021, Iceland committed to cooperating with the EU, its Member States and Norway to achieve a collective 55% emission reduction target by 2030, compared to 1990 (UNFCCC, 2021). Iceland's collaboration with the EU, its Member States and Norway entails a national target for sectors subject to the EU's Effort Sharing Regulation (ESR), including road transport, fisheries, agriculture, and waste management. Currently, Iceland's target under the ESR is a 29% reduction by 2030, compared to 2005, but the target is expected to be increased to around 40% (Nordic Council of Ministers, 2023).

Additionally, the government has independently set a target of reducing ESR emissions by at least 55% by 2030, compared to 2005 (Government of Iceland, 2021).

To meet these objectives, the Icelandic government has outlined approximately 50 actions in its most recent Climate Action Plan from 2020 (Ministry for the Environment and Natural Resources, 2021). The action plan has been under review and a new plan is expected to be published in Summer of 2024 (Interviews, Iceland).

4.2 The Business Climate Roadmaps (Loftslagsvegvísar atvinnulífsins)

In recent years, the Icelandic government has increasingly emphasized the active involvement of the business and industry sectors in achieving the country's climate targets. In 2022, the Minister of the Environment, Energy and Climate initiated a collaborative project between government authorities and the business sector, known as The Business Climate Roadmaps.

4.2.1 Main objectives

The primary objective of the Business Climate Roadmaps is to contribute to the development of a comprehensive and realistic plan to achieve Iceland's climate targets. This involves gaining a thorough understanding of the emission-reducing projects that the business sector is willing and able to undertake, as well as identifying ways in which the public sector can support these efforts (Ministry of the Environment, Energy and Climate, 2023). The aim is to establish a collaboration platform where government officials and business representatives can work together to define, prepare, and implement sector-specific emission reduction targets. An informant from the government's side described this as an attempt to broaden the 'ownership' of climate action in Iceland (Interviews, Iceland).

A key aspect of this initiative is to provide the government with essential information for prioritizing their actions. This includes data on achievable emission reductions in each sector, associated costs, and the current status of technological development (Interviews, Iceland). Additionally, the Business Climate Roadmaps allow businesses to influence public policymaking by sharing their perspectives on suitable government interventions, such as regulatory change, infrastructure development, incentives for green investment, and support for research and development (R&D) and energy transition efforts (Confederation of Icelandic Enterprise, 2024).

4.2.2 Sectoral coverage

Early in the process, a total of 11 sectors joined the initiative. While this initiative covers, directly or indirectly, most of the key sectors in the Icelandic economy, additional sectors may still join the initiative at later stages (Interviews, Iceland).

Aluminum industry
Aviation
Domestic passenger cruises
Tourism industry
Aquaculture
Financial industry
Silicon industry
Construction
Energy and utilities
Fisheries
Road transport

4.2.3 Role of participants and procedures

The Business Climate Roadmap initiative began in the autumn of 2022 as an informal collaboration, primarily focused on identifying key stakeholders and facilitating seminars and discussions within various business sectors regarding their contribution to Iceland’s climate targets. Building on previous private-led initiatives, the aim was to strengthen connections between the public and private sectors and establish a shared vision for future climate action (Ministry of the Environment, Energy and Climate, 2023).

In January 2023, the collaboration was formalized through the adoption of a memorandum between the Minister of Environment, Energy and Climate and the Confederation of Icelandic Enterprise. The memorandum, which is not publicly accessible, specified that each sector would independently carry out the development of its roadmap, and that the project would be overseen by the Confederation of Icelandic Enterprise, which would appoint an overall project manager. Each sector has its own leader, typically the CEO of a prominent company within that sector (Interviews, Iceland).

Engagement on the part of a diverse set of stakeholders was prioritized in order to ensure that the roadmaps would reflect the diversity of Icelandic industries and would foster dialogue about climate efforts within these sectors. According to informants, the distribution of responsibilities and workload was not clearly defined

in the beginning, but gradually the role of key actors developed, and the work became more efficient. Informants from both the public and private sectors acknowledge that this was a learning by doing process and that the initiative's ongoing evolution will include further clarifying the role of each participant (Interviews, Iceland).

As set out in the memorandum, the role of the Ministry of the Environment, Energy and Climate is to facilitate and support the work on the roadmaps. To perform this role a special working group was established, its members hired specifically for this purpose, to collaborate closely with the business sectors throughout the development of the roadmaps. Among this group's intended tasks were to assist in defining interim targets for each sector and to outline procedural aspects for analyzing and implementing the measures proposed. According to informants, the extent to which this support was utilized varied between sectors, some sectors choosing to hire their own consultants (Interviews, Iceland).

4.2.4 Outcomes

In June 2023, the 11 sectors submitted their roadmaps, each outlining specific goals and proposing actions to reduce emissions within the respective sector. The roadmaps also collectively set forth 332 proposals for public and private measures aiming to contribute to Iceland's climate objectives (Confederation of Icelandic Enterprise, 2024).

The roadmaps are accessible in Icelandic at a [website](#) created for the initiative and operated by the Confederation of Icelandic Enterprise. The roadmaps are built upon previous collaborative efforts of several business associations that issued sectoral roadmaps in 2021. While the earlier effort was initiated by private entities, it was overseen by Green by Iceland (*Grænvangur*), a public-private partnership established to promote Icelandic climate solutions (Green by Iceland, 2021).

From the outset, it was envisioned that the outcomes of the Business Climate Roadmap initiative would contribute to the development of a new Climate Action Plan. The new plan is expected to integrate sector-specific climate roadmaps for businesses, incorporating sector-specific goals and proposals for emission reduction measures. The roadmaps are considered 'living documents', subject to updates. The roadmaps are scheduled to be updated in 2025 (Interviews, Iceland).

4.3 Experience

As of the writing of this report, a new government climate action plan is pending. The Minister of the Environment, Energy and Climate has declared that the new plan will take the sectoral roadmaps into account. Consequently, there is significant uncertainty regarding the roadmaps' impact on governmental climate policy. This uncertainty may have contributed to the mixed feedback from informants

regarding the initiative's effectiveness, ranging from somewhat ineffective to somewhat effective. Nonetheless, almost all informants underscored the importance of private sector involvement in shaping public climate policy and advocated for expanding the private sector's role.

One recurring theme from informants was the need for clearer 'ownership', roles, and procedures within the Business Climate Roadmap initiative. It was mentioned that establishing relatively clear objectives early on would have facilitated alignment between the public and private sectors, harmonizing expectations regarding the project's outcomes and processes. One informant suggested that formalizing the collaboration through a memorandum should have occurred sooner. However, informants also gave positive feedback as to the efficiency of the collaboration, especially in its early phases, and noted that the atmosphere was constructive.

Noting that the memorandum of January 2023 had to some extent outlined how the collaborative process was to be conducted, informants also mentioned that in practice the memorandum has not been fully adhered to. After the publication of the roadmaps, ambiguity persisted about who was responsible for taking the next steps and how proposals would be addressed, indicating, according to some private sector informants, a lack of initiative on the government's part. This appears to have affected trust between the public and private sector, reported by most informants as moderate or low.

It was specifically noted that while the collaboration was quite effective during the roadmap development phase, uncertainty later arose regarding next steps and the roles of both governmental and business sector actors. At this stage, the involvement of sectoral ministries increased, and some private sector informants experienced a lack of collaboration and harmonization between ministers. Delays in issuing a new climate action plan further exacerbated uncertainty among private sector stakeholders.

Additionally, concerns were voiced that the government had not demonstrated how roadmap outcomes would be used for prioritizing public policy measures, despite this being a primary purpose of the initiative. Nevertheless, most informants believed that public-private collaboration had already contributed to reducing net emissions in Iceland to some extent, albeit only slightly or moderately.

Informants mentioned differences between sectors as to available baseline data and starting points on emissions, technologies, and costs, as well as differences in capabilities to assess achievable emission reductions. These disparities were said to have contributed to the diversity in methodologies and outcomes across the roadmaps.

Despite challenges, informants generally recognize the establishment of formal climate collaboration between the public and private sectors in Iceland as a significant and positive step. It was noted that this is the first time that a formal

cooperation on climate action is created between the public and private sectors in Iceland. Informants appear to consider this a step of great importance for Iceland's future climate efforts, even though the experience so far has left considerable room for improvement. They expressed optimism about the potential for further development and streamlining of the collaboration, underscoring its importance for advancing climate action in Iceland. It was emphasized that the initial round of roadmaps only constitutes a first step, and that further collaboration will be needed to allow the collaboration to evolve and lead to more beneficial results in the future.

5. Norway

Key climate targets

At least 55% GHG reduction by 2030, compared to 1990

Low emission society by 2050 (90-95% emission reduction, compared to 1990)

5.1 National climate targets

Norway aims to become a low-emission society by 2050 with a targeted emission reduction of 90-95%, compared to 1990 levels (Ministry of Climate and Environment, 2021). The effect of Norway's participation in the EU Emissions Trading System (EU ETS) is to be taken into account when assessing progress towards this target (Nordic Council of Ministers, 2023). Norway has also set a target of at least 55% GHG emission reduction by 2030, compared to 1990. The targets for 2030 and 2050 are enshrined in the Norwegian Climate Act, enacted in 2017, which requires the government to submit updated climate targets to the Norwegian Parliament every five years.

In its latest NDC, submitted in November 2022, Norway pledged its intention to collaborate with the EU, its Member States and Iceland to collectively reduce GHG emissions by 55% by 2030, compared to 1990 (UNFCCC, 2022). This entails reducing emissions covered by the EU Effort Sharing Regulation, spanning sectors such as road transport, fisheries, agriculture, and waste management, by at least 40% by 2030, compared to 2005. This target is expected to be increased to 50% (Nordic Council of Ministers, 2023).

In January 2021, the Norwegian government set out a comprehensive climate action plan, covering all sectors, to meet Norway's climate targets while also promoting green growth (Ministry of Climate and Environment, 2021). Under the Climate Act, the government must make an annual report to the Norwegian Parliament (*Stortinget*) on the progress and implementation of the codified climate targets.

In relation to Norway's ratification of the Paris Agreement in 2016, the Norwegian Parliament declared its intention to advance its previous 2050 carbon neutrality target to the year 2030 (Norwegian Parliament, 2016). Now referred to as climate neutrality, this target covers all remaining GHG emissions in Norway from 2030 onwards, although the specific role of the LULUCF is yet to be determined (Nordic

Council of Ministers, 2023). To achieve climate neutrality, Norway will partly rely on international mitigation action, including participation in the EU ETS, international cooperation on emission reductions, emissions trading, and project-based cooperation (Ministry of Climate and Environment, 2021).

5.2 Business Climate Partnerships (Klimapartnerskap med næringslivet)

In 2023, the Norwegian government launched an initiative to establish partnerships with industry sectors responsible for the largest share of Norway's GHG emissions and having the greatest potential for reducing emissions (Norwegian Government, 2023). The initiative, which involves the Minister of Climate and Environment and the Minister of Trade and Industry, along with key employer and employee organizations, aims to create mutually binding, industry-specific agreements between the government and selected business sectors. These agreements will formalize a collective vision for achieving Norway's climate targets (Ministry of Climate and Environment, 2023).

Over the past decade, some private sectors in Norway have already pursued public-private partnerships to accelerate climate action. This has included pilot projects in maritime and land transport industries, intended to promote the exchange of knowledge and experience to overcome barriers and reduce risks for businesses (Ministry of Climate and Environment, 2021). Additionally, various sectors have developed their own roadmaps for green competitiveness, outlining emission reduction goals by 2050 while simultaneously aiming to increase value creation and job growth (UNFCCC, 2020). The government's 2023 initiative to adopt industry-specific agreements builds on these earlier endeavors, aiming to further formalize and strengthen public-private collaborations (Interviews, Norway).

5.2.1 Main objectives

The main objectives of developing climate partnerships were introduced through a government roadmap known as the *Green Industrial Initiative*, published in 2022 (Ministry of Trade, Industry and Fisheries, 2022). The roadmap aims to accelerate the green transition within the business sector, emphasizing the potential of climate partnerships to foster a shared understanding between the public and private sectors of the actions necessary to achieve Norway's climate goals. It was further noted that these partnerships would identify and anchor essential emission reduction strategies and the green transition in industry, including energy and resource efficiency and increased circularity.

Further, climate partnerships are intended to facilitate a systematic exchange of experience regarding the effect of policy instruments, without limiting the government's overall scope for action in climate policy (Ministry of Trade, Industry

and Fisheries, 2022). Subsequently, in January 2023, an agreement (referred to below as the 'general agreement') was announced between the government and key industry actors in the Norwegian economy. The general agreement laid down objectives, overarching guidelines, and shared principles for collaboration (Norwegian Government, 2023).

Under the general agreement, the overarching goal of the climate partnerships is to enable socio-economically profitable business measures that contribute to reducing GHG emissions in Norway in line with the country's climate targets for 2030 and 2050 and its broader economic transition goals (Norwegian Government, 2023a).

To achieve this goal, sector-specific partnership agreements are to be negotiated with selected sectors in order to facilitate structured dialogues. These agreements will be based on objectives outlined in the general agreement and will aim to create a common understanding among parties regarding necessary emission reductions within each participating sector. They are also intended to support competence-building and knowledge-sharing, including the sharing of information concerning the effects of various instruments of policy such as taxation, regulation, government support schemes, and development of infrastructure for transport and energy.

Furthermore, the purpose of the partnership agreements is to identify within each industry sector actual and potential measures to contribute to the green transition, focusing on areas such as energy and resource efficiency and the circular economy. Ultimately, the partnerships are expected to drive sustainable value creation, enhance the competitiveness of Norwegian business, promote the export of green products within international value chains, and ensure a fair transition towards carbon neutrality.

5.2.2 Sectoral coverage

The parties to the general agreement are the State of Norway, represented by the Ministry of Climate and Environment and the Ministry of Trade, Industry and Fisheries, and key business organizations in Norway. Three sectors are chosen as pilot projects due to their substantial impact on total GHG emissions in Norway and their considerable potential for emissions reduction (Interviews, Norway). These three sectors are the process industry, the maritime industry, and the construction and property industry.

As part of this ongoing process, the collaboration's coverage might gradually expand over time as other sectors may be invited to enter into climate partnership agreements with the government (Interviews, Norway).

Process industry

Maritime industry

Construction and property industry

5.2.3 Role of participants and procedures

Building upon the general agreement, negotiations began between the government and the selected sectors in order to formulate more specific agreements with each of the sectors involved. Originally intended to be completed by the end of 2023, this process has encountered delays and remains ongoing (Interviews, Norway).

It was clear from the beginning that the collaboration would not be as rigidly structured as in some other Nordic countries, and that there would be no specific government organization with a mandate dedicated to this effort (Interviews, Norway). Oversight and overall responsibility for the climate partnership agreements lie with the Ministry of Climate and Environment and the Ministry of Trade, Industry and Fisheries. The roles of key participants and the procedural steps leading to the conclusion of industry-specific climate partnership agreements are outlined in the general agreement (Norwegian Government, 2023a).

The partnership agreements will be adopted between the relevant sector ministry, the Ministry of Climate and the Environment, and invited organizations representing employers and employees (Ministry of Trade, Industry and Fisheries, 2022). Other ministries and individual companies may also become parties to the agreement. The selection of organizations is made by the relevant sector ministry in consultation with the Ministry of Climate and the Environment, with input from the relevant sector (Norwegian Government, 2023a).

Upon invitation to engage in a dialogue regarding a climate partnership agreement, the parties involved were expected to compile a knowledge base detailing efficacious and cost-effective measures that contribute to reducing GHG emissions and/or expedite a green transition along the entire value chain, along with the potential impacts of these measures. The knowledge base is to serve as the foundation for subsequent discussions focusing on implementing these measures. The process for compiling a knowledge base is to be further clarified within the industry-specific climate partnerships. Existing roadmaps or similar plans outlining the green transition within an industry are to be systematically reviewed, with a focus on identifying measures yet to be implemented (Norwegian Government, 2023a).

Under the general agreement, the parties must regularly evaluate the collaboration's results and are required to meet at least annually to assess the impact of the partnerships. The parties must collectively decide how the climate partnerships will be followed up, for example by developing reporting procedures and by conducting periodic reviews to evaluate their progress and outcomes.

5.2.4 Outcomes

As of the writing of this report, the climate partnerships agreements are still in their preparatory phases, making it premature to discuss actual outcomes. However, it should be noted that the general agreement outlines a set of essential elements that must be incorporated into the agreements. These elements include the industry's own targets and ambitions to reduce emissions and otherwise contribute to the green transition, ideally with clear, quantified targets and timetables. The agreements are to detail the measures intended to achieve these objectives and should also assess their potential distributional effects, with a particular emphasis on ensuring a fair transition. Furthermore, they should specify how work within the relevant sector will be organized and how progress will be monitored (Norwegian Government, 2023a).

5.3 Experience

As the Climate Partnerships initiative is still in its early stages, it is too soon to address the question of whether it will achieve its intended objectives. However, based on feedback from informants (notably fewer in Norway than in the other countries), the experience of the collaboration thus far has been both positive and challenging.

On the positive side, informants highlighted the significant value of establishing a shared vision between the government and the relevant industry sectors. It was noted that negotiations have generally been constructive, and optimism about their eventual finalization seems to remain. Progress was also noted in assembling a knowledge base, including defining data and metrics for establishing baselines and targets, as well as determining reference years. Informants underscored that the platform for knowledge and information sharing is among the most important outcomes of the cooperation so far.

There is evidently strong commitment on both sides to complete the agreements, and trust between the public and private sectors appears to be relatively high. Representatives from the private sector have emphasized their dedication to climate action and their willingness to contribute to Norway's climate targets. According to a private sector informant, they recognize the importance of early adoption of ambitious climate measures for gaining a competitive advantage, particularly considering the European developments driving this transition.

On the negative side, however, feedback from the private sector indicates some dissatisfaction with the government's perceived slow and hesitant approach, particularly in providing adequate financial and regulatory support for the significant steps required to achieve Norway's climate targets. Some industry sectors have articulated specific demands for government facilitation of major advancement within industry sectors, for instance advocating for the establishment of a fund financed by revenues from the EU ETS. Different views on the financing of necessary measures have reportedly led to setbacks and delays in agreement negotiations.

Furthermore, private sector representatives have voiced criticism about a lack of clarity in the general agreement as to how to achieve goals and implement necessary measures. One informant suggested that the general agreement should have been more specific as to expectations, the structure of sector-specific agreements, and the apportioning of responsibilities between the government and the private sector.

6. Sweden

Key climate targets

Carbon neutrality by 2045

70% reduction in domestic transport emissions by 2030, compared to 2010

63% reduction in Effort Sharing emissions by 2030, compared to 1990

75% reduction in Effort Sharing emissions by 2040, compared to 1990

6.1 National climate targets

In the lead-up to COP21 in Paris in 2015, Sweden announced its vision to become the world's first fossil free welfare nation (Fossil Free Sweden, 2024). In 2017, Sweden adopted a new climate policy framework, anchored by the long-term objective of achieving carbon neutrality by 2045 and aiming for negative emissions thereafter (Ministry of Climate and Enterprise, 2021). This goal is codified in the Swedish Climate Act, which was enacted in the same year.

Sweden's pursuit of carbon neutrality by 2045 encompasses both domestic and international measures. The target is to reduce greenhouse gas emissions in Sweden by at least 85% by 2045, compared to 1990, with supplementary measures making up the remaining 15%. These supplementary measures may involve increased carbon sequestration in forests and land, the implementation of biomass-based carbon capture and storage, and emission reductions initiatives beyond Sweden's borders. Supplementary measures may also contribute to negative net emissions after 2045 (Swedish Environmental Protection Agency, 2024).

The carbon neutrality objective is underpinned by three milestone targets: A minimum 70% reduction in emissions from domestic transport (excluding domestic air services) by 2030, compared to 2010 levels; a 63% reduction in Effort Sharing emissions by 2030, compared to 1990 (of which 8% may be achieved with supplementary measures); and a 75% reduction in Effort Sharing emissions by 2040, compared to 1990 (of which 2% may be achieved with supplementary measures) (Swedish Environmental Protection Agency, 2024).

Sweden is committed under the EU's Effort Sharing Regulation (ESR) to reduce emissions from sectors covered by the regulation by 50%, relative to 2005 levels, by 2030. This includes emissions from road transport, heating of buildings, agriculture and waste management (EU Commission, 2024).

Under the Climate Act, the Swedish government is required to draft and present to the Swedish Parliament (*Riksdag*) a new climate policy action plan every fourth year, at the beginning of the parliamentary term. In December 2023, the government submitted a comprehensive climate action plan spanning all sectors of the Swedish economy. This plan introduced approximately 70 proposals for measures aiming to achieve Sweden's carbon neutrality target by 2045. Also outlined were the government's plans for climate-related efforts internationally and within the EU (Ministry of Climate and Enterprise, 2023).

6.2 Fossil Free Sweden (Fossilfritt Sverige)

As part of its vision to become the world's first fossil free welfare nation, the Swedish government launched the Fossil Free Sweden initiative in the fall of 2015, ahead of COP21 in Paris. Its primary objective was to bring together all actors that must cooperate to realize the fossil free objective (Fossil Free Sweden, 2024).

In 2017, Fossil Free Sweden initiated a program aiming to encourage all major industries and business sectors in Sweden to develop their own roadmaps towards becoming fossil free or climate neutral and thereby increase their competitiveness (Fossil Free Sweden, 2020).

6.2.1 Main objectives

The overarching goal of the Fossil Free Sweden initiative is to accelerate the climate transition while also building a strong industrial sector while creating jobs and opportunities by becoming fossil free. To this end, the initiative establishes a platform for a dialogue on climate policy between the government and various actors of the Swedish economy, including companies, municipalities, regions, and organizations. The purpose is to foster constructive cooperation between the government and these actors in order to achieve Sweden's climate targets.

One of Fossil Free Sweden's key objectives is to facilitate the creation of sector-based roadmaps. These roadmaps are intended to identify opportunities, address obstacles, and propose solutions through industry-led commitments and measures. The core idea is that the roadmaps outline the path to fossil free or climate neutral industries, highlighting the benefits of the energy transition for both private sectors and the nation as a whole.

Sweden's goal of becoming fossil free is closely linked with its broader objectives, including enhancing the competitiveness of its industries and promoting overall

societal well-being. The roadmaps are thus not only intended to facilitate Sweden's transition to a fossil free economy, but also to strengthen key industrial sectors, create employment opportunities, and stimulate economic growth (Fossil Free Sweden, 2024).

6.2.2 Sectoral coverage

The initiative spans a wide array of sectors and industries. Under the umbrella of Fossil Free Sweden, 22 business sectors have developed their individual roadmaps for achieving fossil free competitiveness. Collectively, these roadmaps cover over 70% of GHG emissions originating in Sweden (Fossil Free Sweden, 2024). While the coverage is extensive, one notable exception is the chemical industry, which is currently in the process of preparing its first roadmap, scheduled for presentation in 2024 (Interviews, Sweden).

Aggregates industry

Agricultural sector

Automotive industry – heavy transport

Automotive industry – passenger cars

Aviation industry

Cement industry

Concrete industry

Construction and civil engineering sector

Digitalization consultancy industry

Electricity sector

Fast-moving consumer goods industry

Food retail sector

Forest sector

Gas sector

Heating sector

Heavy road haulage industry

Maritime industry

Mining and minerals industry

Petroleum and biofuel industry

Recycling sector

Ski resort sector

Steel industry

6.2.3 Role of participants

The Fossil Free Sweden initiative is run by an office headed by a national coordinator, who is appointed by the government. In 2016, the mandate of the Fossil Free Sweden initiative was set out in a document providing its Terms of Reference (*kommittédirektiv*) (Interviews, Sweden; Government Offices of Sweden, 2016).

As described in the 2016 Terms of Reference, the national coordinator's main responsibilities include arranging meetings and discussions, initiating and promoting cooperation, and showcasing the efforts of various non-state actors towards achieving a fossil free Sweden. The coordinator's task is also to encourage more actors, both nationally and internationally, to take measures to reduce emissions.

The national coordinator acts as a bridge between non-state actors and the government. The coordinator also facilitates dialogue and cooperation among non-state actors and initiates communication with actors not currently involved.

The office, which operates independently of the government, works closely with various non-state actors in identifying obstacles and opportunities to accelerate climate action. Acting as a policy advisor, its task is to develop political proposals and advocate the removal of obstacles hindering progress towards Sweden's climate objectives (Fossil Free Sweden, 2020).

Although the office outlines a framework for the industry sector's roadmaps, the sectors themselves are responsible for the development of the roadmaps. They work independently to develop their vision, targets, and proposals to the government, but their partnership with Fossil Free Sweden allows them to communicate their perspectives more efficiently to policymakers. The process has been characterized as 'bottom-up' and 'sector-led' (Fossil Free Sweden, 2020).

The sectors are typically led by an industry organization, or in some instances a company or group of companies. These leaders are responsible for engaging relevant actors and securing support for the roadmaps.

The Fossil Free Sweden office has encouraged the industry to adopt transparent and inclusive processes and to seek inputs and contributions through seminars and meetings. This has been considered essential in order to foster a broad acceptance of the roadmap outcomes and a sense of ownership among all stakeholders, further increasing their commitment to implementation of suggested measures (Fossil Free Sweden, 2020).

The role of the various actors with the Fossil Free Sweden initiative has evolved over time. The initial 2016 Terms of Reference have been updated three times (2018, 2020 and 2022), with some adjustments and changes made each time (Government Offices of Sweden, 2024). Currently, an ongoing governmental analysis is being conducted in order to assess whether to continue with the initiative, and if so whether to make further changes (Interviews, Sweden).

6.2.4 Outcomes

Development of the 22 roadmaps commenced in 2017 and they were presented to the Swedish government in three separate phases in the period 2018-2020. The roadmaps can be accessed in Swedish (with English summaries) on Fossil Free Sweden's [website](#).

Each roadmap outlines how the respective sector plans to become fossil free or climate neutral by 2045, focusing on strategies to enhance its competitiveness through this transition. The roadmaps generally have two key components: the sector's planned internal measures and proposals for necessary policy interventions. Methodologies for defining targets and achievements vary across roadmaps. Many roadmaps identify technological developments needed for the achievement of climate targets, highlight potential obstacles, and propose policy initiatives to overcome these challenges. Collectively, the roadmaps comprise over 350 proposals (Fossil Free Sweden, 2021).

To assist policymakers in prioritizing among the large number of policy proposals, the Fossil Free Sweden office has since 2019 issued three lists, containing 54 proposals in total. These lists have been presented to the government and are viewed as a foundation for the ongoing collaboration between Fossil Free Sweden and the participating industries (Fossil Free Sweden, 2024). At the time of writing this report, some sectors are in the process of updating their roadmaps (Interviews, Sweden),

In 2021, a follow-up report about the implementation was presented to the government by the Fossil Free Sweden office, focusing on industry measures and the progress of the prioritized policy proposals (Fossil Free Sweden, 2021).

6.3 Experience

Informants generally expressed positive views on the effectiveness of the Fossil Free Sweden initiative as a public-private climate collaboration effort. Some, however, raised a concern about declining political support and uncertainties regarding future funding as the initiative has relied on annual renewals of funding, with potential expiration looming by the end of 2024.

One particularly successful aspect highlighted by informants is the unique role of the Fossil Free Sweden office. By establishing its mandate through its terms of reference, the office is positioned both within and outside the government. Thus, it serves as an independent intermediary between the government and the private sectors, providing a platform for private sectors to voice their views more freely than if communicating directly with the government or with governmental bodies. The office's comprehensive overview of various business sectors and ongoing processes, along with its understanding of government priorities, was especially noted as crucial for the effectiveness of the collaboration.

The new relationships and dialogues forged between sectors and policymakers appear to be one of the most significant aspects of the initiative (see also: Fossil Free Sweden, 2020). According to informants, this has not only facilitated communication between the government and the private sectors but has also led to enhanced internal dialogue within the private sectors, which has in turn increased awareness of potential solutions and opportunities for climate action.

The Fossil Free Sweden office's considerable freedom to shape the work and adapt to changes in the economic, political, and technological landscape was noted as helpful. It was mentioned that its proactive approach has facilitated the formulation of realistic industry actions and policy proposals, including a clear list of priorities, thereby enabling more efficient and transparent follow-up on private sector proposals.

While trust between the public and private sectors in Sweden appears to be relatively high, informants' opinions on the transparency of the Fossil Free Sweden initiative vary. Some informants expressed satisfaction, while others believe that improvement is needed. Among these, some perceive increasing challenges in effective communication with the government, leading to concerns about levels of trust.

Most informants emphasize the private sector's commitment to climate action and the importance of public-private collaboration in achieving Sweden's climate goals, and many believe that the private sector should have a greater role in public policymaking. Here, it should be noted that the Fossil Free Sweden office has reported that the private sectors have shown a clear interest in being part of the narrative of Sweden's journey towards climate neutrality by 2045, and that they are

highly motivated by the competitive advantage they expect to gain from this (Fossil Free Sweden, 2020).

The creation of official sectoral targets through roadmaps seems to be regarded as a significant success, demonstrating the private sector's commitment to the government's target of becoming fossil free. According to the Fossil Free Sweden office, over time the initiative has garnered support from over 500 public and private actors who have endorsed the government's vision (Fossil Free Sweden, 2024). By initiating and maintaining this project the government has, according to informants, furthermore fostered an atmosphere of predictability and stability. Concerns persist, however, about the climate ambition of the current government and uncertainties exist regarding future climate and energy plans. Some noted that the government has taken too long to respond to private sector proposals and remove obstacles, such as lengthy permit processes for new energy production.

Views differ on the initiative's actual contribution to reducing net emissions in Sweden, some informants perceiving only a slight contribution while others see moderate or significant impacts.

7. Comparison and synthesis

The preceding country-specific chapters show that each Nordic country has initiated various efforts to actively engage the private sector in achieving national climate targets. However, the countries have taken different approaches, influenced by variations in climate targets, administrative structures, and norms and traditions regarding public-private collaborations. Consequently, each initiative is tailored to its unique circumstances and approaches. Nonetheless, several similarities are evident among the initiatives studied, particularly concerning their overarching objectives, the division of responsibilities between the public and private sectors, and the intended use of outcomes.

While this study is limited to five selected government-led initiatives, it shows a trend of rapidly increasing public-private climate collaboration within the Nordic region. Among the initiatives examined, the oldest is Fossil Free Sweden, which dates back to 2015 during Sweden's preparation for COP21 in Paris, with its roadmap program starting in 2017. Both the Danish Climate Partnerships and the Finnish Low-Carbon Roadmaps initiatives were launched in 2019. Formal public-private climate collaboration in Iceland and Norway began later, in 2022 and 2023 (respectively), though built upon prior private initiatives.

This chapter aims to identify key similarities, shared elements, and differences in the approaches taken in the selected public-private collaboration initiatives. The comparison will center on the five following themes:

- Objectives
- Sectoral coverage and participants
- Access to information
- Structure and organization
- Use of outcomes

Within the discussion of structure and organization, examples will be provided of both best practices and challenges.

7.1 Objectives

The overarching objectives and the primary motives for public-private collaboration in the Nordic countries appear to be largely similar. The initiatives studied in the present project are typically intended to accelerate the green transition and achieve national climate targets by establishing effective communication and information exchange platforms and by creating shared commitment and mutual trust between the government and private sectors.

Publicly accessible information and feedback from informants suggest that these initiatives are opportunity-driven and business-oriented. They all place emphasis on aligning private sector interests with national climate goals in such a way that moving toward the goals enhances the competitiveness of businesses, thereby also bolstering the country's position globally.

In addition to their core focus on engaging economic actors in climate efforts, most of the initiatives also prioritize broader economic, societal, and environmental objectives. They seek to implement the green transition in a manner that safeguards and strengthens the competitiveness of private sectors, promotes exports, supports job creation and prosperity, and addresses issues of inequality so as to enable a just transition.

The present study highlights a widespread willingness among private sectors in the Nordic countries to contribute to national climate targets. Informants from all countries highlighted the mutual interest, shared by governments and the private sectors, in joining forces on ambitious climate action. Many also mentioned the significance of EU climate-related requirements as a major driver in this context, with businesses recognizing the benefits of the competitive edge gained by participating in and supporting ambitious national climate efforts.

7.2 Sectoral coverage and participants

The study shows considerable differences in the sectoral coverage of collaboration initiatives. These variations may primarily be attributed to differences in national circumstances and emissions profiles. In part, they may also be explained by the fact that some initiatives have been operating longer than others, and participation is thus more evolved.

Additionally, there appear to be several differences as to who represents participating actors. For example, the representation of the government varies between countries; while relevant ministries are typically involved, participating ministries span a wide array of topics, including climate, environment, energy, business, trade, industry, transport, agriculture and forestry, and economic affairs.

Sweden's Fossil Free Sweden office stands out as regards public sector representation. It is a public body created specifically for this cooperation and has a unique situation between the government and the private sector. Denmark's Green Business Forum also creates a special arrangement for public-private collaboration, with its structured dialogue platform which focuses on broader participation and expert involvement.

Across all the initiatives, the private sector involvement is typically led by business leaders and organizations. Labor associations seem to be more directly involved in the process in Norway and Denmark than in the other Nordic countries. According to informants in both Finland and Iceland, concerns have been raised over insufficient participation of labor associations, given the need to address social aspects.

The participation of other actors varies, including that of environmental organizations, independent experts, and the general public.

7.3 Access to information

Information about the selected initiatives is generally accessible through online sources. This enables the public and stakeholders to understand the main aspects and elements of these collaboration projects. The extent of available information varies between countries, however.

For example, a document outlining the roles of actors, procedures, and the mandate of relevant actors is publicly accessible in Sweden (*kommittédirektiv*), Denmark (*kommissorium*), and Norway (general agreement). In Finland, the government has published instructions for the private sectors participating the Low-Carbon Roadmaps. In contrast, in Iceland a memorandum describing the role of participants is not publicly available.

Apart from Iceland and Norway, information in English about the initiatives is readily available. Denmark and Sweden particularly stand out for their focus on information sharing regarding their approaches. Finland has also made significant efforts in disseminating information about the Low-Carbon Roadmaps in English.

7.4 Structure and organization

While all the initiatives are driven by the government, the formulation of the outputs (roadmaps and recommendations) can in all instances be characterized as *sector-led*. Private sectors are given substantial autonomy to develop and implement their roadmaps based on their own situations, knowledge, and priorities. Participating private sectors are thus generally responsible for organizing their work on roadmaps and recommendations.

The role of the public sector, on the other hand, is to oversee, support, facilitate, and to some extent to coordinate the work of the private sectors. The extent of public sector involvement varies between countries. The private sectors generally bear the cost of their work, although in some cases the public sector shares the costs of workshops and seminars.

The country-specific chapters demonstrate that in practice, the initiatives studied vary significantly in structure and organization. Some have a well-developed structure, while other initiatives are operated more loosely. Denmark and Sweden use highly structured approaches, whereas Finland’s initiative is less structured but maintains relatively clear roles and responsibilities for each actor. On the other hand, Iceland and Norway appear to have the least structured initiatives, based on a ‘learning by doing’ approach.

Based on feedback from informants across these initiatives concerning the structure and organization of the collaboration, the following examples of best practices and main challenges emerged. Given the limitations of the study, these should not be considered comprehensive; rather, they are illustrative examples providing insights into the experience gained in the initiatives studied.

Examples of best practices	
Formal document defining the role of relevant participants	<ul style="list-style-type: none"> • Terms of Reference (<i>Kommissorium</i>) in Denmark, describing the purpose, mandate, and composition of the Climate Partnerships and the Green Business Forum • Terms of Reference (<i>Kommittédirektiv</i>) in Sweden, establishing the mandate of the Fossil Free Sweden office
Database with predefined set of information to be used by all sectors	<ul style="list-style-type: none"> • Compilation of knowledge base (data, metrics, baselines, potential measures, impact, costs etc.) by parties to the general agreement on climate partnerships in Norway, in preparation for sectoral agreements
Instructions provided by the government on methodologies, use of data, and metrics	<ul style="list-style-type: none"> • Instructions and FAQs on roadmap development, issued by the Ministry of Economic Affairs and Employment in Finland

A public body as intermediary between the government and the private sector	<ul style="list-style-type: none"> • Establishment of the Fossil Free Sweden office in Sweden, serving as a policy advisor to the government
Direct involvement of business sector CEOs	<ul style="list-style-type: none"> • Chairperson of each Climate Partnership in Denmark typically the CEO of a leading company in the relevant sector
Special forums that meet regularly to ensure broad stakeholder/expert input	<ul style="list-style-type: none"> • The Climate Roundtables in Finland • The Green Business Forum in Denmark
Special outreach projects; publication of information material on the initiative	<ul style="list-style-type: none"> • The Climate Partnership Playbook, published by State of Green in Denmark • Specific websites created to share information on the initiatives in Denmark, Iceland and Sweden

Examples of challenges

- Unclear definition of roles and responsibilities of participants, lack of a sense of ownership
- Insufficient funding and resources
- Lack of predictability and long-term vision on the role of the initiative
- Inadequate coordination among public actors
- Lack of involvement of relevant actors (e.g. finance ministries, municipalities)
- Slow government reactions to private sector proposals, lack of formal follow-up procedures
- Insufficient political commitment
- Lack of transparency regarding future climate objectives and plans
- Data gaps, lack of harmonized methodologies to assess emissions, baselines, costs, etc.
- Differing circumstances among sectors, need for more customized sectoral approaches

7.5 Use of outcomes

The study has highlighted the practical advantages of public-private collaboration, primarily centered around the sharing of information and knowledge. The idea underlying most of these efforts appears to be that the public sector provides long-term goals, stability, and predictability, while the private sector offers innovation and investments crucial for achieving national climate targets. Across all five countries, the outcomes of these initiatives are explicitly intended to facilitate needed private-sector investments and actions, and to assist the government in identifying and addressing barriers to effective measures for meeting national targets.

Numerous examples from the Nordic countries already demonstrate how information and proposals from the private sector have contributed to improvements in the regulatory and institutional environment. However, establishing a direct link between private sector proposals generated by the selected initiatives and actual policy measures often proves challenging.

Comparison of selected public-private climate collaboration initiatives

Element	Denmark <i>Climate Partnerships</i>	Finland <i>Low-Carbon Roadmaps</i>	Iceland <i>Business Climate Roadmaps</i>	Norway <i>Business Climate Partnerships</i>	Sweden <i>Fossil Free Sweden</i>
Period	Initiated in 2019. Ongoing.	Initiated in 2019. Ongoing.	Initiated in 2022. Ongoing.	Initiated in 2023. Ongoing.	Initiated in 2015. Ongoing.
Sectors covered	14 (energy and utilities; waste, water and circular economy; energy intensive industries; manufacturing; life sciences and biotechnology; food and agriculture; inland transport; aviation; maritime transport; construction; commerce; service, IT and consulting; finance; defense)	13 (energy; chemical; forest; technology; food; logistics and transport; agriculture; hospitality; commerce; textile; sawmill; construction and built environment; property owners and development)	11 (aluminum industry; aviation; domestic passenger cruises; tourism industry; aquaculture; financial industry; silicon industry; construction; energy and utilities; fisheries; road transport)	3 (process industry; maritime industry; construction and property industry)	22 (aggregates industry; agricultural sector; automotive industry – heavy transport; automotive industry – passenger cars; aviation industry; cement industry; concrete industry; construction and civil engineering sector; digitalization consultancy industry; electricity sector; fast-moving consumer goods industry; food retail sector; forest sector; gas sector; heating sector; heavy road haulage industry; maritime industry; mining and minerals industry; petroleum and biofuel industry; recycling sector; ski resort sector; steel industry)
Form of cooperation	Establishment of formal partnerships with participation of private and public representatives, led by private sector representatives.	Sectors develop own roadmaps under oversight and 'light coordination' by the Ministry of Economic Affairs and Employment.	Sectors develop own roadmaps, with support of the Ministry of the Environment, Energy and Climate.	Establishment of mutually binding, industry-specific climate partnership agreements between the government and selected business sectors.	Establishment of an office headed by a national coordinator, to facilitate dialogue and cooperation between non-state actors and the government, including work within industry sectors on developing own roadmaps.
Key outputs	Report from each partnership published in 2020, collectively containing over 400 proposals and recommendations. Sector-specific roadmaps issued in 2021.	Sector-specific roadmaps issued in 2020.	Sector-specific roadmaps issued in 2023, collectively containing 332 proposals.	A general agreement between government and key industry actors. More specific sectoral climate partnerships agreement (detailing sector targets and measures) pending.	Sector-specific roadmaps issued in the period 2018-2020. Three lists of priorities issued by the Fossil Free Sweden office since 2019, containing 54 proposals in total.

8. Concluding remarks

The purpose of this report was to provide an outline and comparison of the various approaches employed by governments in the Nordic region to engage the private sector in achieving national climate targets. The analysis focused on five selected government-led initiatives, aiming to understand their objectives, sectoral coverage, and governance, along with their actual and expected outcomes.

The findings underscore the critical role of effective public-private collaboration in driving the transition towards carbon neutrality in the Nordic countries. Review of the initiatives, complemented by information gathered through interviews and a survey, demonstrated a broad commitment to this transition among both the governments and private industries. This work furthermore revealed various creative strategies that can be applied to foster meaningful dialogue and cooperation between the public and private sectors.

The best practices and challenges presented in the report offer valuable insights into the governance and impact of these initiatives. Key stakeholders and participants offered perspectives that can increase our understanding of what works and what can be improved. This knowledge is essential for refining ongoing efforts within each country and for informing the design of future policies that can better harness the potential of the private sector in climate action. It is also hoped that this report will stimulate increased cooperation and sharing of knowledge between the Nordic countries.

Moreover, the best practices identified in this report have the potential to influence similar efforts in other regions. As the urgency of the climate crisis continues to escalate, the lessons learned from the Nordic experience can serve as an inspiration – or even model – for effective collaboration and innovative policymaking worldwide.

9. References

Denmark

Danish Climate Act (Klimaloven, Lov nr. 965 26/06/2020) (with later amendments).

EU Commission (2024). Information from the website https://climate.ec.europa.eu/eu-action/effort-sharing-member-states-emission-targets/effort-sharing-2021-2030-targets-and-flexibilities_en (accessed 10 May 2024).

Ministry of Climate, Energy and Utilities (Klima-, Energi og Forsyningsministeriet) (2023). *Klimaprogram 2023*, accessible at: <https://kefm.dk/Media/638315764817167867/Klimaprogram%202023.pdf> (retrieved 10 May 2024).

Ministry of Climate, Energy and Utilities (Klima-, Energi og Forsyningsministeriet) (2024). Information from the website <https://www.kefm.dk/klima/regeringens-klimapartnerskaber-og-groent-erhvervsforum#:~:text=I%20til%C3%A6g%20til%20de%20oprindelige,af%20Klimapartnerskaber%20og%20Gr%C3%B8nt%20Erhvervsforum> (accessed 10 May 2024).

Ministry of Industry, Business and Financial Affairs (Erhvervsministeriet) (2019a). *Kommissorium for Grønt Erhvervsforum*, accessible at: [kommissorium-for-groent-erhvervsforum_121119.pdf \(em.dk\)](https://www.erm.dk/kommissorium-for-groent-erhvervsforum_121119.pdf) (retrieved 10 May 2024).

Ministry of Industry, Business and Financial Affairs (Erhvervsministeriet) (2019b). *Kommissorium for klimapartnerskaber*, accessible at: [klimapartnerskaber-kommissorium.pdf \(em.dk\)](https://www.erm.dk/klimapartnerskaber-kommissorium.pdf) (retrieved 10 May 2024).

Ministry of Industry, Business and Financial Affairs (Erhvervsministeriet) (2023). *Kommissorium for klimapartnerskaber og Grønt Erhvervsforum*, accessible at: [kommissorium-for-klimapartnerskaber-og-groent-erhvervsforum_2023docx.pdf \(em.dk\)](https://www.erm.dk/kommissorium-for-klimapartnerskaber-og-groent-erhvervsforum_2023docx.pdf) (retrieved 10 May 2024).

Nordic Council of Ministers (2023). *Nordic Stocktake: Pathways to Climate Neutrality*, TemaNord 2023:545, accessible at <https://www.norden.org/en/publication/nordic-stocktake-pathways-climate-neutrality> (retrieved 10 May 2024).

Prime Minister's Office (Statsministeriet) (2019). *Statsministeren præsenterer regeringens klimapartnerskaber*, 6 November 2019, <https://www.regeringen.dk/nyheder/2019/statsministeren-praesenterer-regeringens-klimapartnerskaber/> (accessed 10 May 2024).

Prime Minister's Office (Statsministeriet) (2022). *Regeringsgrundlag 2022: Ansvar for Danmark*, accessible at: <https://www.stm.dk/statsministeriet/publikationer/regeringsgrundlag-2022/> (retrieved 10 May 2024).

State of Green (2022). *Climate Partnership Playbook: How to engage the private sector in climate action plans*, accessible at [Climate-Partnership-Playbook.pdf \(stateofgreen.com\)https://stateofgreen.com/en/wp-content/uploads/2022/11/Climate-Partnership-Playbook.pdf](https://stateofgreen.com/en/wp-content/uploads/2022/11/Climate-Partnership-Playbook.pdf) (retrieved 10 May 2024).

State of Green (2024). Information from the website <https://climatepartnerships2030.com/the-partnership-approach/> (accessed 10 May 2024).

The Danish Council on Climate Change (Klimarådet) (2020). *Regeringens klimapartnerskaber: Vurderingsnotat om partnerskabernes bidrag og forslag til indfrielse af 70-procentsmålet*, accessible at: <https://klimaraadet.dk/da/analyser/regeringens-klimapartnerskaber> (retrieved 10 May 2024).

Finland

Finnish Climate Act (432/2022).

EU Commission (2024). Information from the website https://climate.ec.europa.eu/eu-action/effort-sharing-member-states-emission-targets/effort-sharing-2021-2030-targets-and-flexibilities_en (accessed 10 May 2024).

Finnish Government (2019). *Inclusive and competent Finland – a socially, economically and ecologically sustainable society*, available at https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161664/Inclusive%20and%20competent%20Finland_2019_WEB.pdf?sequence=7&isAllowed=y (retrieved 10 May 2024).

Finnish Government (2023). *Climate Policy Roundtable's message to the next Government: Finland must stick to its climate neutrality target*, <https://valtioneuvosto.fi/en/-/1410903/climate-policy-roundtable-s-message-to-the-next-government-finland-must-stick-to-its-climate-neutrality-target> (accessed 10 May 2024).

Ministry of Economic Affairs and Employment (Työ- ja elinkeinoministeriö) (2021). *Summary of sector-specific low-carbon roadmaps*, Publications of the Ministry of Economic Affairs and Employment 2021:9, available at https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162851/TEM_2021_9.pdf?sequence=1&isAllowed=y (retrieved 10 May 2024).

Ministry of Economic Affairs and Employment (Työ- ja elinkeinoministeriö) (2024). Information from the website <https://tem.fi/en/low-carbon-roadmaps-2035> (accessed 10 May 2024).

Ministry of Economic Affairs and Employment (Työ- ja elinkeinoministeriö) (2024a). Information from the website <https://tem.fi/en/updating-the-low-carbon-roadmaps> (accessed 10 May 2024).

Ministry of the Environment (Ympäristöministeriö) (2022). *Medium-term Climate Change Policy Plan Towards a carbon-neutral society in 2035*, Publications of the Ministry of the Environment 2022:20, available at https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164274/YM_2022_20.pdf?sequence=1&isAllowed=y (retrieved 10 May 2024).

Ministry of the Environment (Ympäristöministeriö) (2024). Information from the website <https://ym.fi/en/finland-s-national-climate-change-policy> (accessed 10 May 2024).

Nordic Council of Ministers (2023). *Nordic Stocktake: Pathways to Climate Neutrality*, TemaNord 2023:545, accessible at <https://www.norden.org/en/publication/nordic-stocktake-pathways-climate-neutrality> (retrieved 10 May 2024).

Iceland

Icelandic Climate Act (Lög nr. 70/2012 um loftslagsmál) (with later amendments).

Confederation of Icelandic Enterprise (Samtök atvinnulífsins) (2024). Information from the website <https://www.loftslagsvegvisar.is/> (accessed 10 May 2024).

Government of Iceland (Stjórnarráð Íslands) (2017), Sáttmáli Framsóknarflokks, Sjálfstæðisflokks og Vinstrihreyfingarinnar – græns framboðs um ríkisstjórnarsamstarf og eflingu Alþingis, available at <https://www.stjornarradid.is/rikisstjorn/sogulegt-efni/um-rikisstjorn/2017/11/30/Sattmali-Framsoknarflokks-Sjalfstaedisflokks-og-Vinstrihreyfingarinnar-graens-frambods-um-rikisstjornarsamstarf-og-eflingu-Althingis/> (accessed 10 May 2024).

Government of Iceland (Stjórnarráð Íslands) (2021), Sáttmáli um ríkisstjórnarsamstarf Framsóknarflokks, Sjálfstæðisflokks og Vinstrihreyfingarinnar – græns framboðs, available at <https://www.stjornarradid.is/rikisstjorn/stjornarsattmali/> (accessed 10 May 2024).

Green by Iceland (Grænvangur) (2021). Loftslagsvegvisir atvinnulífsins, available at https://www.si.is/media/_eplica-uppsetning/ISL-BKL-A4-loftslagsaetlun_atvinnulifsins-Spreads-0621-FINAL.pdf (retrieved 10 May 2024).

Ministry for the Environment and Natural Resources (Umhverfis- og auðlindaráðuneyti) (2021), Aðgerðaáætlun í loftslagsmálum – Aðgerðir íslenskra stjórnvalda til að stuðla að samdrætti í losun gróðurhúsalofttegunda til 2030, available at <https://www.stjornarradid.is/library/02-Rit--skyrslur-og-skrar/Adgerdaaetlun%20i%20loftslagsmalum%20onnur%20utgafa.pdf> (retrieved 10 May 2024).

Ministry of the Environment, Energy and Climate (Umhverfis-, orku- og loftslagsráðuneyti) (2024) Information on the website <https://www.stjornarradid.is/raduneyti/nefndir/nanar-um-nefnd/?itemid=84a01cd5-e500-11ed-9bb9-005056bc4727> (accessed 10 May 2024).

Ministry of the Environment, Energy and Climate (Umhverfis-, orku- og loftslagsráðuneyti) (2023), Samtal hafið við atvinnugreinar um leiðir til að draga úr losun, <https://www.stjornarradid.is/efst-a-baugi/frettir/stok-frett/2023/03/17/Samtal-hafid-vid-atvinnugreinar-um-leidir-til-ad-draga-ur-losun-/> (accessed 10 May 2024).

Nordic Council of Ministers (2023). *Nordic Stocktake: Pathways to Climate Neutrality*, TemaNord 2023:545, accessible at <https://www.norden.org/en/publication/nordic-stocktake-pathways-climate-neutrality> (retrieved 10 May 2024).

UNFCCC (2021), Update of the Nationally Determined Contribution of Iceland Communicated to the UNFCCC on February 18, 2021, available at https://unfccc.int/sites/default/files/NDC/2022-06/Iceland_updated_NDC_Submission_Feb_2021.pdf (retrieved 10 May 2024).

Norway

Norwegian Climate Act (Lov om klimamål (klimaloven) LOV-2017-06-16-60) (with later amendments).

Ministry of Climate and Environment (Klima- og miljødepartementet) (2021). *Klimaplan for 2021–2030*. Meld St. 13 (2020–2021) Melding til Stortinget, available at <https://www.regjeringen.no/no/dokumenter/meld.-st.-13-20202021/id2827405/?ch=1> (retrieved 10 May 2024).

Ministry of Climate and Environment (Klima- og miljødepartementet) (2023). *The 2050 Climate Change Committee - The transition to low emissions: Climate policy choices towards 2050*, Norwegian Official Report (NOU) 2023: 25, available at <https://files.nettsteder.regjeringen.no/wpuploads01/sites/479/2024/02/The-2050-ClimateChangeCommittee-ENDELIG.pdf> (retrieved 10 May 2024).

Ministry of Trade, Industry and Fisheries (Nærings- og fiskeridepartementet) (2022). *Roadmap – The Green Industrial Initiative*, available at https://www.regjeringen.no/contentassets/1c3d3319e6a946f2b57633c0c5fcc25b/roadmap_the-green-industrial-initiative_spreads_web.pdf (retrieved 10 May 2024).

Nordic Council of Ministers (2023). *The Road towards Carbon Neutrality in the different Nordic Countries*, TemaNord 2020:527, available at <https://pub.norden.org/temanord2023-545/4-climate-neutrality-targets-and-emissions-in-the-nordic-countries.html> (retrieved 10 May 2024).

Norwegian Government (Regjeringen), *Nå kommer klimapartnerskapene med næringslivet*, 23 January 2023, <https://www.regjeringen.no/no/aktuelt/na-kommer-klimapartnerskapene-med-naringslivet/id2960096/> (accessed 10 May 2024).

Norwegian Government, 2023a, *Intensjonsavtale om klimapartnerskap* (Omforent versjon 11.01.23), available at <https://www.regjeringen.no/contentassets/958ee332aa5243c986f08ace2514ebfd/230112-intensjonsavtale-endelig-versjon.pdf> (retrieved 10 May 2024).

Norwegian Parliament (Stortinget) (2016). *Samtykke til ratifikasjon av Parisavtalen av 12. desember 2015 under FNs rammekonvensjon om klimaendring av 9. mai 1992*, Prop. 115 S (2015-2016), Innst. 407 S (2015-2016), available at <https://www.stortinget.no/no/Saker-og-publikasjoner/Saker/Sak/?p=65501> (retrieved 10 May 2024).

UNFCCC (2020), *Norway's long-term low-emission strategy for 2050*, available at https://unfccc.int/sites/default/files/resource/LTS1_Norway_Oct2020.pdf (retrieved 10 May 2024).

UNFCCC (2022), *Update of Norway's nationally determined contribution*, available at https://unfccc.int/sites/default/files/NDC/2022-11/NDC%20Norway_second%20update.pdf (retrieved 10 May 2024).

Sweden

Swedish Climate Act (Klimatlag, 2017:720).

EU Commission (2024). Information from the website https://climate.ec.europa.eu/eu-action/effort-sharing-member-states-emission-targets/effort-sharing-2021-2030-targets-and-flexibilities_en (accessed 10 May 2024).

Fossil Free Sweden (Fossilfritt Sverige) (2020). *Roadmap for fossil free competitiveness: Summaries 2018–2020*, accessible at https://fossilfritt Sverige.se/wp-content/uploads/2020/12/Sammanfattning_Webb_ENG_2020.pdf (retrieved 10 May 2024).

Fossil Free Sweden (Fossilfritt Sverige) (2021). *Roadmaps for fossil free competitiveness – follow-up 2021*, accessible at https://fossilfritt Sverige.se/wp-content/uploads/2022/01/Roadmaps_follow_up_2021_ENG.pdf (retrieved 10 May 2024).

Fossil Free Sweden (Fossilfritt Sverige) (2024). Information from the website <https://fossilfritt Sverige.se/> (accessed 10 May 2024).

Government Offices of Sweden (Regeringskansliet) (2016). *Kommittédirektiv: Initiativet Fossilfritt Sverige*, Dir. 2016:66, accessible at <https://www.regeringen.se/contentassets/6958bb4359014725ac7caca09584ea6f/kommittedirektiv-initiativet-fossilfritt-sverige.pdf> (accessed 10 May 2024).

Government Offices of Sweden (Regeringskansliet) (2016). Information from the website <https://www.regeringen.se/rattsliga-dokument/kommittedirektiv/2016/07/dir.-201666> (accessed 10 May 2024).

Ministry of Climate and Enterprise (Klimat- och näringslivsdepartementet) (2021). *Sweden's climate policy framework*, 11 March 2021, accessible at <https://www.government.se/articles/2021/03/swedens-climate-policy-framework/> (retrieved 10 May 2024).

Ministry of Climate and Enterprise (Klimat- och näringslivsdepartementet) (2023). *Regeringens klimathandlingsplan – hela vägen till nettonoll*, Skr. 2023/24:59, accessible at <https://www.regeringen.se/rattsliga-dokument/skrivelse/2023/12/skr.-20232459> (retrieved 10 May 2024).

Swedish Environmental Protection Agency (Naturvårdsverket) (2024). Information from the website [Sweden's Climate Act and Climate Policy Framework \(naturvhttps://www.naturvardsverket.se/en/topics/climate-transition/sveriges-klimatarbete/swedens-climate-act-and-climate-policy-framework/ardsverket.se\)](https://www.naturvardsverket.se/en/topics/climate-transition/sveriges-klimatarbete/swedens-climate-act-and-climate-policy-framework/ardsverket.se) (accessed 10 May 2024).

Other references

European Climate Law (Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (with later amendments).

Council of the EU and the European Council (2024). Information from the website [European Green Deal - Consilium \(europa.eu\)](https://www.europa.eu/european-green-deal) (accessed 10 May 2024).

ERT (2021). *Sectoral Roadmaps to Net-Zero Emissions enhance the European Climate Law as a framework to invest in climate neutrality*, available at [2021-02-25-Statement-on-Sectoral-Approaches.pdf \(ert.eu\)](https://ert.eu/2021-02-25-Statement-on-Sectoral-Approaches.pdf) (retrieved 10 May 2024).

European Commission (2024). Information from the website [Climate Action - European Commission \(europa.eu\)](#) (accessed 10 May 2024).

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*, available at [AR6 Climate Change 2022: Mitigation of Climate Change – IPCC](#) (retrieved 10 May 2024).

Nordic Council of Ministers (2019). *The Helsingfors Declaration on Nordic Carbon Neutrality*, a declaration from the meeting between the Nordic Prime Ministers and the Ministers of Environment, 25 January 2019, [Declaration on Nordic Carbon Neutrality | Nordic cooperation \(norden.org\)](#) (accessed 10 May 2024).

Nordic Council of Ministers (2020). *The Road towards Carbon Neutrality in the different Nordic Countries*, TemaNord 2020:527, accessible at <https://www.norden.org/en/publication/road-towards-carbon-neutrality-different-nordic-countries> (retrieved 10 May 2024).

Nordic Stocktake: Pathways to Climate Neutrality, TemaNord 2023:545, accessible at <https://www.norden.org/en/publication/nordic-stocktake-pathways-climate-neutrality> (retrieved 10 May 2024).

The Coalition of Finance Ministers for Climate Action (2020). *Helsinki Principles*, available at [FM Coalition - Principles final.pdf \(financeministersforclimate.org\)](#) (retrieved 10 May 2024).

World Bank (2020). *World Bank Reference Guide to Climate Change Framework Legislation*, available at [World Bank Reference Guide to Climate Change Framework Legislation](#) (retrieved 10 May 2024).

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