Embracing the just green transition on the Nordic labour market



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Introduction

The green transition targets climate change and aims to reduce CO2 emissions in line with the goals set out in the UN Agenda 2030 and the Paris Agreement (UN, 2015). It impacts not only those industries with the largest CO2 emissions, but also other sectors, the labour markets and society at large. To achieve the defined goals, it is important to leave no one behind and ensure a just green transition.

A good working life is one of the pillars of the Nordic welfare states. Key elements of the Nordic model, such as social dialogue between governments, trade unions and employers' organisations, play a pivotal role in ensuring that the green transition is also a just transition. This is underlined by the International Labour Organisation (ILO) which has elaborated Just Transition Guidelines (ILO, 2015), referred to as a "central reference for policymaking and a basis for action" by the International Labour Conference in 2023 (ILO-ILC.111/resolution V, 2023). Social dialogue is also integral to the ILO Decent Work Agenda (ILO, n.d.).

The exchange of best practices among the Nordic countries and strengthening of social dialogue could be an enabler to achieving a just Nordic green transition based on economic growth, social justice and a steady path towards carbon neutrality. It could also be an important step towards achieving the Nordic vision of being the most sustainable and integrated region in the world by 2030.

The Nordic Council of Ministers has launched several projects designed to increase knowledge and facilitate the green transition. One example is the work programme of the Nordic Council of Ministers for Labour aimed at ensuring availability of a skilled labour force for the green transition and supporting good working conditions. The tripartite dialogue in Iceland on 1 December 2023 "Green Transition on the Nordic Labour market: A Nordic Tripartite Dialogue" forms part of that agenda. This report sets out to provide some background and inspiration for the discussions.

In the first section, some basic knowledge about the green transition and how it impacts the Nordic countries will be provided. The second section will discuss how a just green transition can be tackled and best practice examples from around the Nordic countries will be shared. The report will end with some short final remarks.





How does the green transition impact the Nordic labour markets?

The green transition is already taking place and it impacts the Nordic countries and regions in several different ways as we will see in the following sections.

WHAT IS A JUST GREEN TRANSITION?

Most definitions of the ***green transition*** refer to a transformation or shift to a low-carbon economy, while most definitions of *a* ***just green transition*** focus on the socioeconomic aspects and impacts of the transition to a low-carbon economy and a more sustainable society.

The concept of a just transition goes back to the 20th century labour movement in the US. It was later incorporated into the outcome of the **Rio+20 Earth Summit** 2012 and referred to in the preamble to the **Paris Agreement** 2015**:**

"Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities."

The **ILO-UNEP** report 2008 concluded that the green transition is a structural change expected to result in new jobs as well as greening of jobs, but also potential job losses in some economic sectors and regions (ILO, 2023). That was followed by an ILO resolution in 2013 focusing on sustainable development, decent work and green jobs and guidelines for a just transition in 2015.

The ILO resolution on a just transition adopted in 2023 states:

"A just transition promotes environmentally sustainable economies in a way that is inclusive, by creating decent work opportunities, reducing inequality and by leaving no one behind. (...) Just transition involves maximizing the social and economic opportunities of climate and environmental action, including an enabling environment for sustainable enterprises, while minimizing and carefully managing challenges. It should be based on effective social dialogue, respect for fundamental principles and rights at work, and be in accordance with international labour standards. Stakeholder engagement is also important."

In research, the green transition is described as a multi-dimensional sociotechnical change involving markets, infrastructure and technology, with institutional, cultural, social, behavioural and spatial aspects. Sociotechnical transitions are often not linear or incremental, which makes their trajectories hard to predict. A just green transition can be analysed according to different understandings of justice, such as distributive, recognitional, procedural or cosmopolitan justice. (Cedergren et al. 2022).

Varying emission trends in the Nordic countries

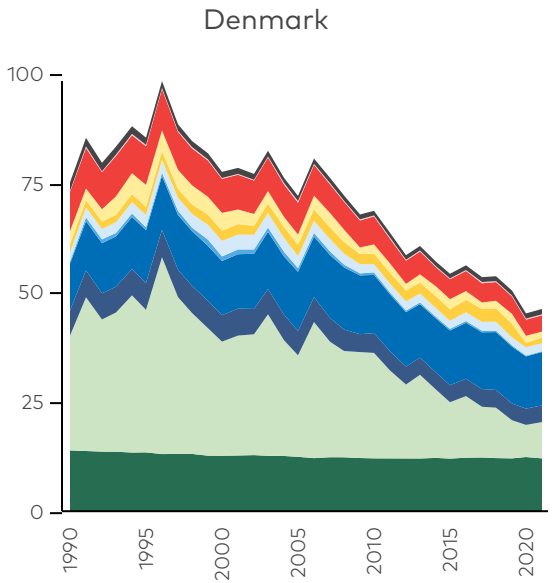
Although the Nordic countries face many similar challenges with regard to reducing CO2 emissions, for example in terms of transport and consumption, there are also differences due to the diverse economic structures and energy mixes in the respective Nordic countries. Furthermore, the differences in industry profiles between the Nordic regions and municipalities make them vulnerable to green transition and climate mitigation policies to varying degrees.

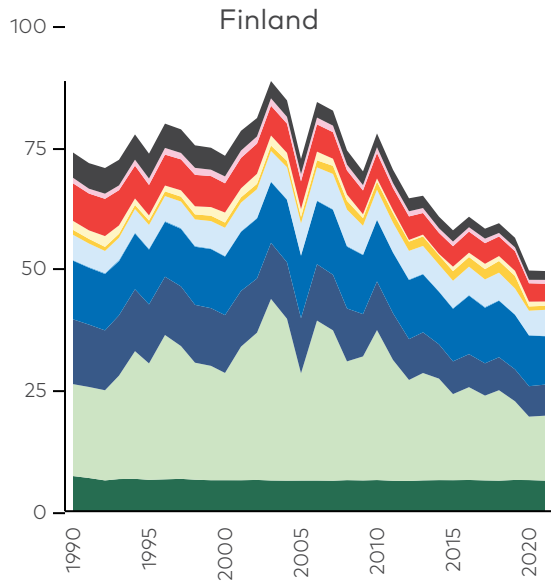
CLIMATE COUNCILS IN THE NORDIC REGION

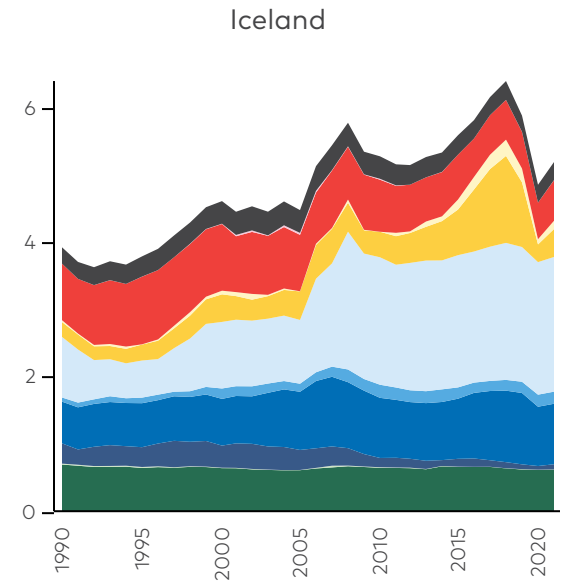
- The **Swedish Climate Policy Council** (Klimatpolitiska rådet)
- The **Danish Council on Climate Change** (Klimarådet)
- The **Finnish Climate Change Panel** (Suomen Ilmastopaneeli)
- The **2050 Climate Change Committee in Norway** (Klimautvalget 2050)
- The **Icelandic Climate Council** (Loftslagsráð)

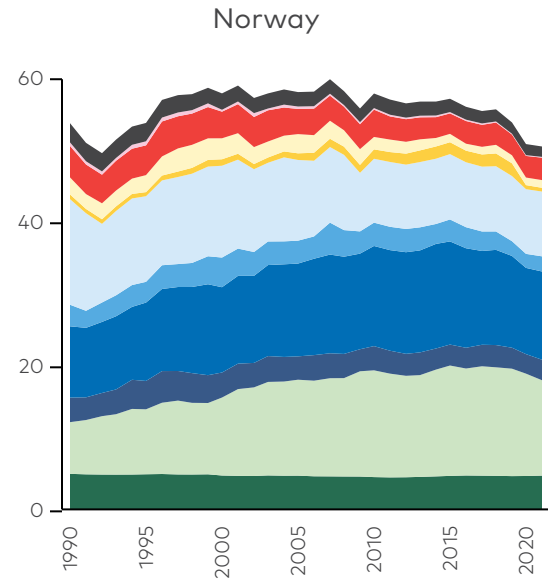
– track climate change developments and countries' progress towards attaining the goals under the Paris Agreement and the national climate goals.

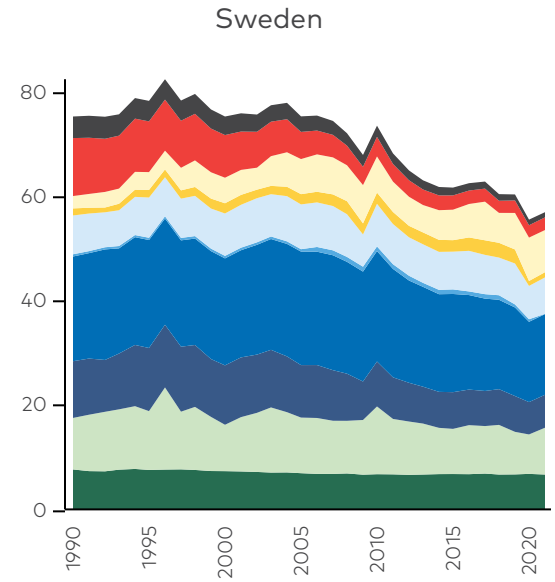












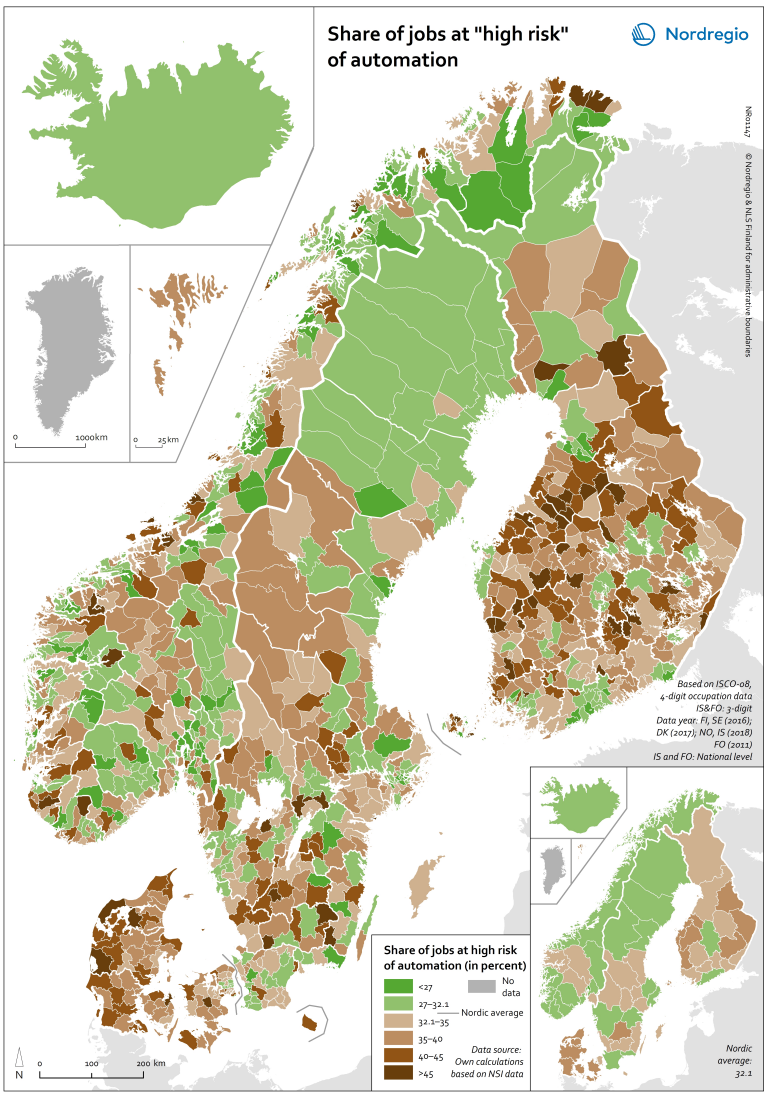
Sectors

- Waste management
- Other fuel combustion sectors n.e.c.
- Other fuel combustion sectors
- International navigation (memo item)
- International aviation (memo item)
- Industrial processes and product use
- Fuels, fugitive emissions
- Fuel combustion in transport
- Fuel combustion in manufacturing industries and construction
- Fuel combustion in energy industries
- Agriculture

Source: Eurostat env_air_gge:
Greenhouse gas emissions by source sector (source: EEA)

The green transition and digitalisation – a twin transition

The green transition and digitalisation have sometimes been described as a twin transition (European Commission, 2020). Depending on their industry mix, some regions and municipalities are more impacted than others by automation, digitalisation and the green transition.

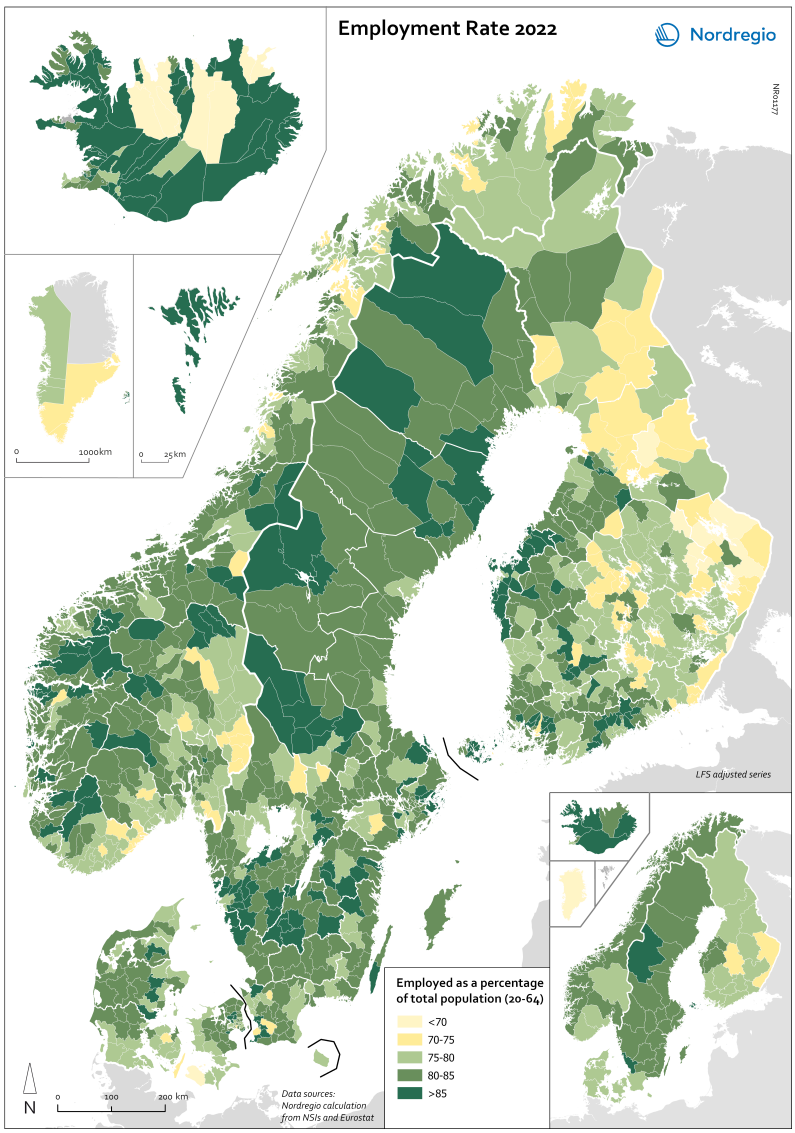


Map 1. Share of jobs at "high risk" of automation

High employment rate, strong gender balance and skills shortage

The employment rate in the Nordic Region is high, although it has varied over time depending on shocks and economic cycles. The Nordic model and welfare systems are based on high labour market participation.

A large majority live in areas with above 80% employment in the working-age population. The number of people in employment in the Nordic Region has increased and has never been higher. The Nordic countries have a more gender-balanced labour market than the EU average, although the Nordic labour market is still gender-segregated. After the pandemic, a strong demand for labour in all of Europe has led to a skills shortage in many industry sectors.



Map 2. Employment rate 2022

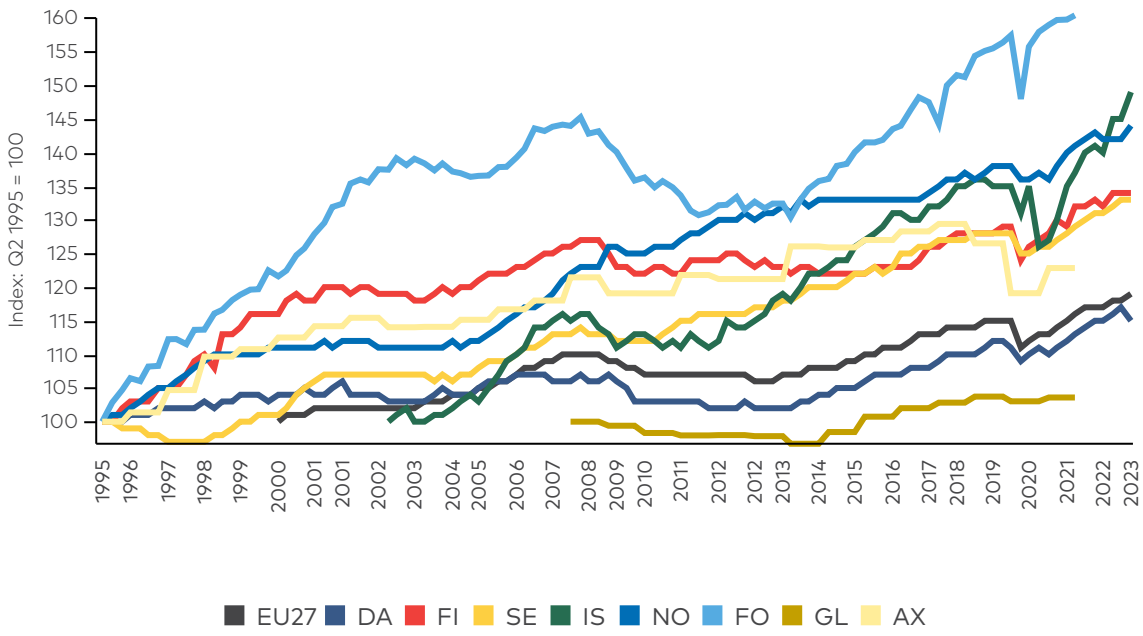


Figure 1. Total number of employed (15-74) by quarter.
Note: Index: 100=Q21995
GL: Index: 100=2008
EU27: Index: 100=Q1 2000
Data sources: Eurostat & NSIs

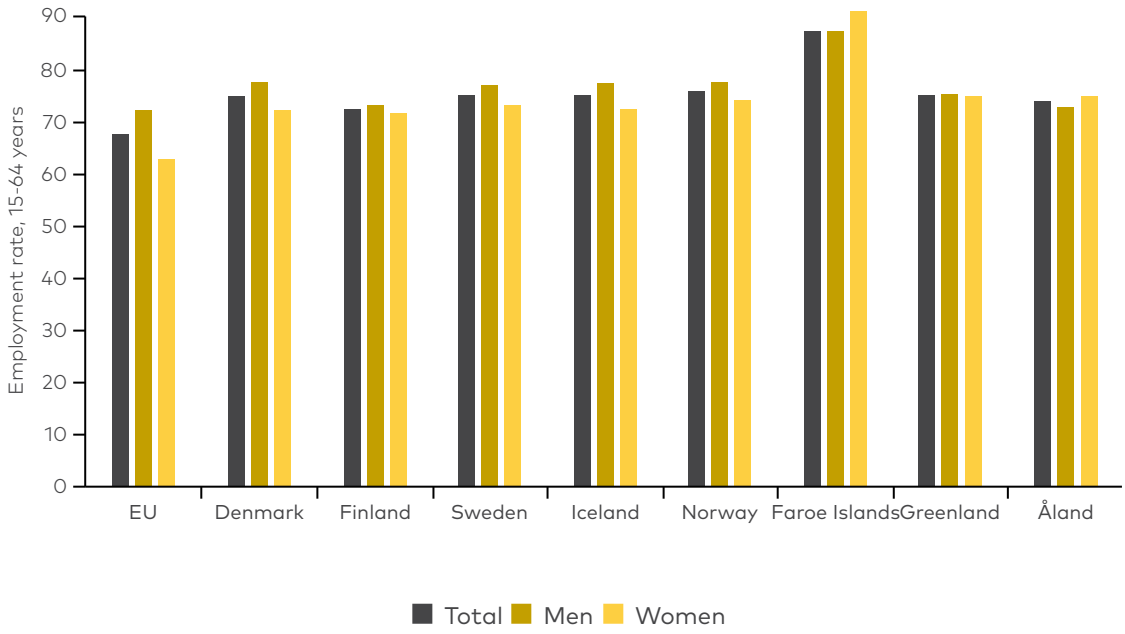


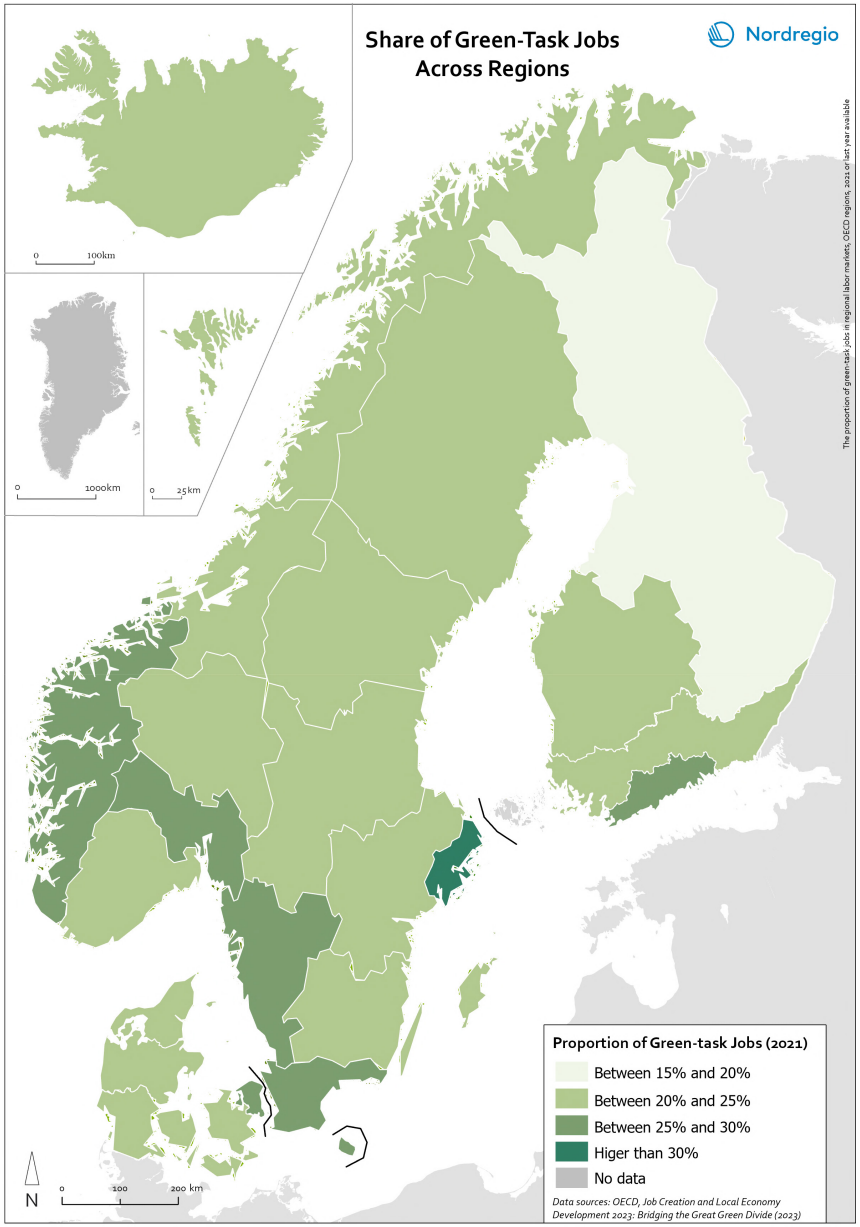
Figure 2. Employment rate by gender 2021 (November).
Data source: Nordic Statistics. Åland: ÅSUB

Green and polluting jobs in the Nordic countries

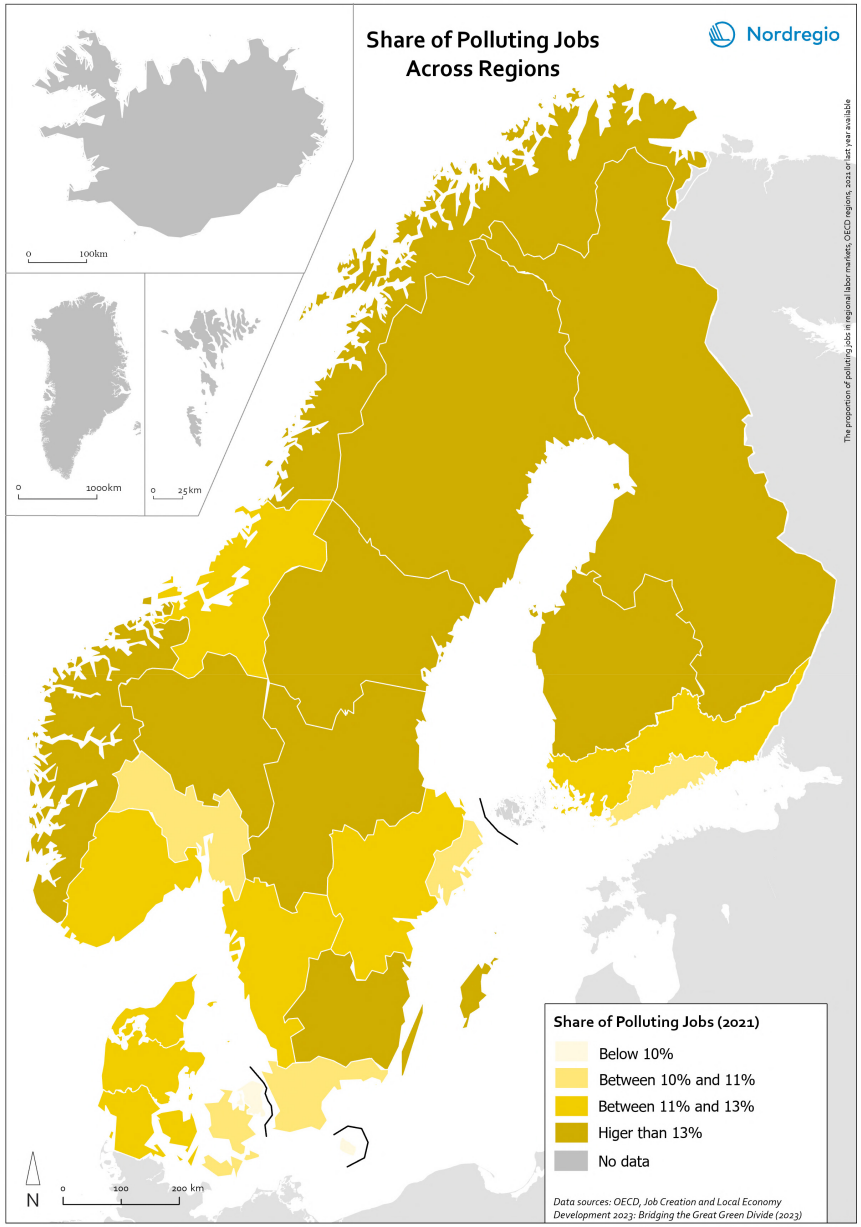
The European Union Green Deal is expected to result in 2.5 million new jobs in 2030 (Cedefop 2022). The green transition is widely supported by governments, business organisations and trade unions. The impacts of the green transition in terms of new jobs and job losses may, however, differ between different industries, countries and regions.

One way to understand the impact of the green transition is to distinguish between green jobs, white jobs and brown jobs. The vast majority of the jobs in the European Union are considered "white jobs", i.e. jobs which will see only moderate changes in tasks related to the greening of jobs. “Green jobs” include more tasks related to the green transition and are expected to grow, and “brown jobs” belong to the major polluting industry sectors (Vandeplas et al. 2022).

The Organisation for Economic Cooperation and Development (OECD) uses a similar terminology, namely “green-task jobs” and “polluting jobs” (OECD, 2023). Less than a fifth of the workforce in the OECD holds a green-tasked job, while in the Nordic countries, the corresponding figure ranges from 22% in Iceland to 27% in Sweden. Some regions are impacted by both green jobs and brown jobs. For example, in the north of Sweden, thousands of new green jobs are being created at the same time as the region has many brown jobs, some of which will also be turned into green ones.



Map 3. Share of green-tasked jobs 2021



Map 4: Share of polluting jobs 2021

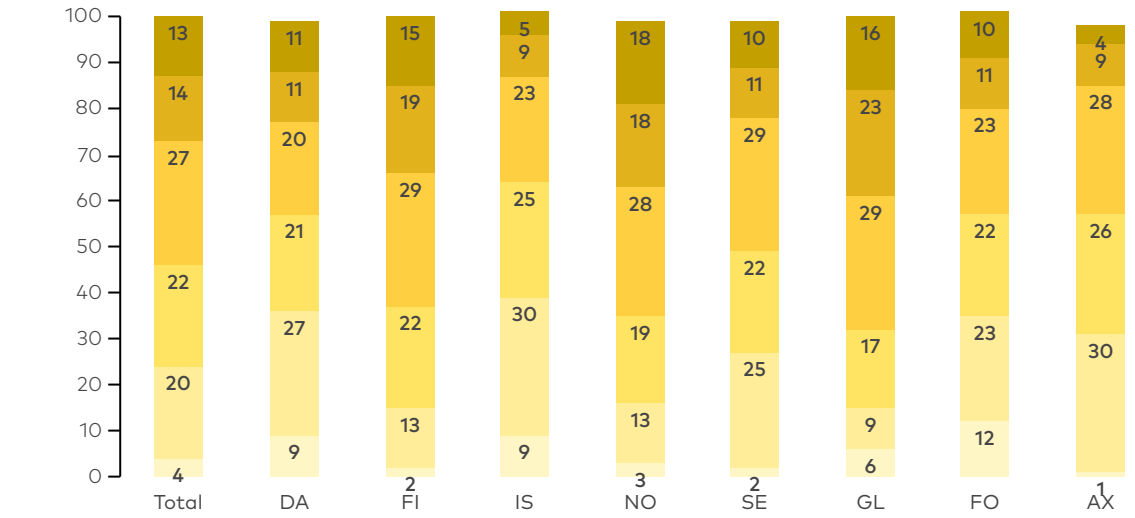
Perceptions of the impacts of the green transition on the labour market

To understand how people are impacted by climate change and the green transition, many surveys have been conducted, including a **Nordic survey in 2022** with more than 5000 respondents from the Nordic countries and territories (Tapia et al, 2023).

Will the green transition entail job losses?

A total of 71% of the respondents in the Nordic survey agree that climate change is a serious or very serious problem. 27% worry that some jobs in their country or region may be at risk due to the green transition.

Respondents in Greenland (39%), Norway (36%) and Finland (34%) are more likely to be worried or very worried about the risk of potential job losses. Women are less likely to be worried about potential job losses than men (23% vs. 31%), as are people under the age of 30 (46%), people in larger cities (22% compared to 31% in rural areas) and respondents with a university education (47% compared to those with primary (31%) and secondary (37%) education).

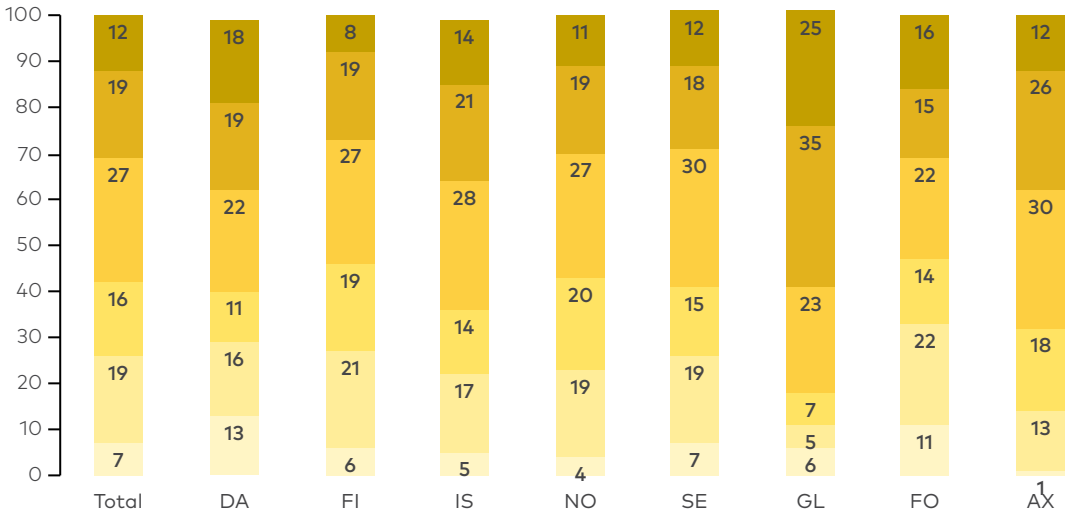


To what extent do you agree or disagree with the following statement: I am worried that some jobs in <country, region> may be at risk due to the transition to a low-carbon economy (%)

- 5 Fully agree
- 4
- 3
- 2
- 1 Fully disagree
- Don't know / No answer

Will the green transition lead to new jobs?

31% of the Nordic population think that initiatives to combat climate change will help create new jobs in their area. However, 35% do not think that climate initiatives will have a positive impact on the labour market. Men are more likely to disagree that such initiatives will help create jobs than women (39% and 30%).

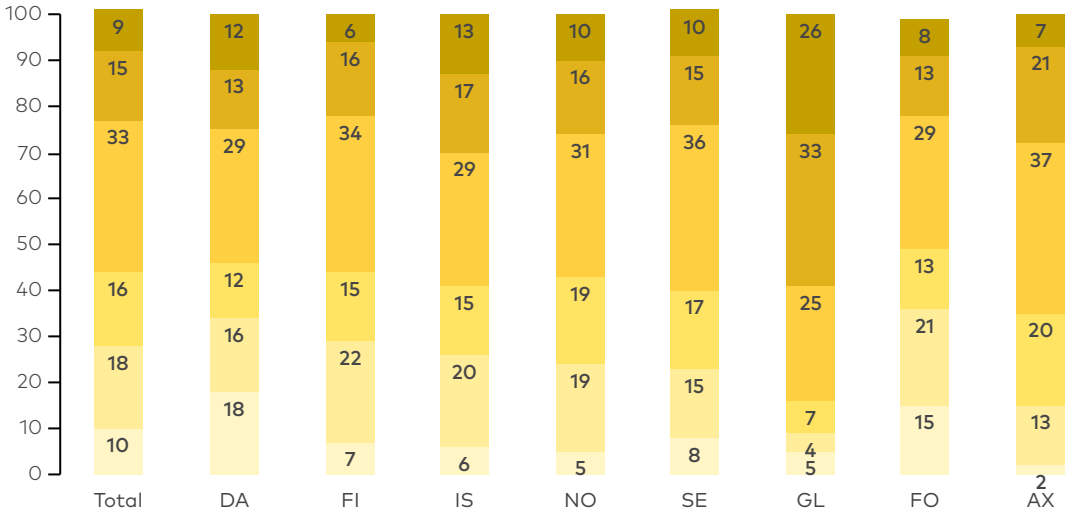


To what extent do you agree or disagree with the following statement: Initiatives to fight climate change will help create new jobs in the area where I live (%)

- 5 Fully agree
- 4
- 3
- 2
- 1 Fully disagree
- Don't know / No answer

Will the green transition improve the quality of work?

The population in the Nordic Region holds divided opinions about how climate policies will affect working conditions, with respondents from Greenland being the most optimistic and those from Norway and Finland being the most pessimistic. While 24% believe that climate initiatives will have positive effects on working conditions, over a third (34%) do not believe that working conditions will improve. Those who live in cities are more likely to expect climate-positive effects compared to those in rural areas (28% and 19%) and men are a little less likely to expect improvements than women (23% and 26%).



To what extent do you agree or disagree with the following statement: Initiatives to fight climate change will improve working conditions in the area where I live (%)

- 5 Fully agree
- 4
- 3
- 2
- 1 Fully disagree
- Don't know / No answer

Further surveys have been conducted, such as the **Eurobarometer** on Climate change (2023), according to which 77% of Europeans think climate change is a very serious problem, while 37% maintain that they are exposed to environmental and climate-related risks and threats. There are also examples of surveys from the Nordic countries, such as the **Central Organisation of Finnish Trade Unions** (SAK), which involved their member trade unions in studies of how the green transition impacts the labour market and working life. Another example is the **Danish Confederation of Trade Unions**, which created its own Climate Panel representing 10 different sectors and trade unions and whose final report "**Green transition together"** included eight recommendations for a greener future and workplace involvement.





How can a just green transition be addressed?

Recent research shows that two main approaches dominate when it comes to addressing the just green transition; one focusing on social justice on the labour market and one focusing on social justice to advance the climate agenda (Cedergren et al. 2022). Below are some examples of initiatives to put a just green transition on the agenda.

In the **international context,** the OECD suggests a comprehensive approach. The **ILO Guidelines for a Just Transition** (ILO 2015) include nine policy areas that should be addressed to achieve a just green transition: macroeconomic and growth policies, industrial and sectoral policies, enterprise policies, skills development, occupational safety and health, social protection, active labour market policies, rights, social dialogue and tripartism.

Both the EU and ILO recognise the potential and benefits of **green collective bargaining** in tackling the just transition, including green clauses for skills development and sustainable environmental management (European Economic and Social Committee, 2023; ILO, 2023).

The **United Nations Development Programme (UNDP)** uses the concept of the just green transition as a means of delivering on the Paris Agreement. That includes providing a framework for countries on Show to tackle the just green transition, covering the key elements of increasing awareness of the principles of a just green transition, strengthening the ability to engage in just transition processes and increasing the capacity to implement just transition practices (UNDP, 2022).

The **Intergovernmental Panel on Climate Change (IPCC**) also recognises just transition as a key element (IPCC, 2022). The UNDP reports that 38% of the 170 countries that submitted their National Determined Contributions (NDC) to the Paris Agreement referred to a just transition in their plans (UNDP, 2022). However, there is always a risk that social aspects of the green transition may be overshadowed by economic and technical imperatives, as was shown in a recent study of Just Green Transition Plans in Sweden (Moodie et al. 2021).

The **European Commission** has suggested strengthened social dialogue to manage a just transition (European Commission, 2023) and there are several examples of how the green transition and a just green transition have made their way into policies in relation to education and training**.** The European Commission refers to the green transition and digitalisation as twin transitions. That is also reflected in the **New Skills Agenda**, the five-year plan presented in 2020. The agenda aims to strengthen sustainable competitiveness as set out in the European Green Deal, ensure social fairness, increase resilience and put an emphasis on skills for the green and digital economy.

Cedefop is the European Union's centre for the development of vocational training. Beyond technical skills needed for the green transition, it recognises that the greening of jobs will cut across occupations and sectors. Vocational education and training (VET), including both short-term tracks and solutions and long-term development responding to skills needs at all levels, will be needed with the aim of employability and leaving no one behind. Cedefop (2022) defines skills for the green economy as "the knowledge, abilities, values and attitudes needed to live, work and act in economies and societies seeking to reduce the impact of human activity on the environment".

In the Nordic context, the Nordic model – with the key elements of responsible macroeconomic policies, collective bargaining and universal welfare systems – has played a crucial role in previous socio-economic transitions. Long-term public investment in education has contributed towards the preparedness of the Nordic Region for crises and structural changes. Mobilising qualifications through continuous and coordinated facilitation and access to upskilling and reskilling of the labour force is a critical factor for the future of work in the Nordics (Alsos and Dølvik, 2021).

The **Nordic trade union movement** has also engaged in collaboration on a just green transition. In the project **"The Road Towards a Carbon-Free Society – A Nordic-German Trade Union Cooperation on Just Transition"**, trade unions from Denmark, Finland, Iceland, Norway and Sweden drew up a joint report on a just green transition through the Council of Nordic Trade Unions (NFS) in collaboration with the Friedrich-Ebert Stiftung (FES) and the German Trade Union Confederation (DGB).

At the national level, all Nordic countries are engaged in tackling not only the green transition but also the just green transition. The impact of the green transition on the labour market and jobs – as well as the concept of a just green transition – is generally taken into consideration in the climate councils' work and reports. For example, in **Finland the Climate Change Panel** is conducting an ongoing study on the just green transition and in **Norway, the 2050 Climate Change Committee** has deemed a just green transition to be one of 10 priority areas.

Learning about the impacts

Learning about the impacts of the green transition on the labour market is essential in order to provide adequate support measures, such as education and training and this is also a focus for e.g. **OECD**. In Norway the government has launched several initiatives, such as "**Better growth, lower emissions" – the Norwegian Government's strategy for green competitiveness**, which provides a framework for value creation and high employment through the transition to a low-emission society with inputs from various stakeholders. The **Norwegian committee on skills needs (Kompetansebehovsutvalget)**, whose latest report focuses on skills development and labour needs within the context of the green transition and social justice. Furthermore, the annual **Norwegian YS Arbeidslivsbarometer** focused in its latest report on motivation and challenges of upskilling on the labour market, including in relation to the green transition (2023).

Other examples are the **Skills assessment for the future needs of businesses in Iceland**, conducted by the **Icelandic Association of Industries**, and a report on the possible effects of automation of jobs by the **Committee on the 4th Industrial Revolution and Statistics Iceland**.

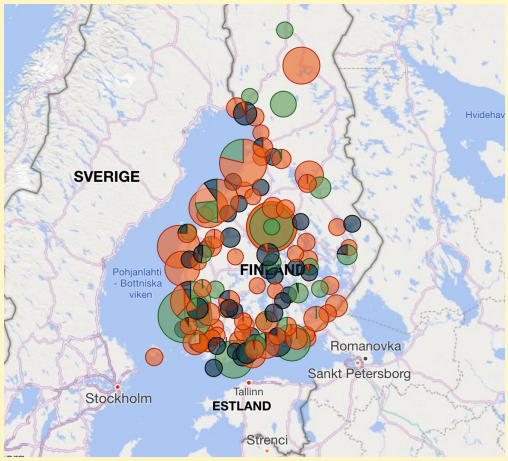
The Swedish **Trade Union ILO** describes which sectors, jobs and professions are impacted most by the green transition in **Färdplan Sysselsättning**. It estimates, for example, that while four industry sectors stand for half of the CO2 emissions in Sweden, they only represent 2% of the workforce. It also estimates that 100 000-250 000 new jobs will be created as a result of the green transition and that more jobs will go greener. However, it acknowledges that future scenarios are difficult to estimate, not least since they are also dependent on strategic political choices.

In Finland, the **Confederation of Finnish Industries** has developed a digital tool to display estimations in real-time of future skills needs relating to green investments.

GREEN INVESTMENTS IN FINLAND

To showcase green investments in Finland, the Finnish Confederation of Industries has developed a GIS tool and dashboard displaying more than 260 new green investments and the expected number of jobs associated with them.

https://ek.fi/en/green-investments-in-finland/



Collaboration to enhance a just green transition

In the Nordic countries, examples can be found of joint platforms for addressing matters of sustainable development and climate change, involving representatives from the tripartite actors, as well as other actors.

One example is the **National Council on Sustainable Development in Iceland**, which was formed in 2022 and includes representatives from the business sector and unions, ministers, the parliament, municipalities and NGOs. The Council forms part of the cooperation platform **Sustainable Iceland**, which also includes specialists from the relevant ministries and Statistics Iceland and is tasked with boosting cooperation and multi-sectoral involvement "to ensure that a just transition in all areas of society is a guiding principle in all policy making and actions" (Prime minister´s office, n.d.). The **Icelandic Macroeconomic Council,** a cooperation between the leaders of government and social partners, also addresses matters related to the just transition.

The climate partnership in Norway, and the **Norwegian Green Alliance with the EU,** established in 2023, is set to enhance cooperation on the green transition between Norway and the EU, further supporting job creation in the renewables sector in Norway.

Another example from Norway is the **Council of Just Transition (Rådet for rettferdig omstilling i arbeidslivet) in Norway.** Set up by the Minister of Climate and Environment in 2022, the council engages in tripartite dialogue at the national level, and also encourages bipartite discussion on matters related to the green transition between trade unions and employers' organisations.

In Finland, the Climate Policy Roundtable is an advisory body led by the Prime Minister and includes representatives from the social partners, i.e. the government, industry organisations and trade unions, as well as from other stakeholders and interest organisations, such as those representing youth and the environment. The council meets five to seven times per year to discuss climate policy plans such as the EU Fit for 55 package, the new Climate Act that entered into force in 2022 and other sectoral climate change plans. There is a particular focus on a just green transition, i.e. on ensuring that the transition to a carbon-neutral society is made in a way that is socially and regionally just.

To extend knowledge in this field, it is also common to look to best practices in other parts of Europe and the world. A report by the Central Organisation of Finnish Trade Unions (SAK) titled **A Fair Climate Policy for Workers – Implementing a just transition in various European countries and Canada** is an example of that approach.

The **Danish Citizens Assembly on the Climate Arena**, which has resulted in 119 recommendations to policymakers (see fact box), is an example of engaging with a larger community.

ENGAGING WITH CITIZENS ON THE GREEN TRANSITION

The **Danish Citizens` Assembly on the Climate Arena** is a representative group of 99 citizens that have been appointed by the Danish Ministry for Climate, Energy and Utilities to provide input on the national climate action plans. The 119 recommendations in the first two reports related to leadership and citizen participation, the roadmap and financing of the reduction of CO2 emissions, as well as the transport, agriculture, energy and construction sectors.



Towards an agenda for a just green transition in the Nordic Region

Apart from the **international conventions and resolutions** engaging with a just green transition, there are also examples of initiatives, agendas and roadmaps from around the Nordic countries that could be learnt from. Strengthening social dialogue and including issues related to the environment and **climate mitigation measures in collective bargaining** could be another way forward (see fact box).

The **Danish Trade Union Confederation (FH)**, for example, has proposed a climate action plan called **"Green Transition Together"**, which it also calls a master plan as it targets all major sectors and includes the three major principles of solving challenges faced by society, creating more good jobs and ensuring social justice. The confederation has also developed 10 priorities under the heading **"A Fair Europe for Workers"**. One of those priorities is a just green transition, with an emphasis on vocational education and training, as well as health and safety.

In Iceland, the **Icelandic Confederation of Labour** (ASI) identified 9 priorities and 10 tasks for **"The future of the labour market 2022-24"**, including pushing for investment and governmental levers to support a just transition and the creation of diverse and good green jobs, as well as making the public and society aware of a just transition and its importance (ASI, 2022).

In the interest of achieving the goal of a carbon-neutral Finland by 2035, the **Finnish government** launched **"13 sector-specific low-carbon roadmaps"** developed in cooperation with operators in each sector, with the aim of identifying the scale, costs and conditions of the climate measures needed, including changes for employees, such as future skills and competence needs.

Fossil Free Sweden is another example which was initiated and is supported by the government. It involves more than 500 actors from industry, government and civil society who are engaged in working with 22 roadmaps for various industry sectors.

GREEN COLLECTIVE BARGAINING

Green collective bargaining means including environment and climate mitigation measures in the collective bargaining processes and agreements. One of the key areas is usually that of information and consultation processes aimed at reducing environmental harm or CO2 emissions. While some agreements include clear goals as well as specific details of how to attain them, agreements setting out only vague intentions are also common.

Areas typically covered in the agreements may include green representatives or committees in the workplace, support for the use of climate-friendly transport and green procurement and waste management at the workplace or in the industry. It is generally important that the parties are strongly committed and that the agreements are adapted to the respective national and local institutional contexts (Bjergene & Hagen, 2020).

The **ILO Guidelines for a Just Transition** promote the inclusion of environmental provisions in collective bargaining (ILO 2015, 2023c). In 2023 the **European Economic and Social Committee** issued an opinion on green collective bargaining as a means of supporting environmental protection and combating climate change. It suggested including clauses such as protection of workers from the effects of climate change and impacts of the green transformation on companies' activities in terms of work structure, changing occupations and skills.

Collective bargaining is an essential part of the Nordic labour market model and includes national-level and local-level/workplace bargaining. By international comparison, the Nordic Region has a high ratio of employees covered by collective agreements. Differences between the Nordic countries with regard to collective bargaining relate mainly to institutional factors, such as level of trade union membership, how employers are organised and the scope of the collective agreements.

Final remarks

The green transition is underway in the Nordic Region, and ensuring that the transition is just enjoys strong support in the Nordic countries. Hopefully this report can inspire the tripartite discussions on the next steps towards a embracing the just green transition on the labour market in the Nordic Region.

References and links

Alsos, K. and Dølvik, J. (2021). The Future of Work in the Nordic countries: Opportunities and Challenges for the Nordic Life Models. Nordic Council of Ministers. https://pub.norden.org/temanord2021-520/

ASI (2022). The future of the Labour market. 45th Congress of ASÍ: ASÍ priorities 2022 – 2024. https://www.asi.is/media/317914/7-future-of-labour-market_en.pdf

Bjergene, J.O and Hagen I.M. (2020) (Eds). Grönne tariffavtaler. Gyldendal, Oslo.

Cedergren, E., Tapia, C., Sánchez Gassen, N. and Lundgren, A. (2022). Just Green Transition. Key Concepts and Implications in the Nordic Region. Nordregio Discussion paper 2022:2. https://pub.nordregio.org/wp-2022-2-just-green-transition-key-concepts-and-implications-in-the-nordics/#

The Central Organisation of Finnish Trade Unions (SAK) (2020). Fackföreningsrörelsen och klimatförändringarna. https://www.sak.fi/sv/material/undersokningar/fackforeningsrorelsen-och-klimatforandringarna

The Central Organisation of Finnish Trade Unions (SAK) (2020). A fair climate policy for workers: Implementing just transition in various European countries and Canada. https://www.sak.fi/en/materials/publications/fair-climate-policy-workers-implementing-just-transition-various-european-countries-and-canada

Confederation of Finnish Industries (Finlands Näringsliv) (n.d.). Green Investments in Finland. https://ek.fi/en/green-investments-in-finland/

Danish Confederation of Trade Unions (2022). A Fair Europe for Workers. https://greentransitiontogether.com/wp-content/uploads/sites/4/2022/12/a-fair-europe-for-workers-150-dpi.pdf

Danish Confederation of Trade Unions (2022). Green transition together. https://greentransitiontogether.com/2022/10/24/climate-panel-of-employees-call-for-climate-action/

European Center for the Development of Education and Training (Cedefop) (2022). An Ally in the Green Transition. Briefing note, March 2022. An ally in the green transition (europa.eu)

European Commission (2020). European Skills Agenda. European Skills Agenda - Employment, Social Affairs & Inclusion - European Commission (europa.eu)

European Commission (2023). Eurobarometer Climate change. https://europa.eu/eurobarometer/surveys/detail/2954

European Commission (2023). European Year of Skills. European Year of Skills 2023 (europa.eu)

European Economic and Social Committee (2023). Opinion Green Collective Bargaining, SOC/747. https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/green-collective-bargaining

The Finnish Climate Change Panel (2019). Soumen Ilmastopaneeli. /www.ilmastopaneeli.fi/sv/

Fossilfritt Sverige (n.d.). Fossilfritt Sverige. https://fossilfrittsverige.se/

Friedrich-Ebert Stiftung (FES) (2020). The Road Towards a Carbon-Free Society – A Nordic-German Trade Union Cooperation on Just Transition. https://www.fes.de/en/the-road-towards-a-carbon-free-society

Holm Ingelsrud, M., Moe Dahl, E. and Norgaard, E. (2023). Arbeidslivsbarometer. Kompetanseutvikling for nye tider? Deltakelse, motivasjon og barrierer. Norsk arbeidsliv 2023. Yrkesorganisasjonenes Sentralforbund.
https://www.regjeringen.no/no/dep/kld/organisasjon/styrer-rad-og-utvalg/permanente-nemnder-rad-styrer-og-utvalg/radet-for-rettferdig-omstilling-i-arbeidslivet/id2960111/

Intergovernmental panel on climate change (IPCC) (2022). Climate change 2022: Mitigation of Climate Change. Working Group III contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.
https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf

International Labour Organization (ILO) (2015). Guidelines for a just transition towards environmentally sustainable societies for all.
https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/documents/publication/wcms_432859.pdf

International Labour Organization (ILO) (n.d.) The ILO Decent Job Agenda. Decent work (ilo.org)

International Labour Organization (ILO) (2022). Flagship Report: Social Dialogue Report 2022: Collective bargaining for an inclusive, sustainable and resilient recovery. wcms_842807.pdf (ilo.org)

International Labour Organization (ILO) (2023). Resolution concerning a just transition towards environmentally sustainable economies and societies for all.
https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_886647.pdf

International Labour Organization (ILO) (2023). Green jobs, green economy, just transition and related concepts. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_883704.pdf

International Labour Organization (2023). Just transition: Collective bargaining as a vehicle for a just transition (ilo.org)

Klima-, Energi- og Forsyningsministeriet (n.d.). Danish Citizens' Assembly on Climate Change (Borgertinget på Klimaområdet) (n.d.). https://kefm.dk/klima/borgertinget-

Klima-, Energi- og Forsyningsministeriet (n.d.). Danish Citizens' Assembly on Climate Change (Borgertinget på Klimaområdet). The Citizens' Assembly's Recommendations.
https://kefm.dk/Media/637647201779892262/Borgertingets%20anbefalinger_ENG.pdf

Klima og Miljödepartementet (n.d.). Rådet for rettferdig omstilling i arbeidslivet. https://www.regjeringen.no/no/dep/kld/organisasjon/styrer-rad-og-utvalg/permanente-nemnder-rad-styrer-og-utvalg/radet-for-rettferdig-omstilling-i-arbeidslivet/id2960111/

Klimarådet (n.d.). https://klimaraadet.dk/en/latest-news-danish-council-climate-change

Klimatpolitiska rådet (n.d.).https://www.klimatpolitiskaradet.se/

Klimautvalget 2050 (n.d.). The 2050 Climate change committee. https://klimautvalget2050.no/forside-english/

Kompetansebehovsutvalget (n.d.). Norwegian Committee on Skills Needs. https://kompetansebehovsutvalget.no/mandate-of-official-norwegian-committee-on-skill-needs/

Lee, S. and Baumgartner, L. (2022). How Just Transition can help deliver the Paris Agreement. UNDP 2022. https://climatepromise.undp.org/sites/default/files/research_report_document/Just%20Transition%20Report%20Jan%2020.pdf

Loftslagsrad (n.d.) Icelandic Climate Council. https://www.loftslagsrad.is/english/

Malmaeus, M., Karlsson, A. and Sanne, J.M. (2022) Färdplan sysselsättning. Arbetsmarknadseffekter av en grön omställning i Sverige. Published by Global Utmaning. https://www.lo.se/home/lo/res.nsf/vRes/lo_play_fardplan_sysselsattning_pdf/$File/Fardplan_Sysselsattning.pdf

Ministry of Economic Affairs and Employment (n.d.). Low-carbon roadmaps 2035. Low-carbon roadmaps 2035 - Ministry of Economic Affairs and Employment (tem.fi)

Ministry of the Environment (n.d.) Climate policy roundtable, Finland. https://ym.fi/en/climate-policy-round-table

Moodie, J., Tapia, C., Löfving, L., Sánchez Gassen, N., & Cedergren, E. (2021). Towards a Territorially Just Climate Transition—Assessing the Swedish EU Territorial Just Transition Plan Development Process. *Sustainability, 13*(13), 7505. https://doi.org/10.3390/su13137505

Norwegian government (2017). Better growth, lower emissions – the Norwegian Government's strategy for green competitiveness. Better growth, lower emissions – the Norwegian Government's strategy for green competitiveness (regjeringen.no)

Norwegian Government (2023). Norway and EU establish Green Alliance. Norway and EU establish Green Alliance - regjeringen.no

The Organization for Economic Cooperation and Development (OECD) (2023). Skills Assessment and Anticipation for the Green Transition – Unlocking Talent for a Sustainable Future, OECD Publishing, Paris. https://www.oecd.org/employment/assessing-and-anticipating-skills-for-the-green-transition-28fa0bb5-en.htm

The Organization for Economic Cooperation and Development (OECD) (2023). Job Creation and Local Economic Development 2023: Bridging the Great Green Divide. OECD Publishing, Paris. https://doi.org/10.1787/21db61c1-en.

Prime Minister´s Office Iceland (n.d.). Forum for Cooperation on Sustainable Development. Sustainable Iceland. https://www.government.is/topics/sustainable-iceland/

Stjórnarráð Íslands (2019). Ísland og fjórða iðnbyltingin. https://www.stjornarradid.is/library/04-Raduneytin/ForsAetisraduneytid/Framtidarnefnd/Fjorda-idnbyltingin-skyrsla.pdf

Tapia, C., Sánchez Gassen, N. and Lundgren, A. (2023). In all fairness: perceptions of climate policies and the green transition in the Nordic Region. Nordregio Report: 2023:5. In-all-fairness-perceptions-of-climate-policies-and-the-green-transition-in-the-Nordic-Region.pdf (nordregio.org)

United Nations (UN) (2015). Paris agreement. https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf

United Nations Development Programme (UNDP) (2022). Climate promise: What is just transition and why is it important? https://climatepromise.undp.org/news-and-stories/what-just-transition-and-why-it-important

United Nations Development Programme (UNDP) (2022). How just transition can help deliver the Paris agreement. How Just Transition Can Help Deliver the Paris Agreement. How Just Transition Can Help Deliver the Paris Agreement | United Nations Development Programme (undp.org)

Vandeplas, A., Vanyolos, I., Mauro, V. and Vogel, L. (2022). The Possible Implications of the Green Transition for the EU Labour Market. Discussion paper 176, December 2022. European Economy Discussion Papers. European Commission. The Possible Implications of the Green Transition for the Labour Market (europa.eu)

About this publication

Embracing the just green transition on the Nordic labour market

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This report sets out to provide some background and inspiration for the discussions during the "Green Transition on the Nordic Labour market: A Nordic Tripartite Dialogue". It provides basic knowledge about the green transition and how it impacts the Nordic countries. It also discusses how a just green transition can be tackled and shares best practice examples from around the Nordic countries.

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