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#### Nordic Stocktake and Visions

This policy brief highlights the main takeaways from the project "Nordic Stocktake and Visions – Pathways to climate neutrality". The project has resulted in two main reports:

- Nordic Stocktake Pathways to climate neutrality
- Nordic Visions of Climate Neutrality

The report "Nordic Stocktake – Pathways to climate neutrality" concludes that the Nordic region needs to increase the pace of the green transition if we are to lead by example. Since 1990, GHG emissions have been reduced by 26% across the Nordic region. This reduction is almost exclusively achieved through emission reductions in the energy sector. Reaching climate neutrality rests on the Nordic countries achieving fast and significant reductions in the other sectors (industrial processes, domestic transport as well as agriculture, and land-use, land-use-change, and forestry). There is great potential in a strengthened Nordic collaboration as many of the challenges and barriers faced by the Nordic countries are the same.

The report "Nordic Visions of Climate Neutrality" concludes that there is a need for visions in climate change policy across the Nordic countries. Visions are powerful tools in spurring action and creating support for the green transition. In the light of this, climate change policies, and arguments for specific climate change policy, need to be aligned with visions. The report also shows that the Nordic countries share the same visions. Importantly, visions of a climate neutral Nordic society are not just about emission reductions and technologies. Instead, visions are centered around issues such as health, time, and communities.

There are opportunities for cross-Nordic collaboration across all sectors:

- Knowledge-sharing on increasing acceptability and reducing potential negative impacts on nature and local populations for renewable energy installations
- Developing a Nordic roadmap for the sustainable development, production, and use of biofuels and synthetic fuels
- Intensify collaboration on the value chain of Carbon Capture and Storage across the Nordic countries
- Knowledge sharing on carbon pricing in agriculture risks and incentive structures
- Increased knowledge-sharing ("best practices") and collaboration on addressing consumption-based emissions in the Nordic countries
- Collaboration on a just and fair transition, incl. more research on making carbon taxes and pricing fair

## Climate neutrality targets in the **Nordic Region**

Across the Nordic countries, climate neutrality targets differ with respect to what the targets encompass and how they can be reached. Except for Sweden, the Nordic countries include the land-use, land-use change, and forestry sector (LULUCF) when aiming for net-zero emissions – with the caveat that the role of LULUCF in reaching climate neutrality in Iceland and Norway is yet to be determined. In Sweden, LULUCF can only be used as a supplementary measure.

Denmark has a climate neutrality target in 2050 and two interim targets of 50-54% in 2025 and 70% in 2030, compared with 1990. The targets are enshrined in the legally binding Danish Climate Act. The Danish government has proposed to move the climate neutrality target forward to 2045 and set a new net-negative target of 110% in  $2050^{[1]}$ . These proposals remain to be turned into law.

Finland has adopted a target of reaching carbon neutrality by 2035 and becoming carbon negative thereafter. The target was first set in the government programme in 2019<sup>[2]</sup> and later codified in law in the Climate Act<sup>[3]</sup>. Carbon neutrality by 2035 is complemented with targets for different years. The Climate Act sets targets for the combined emissions from emissions trading and effort sharing sectors to be reduced by at least 60% by 2030, 80% by 2040 and 90-95% by 2050, compared to 1990 levels.

Iceland aims to be carbon neutral by 2040. The target was codified in law in 2021<sup>[4]</sup> and submitted as the long-term low emissions strategy to the UNFCCC in 2021<sup>[5]</sup>. In addition to reaching carbon neutrality, Iceland aims to be independent of fossil fuels by 2050 as stated in the Sustainable Energy Future of 2020<sup>[6]</sup>. In its coalition agreement, the current government moved the carbon neutrality target forward by 10 years to 2040<sup>[7]</sup>.

Regeringsgrundlag 2022: Ansvar for Danmark (Regeringen, 2022).

https://www.stm.dk/statsministeriet/publikationer/regeringsgrundlag-2022/https://julkaisut.valtioneuvosto.fi/handle/10024/161664https://finlex.fi/fi/laki/gjantasa/2022/20220423

<sup>4.</sup> https://www.stjornarradid.is/efst-a-baugi/frettir/stok-frett/2021/06/15/Markmid-um-kolefnishlutleysi-logfest-a-

<sup>5.</sup> Government of Iceland, 2021, On the path to climate neutrality: Iceland's long term low emissions development strategy, Government of Iceland: Ministry of environment climate and energy.

<sup>6. &</sup>lt;a href="https://www.stjornarradid.is/library/01--Frettatengt---myndir-og-skrar/ANR/Orkustefna/201127%20Atvinnuvegaraduneytid%20Orkustefna%20A4%20EN%20V4.pdf">https://www.stjornarradid.is/library/01--Frettatengt---myndir-og-skrar/ANR/Orkustefna/201127%20Atvinnuvegaraduneytid%20Orkustefna%20A4%20EN%20V4.pdf</a>

<sup>7.</sup> https://www.stjornarradid.is/library/05-Rikisstjorn/Agreement2021.pdf

Table 1: Climate neutrality targets in the different Nordic countries

Country	Target	Coverage	Inclusion of international actions
Denmark	Climate neutrality by 2050	Target includes all GHG emissions and LULUCF	Target must be reached with domestic actions
Finland	Climate neutrality by 2035	Target includes all GHG emissions and LULUCF	Target must be reached with domestic actions
Iceland	Climate neutrality by 2040	Target includes all GHG emissions (accounting LULUCF <sup>(i)</sup> undecided)	At this point, the target must be reached with domestic actions
Norway	Climate neutrality by 2030 and low emission society from 2050 (90-95% emission cuts)	Target includes all GHG emissions (accounting LULUCF <sup>(ii)</sup> undecided)	The climate neutrality target is focused on contributions at the international level and can be reached with a combination of domestic and international actions. The low emission society target must be reached with domestic actions, while the 90-95% can account for cooperation within the EU ETS.
Sweden	Zero net greenhouse gas emissions by 2045 <sup>(iii)</sup>	National target does not include LULUCF (except as a possible supplementary measure)	Target must be reached with domestic actions (except the option to counterbalance residual emissions using ITMOs <sup>(iv)</sup> )

<sup>(</sup>i) It is stipulated that the exact inclusion of the LULUCF sector and its contribution to carbon neutrality must be elaborated further due to need to improve the data and unusually high share in total emissions.

<sup>(</sup>ii) The exact role of the LULUCF sector has yet to be determined

<sup>(</sup>iii) Swedish territorial greenhouse gas emissions must be at least 85 percent lower by 2045 at the latest in comparison with 1990. So-called supplementary measures may be used for the remaining 15 percent of emissions.

<sup>(</sup>iv) ITMO = Internationally Transferred Mitigation Outcomes.

In 2008, the Norwegian Parliament passed a climate neutrality target for 2050 and declared that it should be moved forward to 2030 provided major mitigation commitments by other industrialized countries. The Norwegian Climate Act that entered into force in 2017 and was updated in 2022, sets a long-run commitment for 2050. The goal is to become a low-emission society, defined as reducing emissions by 90-95% compared with 1990 levels.

The Swedish goal for zero net GHG emissions by 2045 means that Swedish territorial GHG emissions must be at least 85 percent lower by 2045 at the latest in comparison with 1990. So-called supplementary measures may be used for the remaining 15 percent of emissions. Sweden also has milestone targets for 2030 and 2040. The milestone target for 2030 says that emissions in the so-called non-trading sector shall be 63 percent lower than in 1990, of which 8 percentage points can be reached with the help of supplementary measures. The milestone target for 2040 says that emissions in the so-called non-trading sector shall be 75 percent lower than in 1990, of which 2 percentage points can be reached with the help of supplementary measures. Thus, emission reductions of at least 73 percent are required to reach the target.

## Trends in Nordic emissions from 1990 to 2021

GHG emissions in the Nordic countries have been reduced by 26% in 2021, compared with 1990-levels (Table 2). This reduction is almost exclusively achieved through large emissions reductions in the energy sector (Figure 1).

The **energy** sector accounts for 55% of total net GHG emissions in the Nordic region. From 1990 to 2021, the GHG emissions in this sector have been reduced by 40% across the Nordic countries, whereas emissions from **waste management** have been reduced by 59%.

Table 2: Territorial emissions (million tonnes  $CO_2e$ ) in the Nordic countries and percentage change 1990-2021, split by IPCC CRF sectors

	1990	2021	Development 1990- 2021
Energy	136	82	-40%
Domestic transport	54	51	-5%
Industrial processes and product use	30	25	-17%
Agriculture	34.5	30.5	-12%
LULUCF	-65	-45	+31%
Waste management	14	6	-59%
Total	203	150	-26%

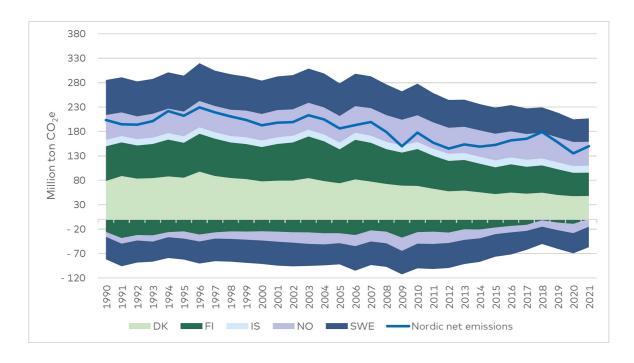


Figure 1: Development of territorial GHG emissions and removal across the Nordic countries (incl. LULUCF), 1990-2021

Source: UNFCCC <a href="https://unfccc.int/topics/mitigation/resources/registry-and-data/ghg-data-from-unfccc">https://unfccc.int/topics/mitigation/resources/registry-and-data/ghg-data-from-unfccc</a>).

For the domestic transport, industrial processes and agriculture, forestry, and land-use sectors, the development has been less positive, and the achievement of climate neutrality requires deep decarbonization within these sectors in the coming years. From 1990 to 2021, the GHG emissions from the Nordic domestic transport sector have been reduced by 5%. Emissions from industrial processes and product use have been reduced by 17%, and in agriculture, forestry, and land-use, the LULUCF-sink has shrunk by 31%, while emissions from agriculture have been reduced by 12%.

# Challenges on the road to climate neutrality

There are still many challenges and barriers to reaching climate neutrality in the Nordic countries. Challenges of which many are similar across the Nordic region and globally.

Across the Nordic countries, in the **energy** sector, a combination of skepticism towards energy production facilities due to negative impacts on local populations and nature as well as a slow review and permit processes risk halting the planned expansion of green power. At the same time, increasing the share of renewables in the energy mix creates intermittency issues regarding a sufficient expansion of supplementary power production that can be regulated.

For **domestic transport**, the main challenges are in the road transport sub-sector. Firstly, the future role of biofuels as a mitigation instrument is unclear. The production of biofuels is limited by land resources, competing with food production and ecosystems services, and limited availability of a waste feedstock for production of advanced biofuels. Secondly, and despite positive developments in electric vehicle uptake, internal combustion engine cars (ICE) still have a dominant presence on the roads. Phasing out ICE cars and trucks is a major challenge.

Regarding **industrial processes**, the main cross-Nordic challenges are incentivizing emission reductions in an internationally competitive sector – while avoiding carbon leakage - and scaling up and providing incentives for carbon removal technologies. The attainment of Nordic countries' individual and joint ambitions to reach net-zero GHG emissions may require very significant CCS deployment within a couple of decades, but that will require significant efforts and cross-Nordic collaboration on capture, transport, and geological storage of CO<sub>2</sub>.

In **waste management**, reducing emissions is not the major challenge. Instead, issues such as reducing the amount of waste generated, increasing recycling rates of sorted waste and in general, the broader transition to a circular economy is lacking across the Nordic region.

In **agriculture, forestry, and land-use**, strategies and initiatives are hard to implement due to political concerns such as carbon leakage, regressive effects on income distribution, food security and rural development. This is a major challenge in decarbonizing and transforming the agricultural sector in all the Nordic countries. Across the Nordic countries, strengthening carbon storage in sinks and reducing emissions from Forestry, and Land-Use also proves difficult. This is especially true regarding emissions from degraded wetlands, such as cultivated peatlands. The Nordic forest sink is strained by climate change and increased demand for biomass.

## Opportunities through Nordic and Global collaboration

Nordic and global collaboration of public and private actors is critical to fostering and accelerating the transition to a carbon neutral future. The "Nordic Stocktake – Pathways to climate neutrality" report highlights several areas where public and private action can be supported by knowledge sharing, analysis, and roadmaps:

#### **Energy:**

 Knowledge-sharing on increasing acceptability - and reducing potential negative impacts on nature and local populations - for renewable energy installations

Despite the extensive academic research done on addressing local opposition and promoting local support, very few initiatives have actually been shown to help in overcoming the challenges. Knowledge-sharing could be done bilaterally between the Nordic countries or in a dedicated network/forum hosted by the Nordic Council of Ministers. Relevant stakeholders would be energy agencies, municipalities and/or other local government level representatives and renewable energy developers.

 Cross-Nordic analysis/overview on future energy supply and demand, especially regarding balancing power capacity supplementing increasing renewable power

There is a need for further cross-Nordic analysis on the future of the Nordic energy supply and demand. Knowledge is particularly needed with respect to the **future options for flexible energy demand**. This is valuable information for policy makers in the Nordic countries and for the assumptions underlying national projections and analysis on ensuring a stable and secure energy supply towards climate neutrality.

• Knowledge-sharing on energy efficiency policies.

None of the five Nordic countries have a dedicated strategy for energy efficiency. The Nordic Council of Ministers could promote this agenda by commissioning studies on energy efficiency policies and their impacts across the Nordic countries.

#### **Domestic transport:**

 Developing a Nordic roadmap for the sustainable development, production, and use of biofuels and synthetic fuels

The Nordic Council of Ministers should commission a cross-Nordic study on how the development, production and use of different types of biofuels in the Nordic region could best contribute to a reduction in greenhouse gas emissions over the coming decades, avoiding overutilization of sparse bio-resources and negative externalities. The work should conclude with a Nordic roadmap.

 Developing a strategy for how to reallocate ICE cars to those users and uses that would have the lowest travel needs and a supporting assessment framework to identify the GHG trade-offs of different policies

The Nordic Council of Ministers could assist the countries with phasing out ICE car dominance by developing a strategy for how to potentially reallocate ICE cars to those users and uses that would have the lowest travel needs and vehicle kilometers, via suitable policy measures, considering socio-economic and mobility impacts. To support and advice this strategy, an assessment framework to address GHG trade-offs between policies that would shift ICE cars to lower use, exporting to external regions, or early scrappage should also be developed in parallel.

 Supporting urban action plans for zero emission passenger and freight transport

This would include analyzing and comparing multi-level governance frameworks and arrangements for decarbonized sustainable mobility in urban regions. Different levels of government have responsibilities for different parcels of the spatial domain, different sections of the transport system, and different levers in the policy toolbox. Aligning transport planning and policy measures across levels of government therefore has the potential to achieve more effective decarbonization.

 Knowledge-sharing on promoting public transport across the Nordic countries to further lower emissions from the use of ICE cars, and coordination of rail transport systems across the Nordics

#### **Industrial processes:**

Piloting public procurement for low-carbon industrial products.

To leverage the muscle of Nordic public procurement, a forum/network for Nordic public procurers should be established. Within this network, best practices to sustainable procurement of low-carbon industrial products can be shared and common practices developed.

Knowledge-sharing on best practices in incentivizing direct electrification of suitable industrial processes across the Nordic countries

Knowledge-sharing across the Nordic countries could take place both at the government level: sharing experiences and best practices in how to incentivize direct electrification of the industrial sector; and at the industry level: sharing knowledge on direct electrification practices in different subsectors and how to overcome barriers.

Intensify collaboration on the value chain of Carbon Capture and Storage across the Nordic countries

As recently recommended in the report on Regulatory framework for CCS in the Nordic countries (2023)<sup>[8]</sup>, the Nordic countries should intensify their cooperation and dialogue, providing for joint efforts to build knowledge, sharing of Nordic experience and lessons learned coordinated through a Nordic forum for collaboration on CCS.

Develop a joint Nordic CCS strategy to increase the potential to realize economies of scale in transportation and storage infrastructure for captured carbon dioxide

In the same vein as the previous recommendation, the Nordic Council of Ministers could lay the groundwork for a joint Nordic CCS strategy. This has also been recommended by Nordic Energy Research in their Nordic Clean Energy Scenarios (2021)<sup>[9]</sup>. A joint Nordic CCS strategy could inspire similar regional cooperation across the globe, illustrating how countries with different (geographical and technical) opportunities for BECCS can work together.

Nordic research on governance and business models for generating CO<sub>2</sub> removal (negative emissions)

We recommend that the Nordic Council of Ministers for example through Nordic

<sup>8.</sup> Nordic Council of Ministers (2023, June 22). Regulatory framework for CCS in the Nordic countries. Retrieved from,

Nordic Countries (2025, 3016 22). Regulatory Indinework for CCS in the Nordic Countries. Retrieved from, https://pub.norden.org/temanord2023-521/index.html
 Wråke, M., Karlsson, K., Kofoed-Wiuff, A., Bolkesjø, T.F., Lindroos, T.J., Hagberg, M., Simonsen, M.B., Unger, T., Tennbakk, B., Jåstad, E.O., Lehtilä, A., Putkonen, N. & Koljonen, T. (2021). Nordic Clean Energy Scenarios: Solutions for Carbon Neutrality. Nordic Energy Research. Retrieved from, https://norden.diva-portal.org/smash/get/diva2:1589875/FULLTEXTO2.pdf

Energy Research or Nordic Innovation provide funding for further cross-Nordic research into incentive schemes for producing negative emissions and the practicalities and consequences of implementing these in the Nordic region.

With regards to **Waste management**, emissions are low and declining and Nordic collaboration efforts should thus focus on governance of waste more generally – and not just on territorial emission from the waste management sector. There are options and need for more Nordic collaboration in improving conditions for the circular economy.

#### Agriculture, forestry, and land-use:

Knowledge sharing and research co-operation on addressing emissions from organic soils

This research could include investigations into the climate benefit of restoring wetlands, providing important knowledge for future political decisions and prioritization of efforts. It could also cover the cost-efficiency and social acceptability of various policies to address organic soil emissions. The research could further be expanded to alternatives to conventional farming on peatlands

- Knowledge sharing on carbon pricing in agriculture risks and incentive structures
- Nordic research on climate accounting on farms and improving knowledge on ways to reduce emissions on the farm from livestock, such as manure management – including biogas production, crop cultivation, and fodder additives to reduce methane releases from ruminants
- Studies on examples on how to improve the conditions for producers of plantbased proteins, both in terms of research, education, and regulatory frameworks

The recommendation above has also previously been recommended in Nordic Food Transition: Low Emissions Opportunities in Agriculture (2021).

• Target Nordic research and innovation funds towards plant-based production

#### **Further opportunities for Nordic collaboration**

In addition to the opportunities from Nordic collaboration that arise directly from the shared challenges in the different sectors, the project has identified **further opportunities** for Nordic collaboration:

• A study on Nordic scenarios for climate neutrality (at the Nordic level)

To identify all the areas of high value for further Nordic collaboration, a natural follow-up to this project is a Nordic-level study on scenarios for climate neutrality, aligned with previous work done by Nordic Energy Research (Nordic Clean Energy Scenarios, 2021<sup>[10]</sup>). The central research questions of this study could be (I) Ignoring national borders, what combination of initiatives in the different sectors achieves climate neutrality in the Nordic region by 2040/2050? (II) What are the consequences for national climate policy?

 Knowledge-sharing on efficient climate policy collaboration between government levels

Many government levels are involved in implementation of climate policy initiatives in the Nordic countries, and cooperation between them is key to efficient and effective implementation. The Nordic Council of Ministers could commission a study on collaboration between government levels on climate policy initiatives and strategies. The study should result in best-practice examples and recommendations for efficient collaboration across government levels on climate policy initiatives/strategies.

• Coordination and transparency on assumptions for climate neutrality strategies and pathways in the Nordic countries

National strategies and pathways towards climate neutrality depend on and rely on assumptions about the development in other countries. If these assumptions are incorrect, the viability of national plans changes.

- Coordination of value chains on waste, CCS and bioenergy across the Nordics to enhance efficiency and economies of scale effects in terms of money, energy and GHG emissions
- Increased knowledge-sharing ("best practices") and collaboration on addressing consumption-based emissions in the Nordic countries

Wråke, M., Karlsson, K., Kofoed-Wiuff, A., Bolkesjø, T.F., Lindroos, T.J., Hagberg, M., Simonsen, M.B., Unger, T., Tennbakk, B., Jåstad, E.O., Lehtilä, A., Putkonen, N. & Koljonen, T. (2021). Nordic Clean Energy Scenarios: Solutions for Carbon Neutrality. Nordic Energy Research. Retrieved from, <a href="https://norden.diva-portal.org/smash/get/diva2:1589875/FULLTEXTO2.pdf">https://norden.diva-portal.org/smash/get/diva2:1589875/FULLTEXTO2.pdf</a>

Across the Nordic countries, there are few policies and strategies targeting consumption-based emissions. Addressing these emissions are important not just for reaching climate neutrality in the Nordic region but also for contributing to global emission reductions.

• Collaboration on a just and fair transition, incl. more research on making carbon taxes and pricing fair

There is a need for pooled resources on and further investigation into ensuring a just and fair transition across the Nordic region. As all the Nordic countries must intensify their efforts towards reaching climate neutrality, the risks of adverse and regressive effects of policies and initiatives multiply, for example policies that e.g. affect low-income more than high-income groups.

## Nordic Visions of Climate Neutrality

Keeping global average temperatures to well below 2°C and pursuing efforts to limit the temperature increase to 1.5°C requires rapid transformation across all societies and all sectors<sup>[11]</sup> and it is unlikely that technical solutions alone will be enough. Thus, the latest UN Gap Report (2022) called for "wide-ranging, large-scale, rapid and systemic transformation"<sup>[12]</sup>. Sociological research has shown the need for visions in managing transformational shifts – describing how expectations of the future shape processes of social change in the present<sup>[13]</sup>.

The Nordic Visions report is meant as a starting point for further discussion about positive visions of climate neutrality in the Nordic countries – and globally. From citizens to politicians, we all need to start thinking about what "a good life" means in a climate neutral world.

In the green transition, countries that have the tools, know-how and institutional and financial capacity must step up and lead by example. The Nordic countries fulfill these criteria. But leading by example is not just about providing feasible pathways towards climate neutrality. It is also about contributing to a positive, global narrative about climate neutrality and the opportunities for achieving increased human well-being in this process.

Based on interviews conducted across the Nordic countries, Nordic visions of the climate neutral society could be visions of a society in balance, environmentally and socially. It could be visions about a healthier society, with strong, local communities. It could be visions of a Nordic society with a global mindset and with more spare time. It could be visions of a new, climate friendly economy, a smarter society, and a society with inclusive democracy and long-term policies.

The visions are illustrated in the figure below.

<sup>11.</sup> IPCC (2022). Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. Retrieved from:

https://www.ipcc.ch/report/sixth-assessment-report-working-group-3/

12. United Nations Environment Programme (2022). Emissions Gap Report 2022: The Closing Window - Climate Crisis Calls for Rapid Transformation of Societies. Retrieved from: https://www.unep.org/resources/emissions-gap-report-2022

<sup>13.</sup> Jensen, C. L., Oldin, F. & Andersen, G. (2022). *Imagining and co-creating futures of sustainable consumption and society*. Retrieved from: <a href="https://doi.org/10.1332/XQUM7064">https://doi.org/10.1332/XQUM7064</a>



An inclusive democracy with long-term policies



A society
in social and
environmental
balance



A healthier society



A new just and climate friendly economy

NORDIC CLIMATE NEUTRAL SOCIETY



A society with more spare time



A smarter



A society with a global mindset



A society with strong, local communities



What does a good life look like for a regular middle-class person in 25 years? When it comes to questions like that it is difficult to not get bogged down by fear of what such a life could look like. But I think that's really what we need ... to have something to strive towards, and also something to be excited about, the opportunities that these transitions can give to our lives.

Emma Holten, discussions at COP27 in the Nordic Pavilion

Realizing the visions, or at least certain elements of the visions of the climate neutral Nordic society outlined in the Nordic Visions report, requires action. The project has resulted in five recommendations for what can be done/instigated at the Nordic level:

• Instigate Nordic dialogue on "the good life" in a climate neutral society

Visions are conspicuously absent in Nordic climate change policy and thus, mobilizing citizens for a green transformation proves challenging. The Nordic Council of Ministers could fund/support Nordic dialogues on "the good life" in a climate neutral society, for example through citizen engagement activities or communication activities.

Fund/support research on multifunctionality in land-use

There is an underdeveloped opportunity for combining different land-use

(multifunctionality), e.g., combining food production and nature conservation, combining energy development, nature conservation and agriculture.

Collect Nordic and international examples of efficiency- and sufficiency policies

To stay within the planetary boundaries, there is a need for new inspiration for policyand decision-makers across the Nordic countries with respect to efficiency and sufficiency policies. Stimulation of a less consumption-focused/growth-oriented and more sufficiency-based lifestyle can catalyze the green transition and make many sustainability goals more achievable. An outcome could be a sufficiency policy toolbox, building on international experiences and examples.

Fund/support research on how to achieve a just, green transition

This could include research on the potential of improving equality and other social issues in climate- and environmental policy. This should build on existing research in the Nordic countries, e.g. the project Not Just a Green Transition (NJUST)<sup>[14]</sup>, conducted by Nordregio in collaboration with the Nordic Welfare Centre.

Fund/support research on the planetary boundaries

A Nordic society in balance is a society that stays within planetary boundaries. But what does that mean for the Nordic region and the individual Nordic countries? More work can be done on translating the planetary boundaries framework<sup>[15]</sup> from a scientific exercise to a practical framework for future policies.

 $<sup>14. \ \ \, \</sup>underline{https://nordregio.org/research/not-just-a-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-green-transition-\underline{njust-examining-the-path-towards-a-socially-just-examining-transition-\underline{njust-examining-the-path-towards-a-socially-just-examining-transition-\underline{njust-examining-transition-njust-examining-njust-examining-njust-examining-njust-examining-njust-examining-njust-examining-njust-examining-njust-examining-njust-examining-n$ transition-in-the-nordic-region/
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### About this publication

#### Policy Brief: Nordic Stocktake and Visions - Pathways to **Climate Neutrality**

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#### About the project

As part of the Nordic Stocktake and Visions project funded by the Nordic Council of Ministers, CONCITO, CICERO, IVL Swedish Environmental Research Institute, University of Iceland and Reykjavik University, and Tyrsky Consulting have taken stock of greenhouse gas (GHG) emissions in the Nordic countries, assessed national pathways, and identified ways forward towards climate neutrality in the Nordic region. The project is a part of the initiative "Climate transition in the Nordics" to support the Nordic Vision 2030. The overall aim of the Nordic Vision is to become the most sustainable and integrated region in the world by 2030.

The Nordic region aims to be the world's most sustainable and integrated region by 2030 (Our Vision 2030<sup>[16]</sup>). The most recent status report<sup>[17]</sup> (2023) shows that Nordic green ambitions are challenged and points to a need for greatly accelerated efforts. The report, Nordic Stocktake, reaches a similar conclusion.

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Nordic co-operation is one of the world's most extensive forms of regional collaboration, involving Denmark, Finland, Iceland, Norway, Sweden, and the Faroe Islands, Greenland and Åland.

Nordic co-operation has firm traditions in politics, economics and culture and plays an important role in European and international forums. The Nordic community strives for a strong Nordic Region in a strong Europe.

Nordic co-operation promotes regional interests and values in a global world. The values shared by the Nordic countries help make the region one of the most innovative and competitive in the world.

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