



A SOCIALLY SUSTAINABLE GREEN TRANSITION IN THE NORDIC REGION

An analysis of the inequality-creating effects of the green transition and the opportunities to promote a socially sustainable green transition



Nordic Council
of Ministers

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Introduction

The Nordic countries have committed themselves to ambitious work to ensure sustainable development through Agenda 2030 and the 17 Sustainable Development Goals (SDGs), as well as to combating climate change through the Paris Agreement. Each country also has ambitious goals for sustainability, the environment and the climate at national level. This is the basis for the Nordic prime ministers adopting *Our Vision 2030*, which is a common future plan for the Nordic region to become the world's most sustainable and integrated region by 2030. The green transition is an integral part of this plan, which will be achieved through the three strategic priorities: a green, competitive and socially sustainable Nordic region. The Nordic region's prime ministers have therefore emphasised that the green transition must be implemented in a socially sustainable manner. But what does this mean in practice?

It is not possible to achieve the ambitious environmental and climate goals without radical changes to the Nordic societies. There will be interventions that affect a number of regions, industries and population groups. Some industries and workers must prepare for a major change, while at the same time the general population must also prepare to change its consumer habits or, alternatively, to pay more for certain products. If the green transition is not carefully planned, a breeding ground for global warming and climate change sceptic protest movements may be created, or there may be a risk of support for the transition in general being reduced.

This report presents the results of an analysis of the links between the green transition and social sustainability in the Nordic countries. The analysis examines what a socially sustainable green transition means in practice, and on that basis makes a number of recommendations to the Nordic countries. The report is based on interviews with authorities, researchers, trade organisations and trade unions, as well as a number of civil society organisations in all the Nordic countries and autonomous areas. We also use a review of relevant literature and an analysis of a number of selected social media debates as a starting point.

The analysis examines the following:

- Where is there a risk of the green transition resulting in greater social inequality?
- How will the green transition affect the different regions, industries and population groups of society?
- How can policies and initiatives be designed in the future to promote a socially sustainable green transition?

We have both gathered knowledge from existing initiatives and brought this to the ongoing debate in the Nordic countries on how social sustainability is integrated into the green transition. The aim of the report is to provide an understanding of the potential impact of this transition on social and economic equality in the Nordic countries, as well as of the tools that can be used to mitigate inequality-creating side effects.

In the following sections, we briefly explain key concepts and the data collection. The analysis is based on desk research, interviews and an analysis of social media debates. This is followed by a review of the green transition policy instruments and tools in the next chapter. The chapter is divided into sections so that a description of the specific policy area follows a review of both the potential inequality effects and the proposals for mitigation measures that the interviewees have pointed out. In the last chapter, we draw conclusions from across the analysis and make a number of recommendations for the Nordic countries' continued work on ensuring a socially sustainable green transition.

Social sustainability and inequality

The Nordic countries are facing a comprehensive green transition, which will both address climate change and try to counter the biodiversity crisis. But at the same time, we as a society must take into account the effects of the transition on people's living and working conditions. In other words, the challenge is to ensure that the transition is not only green, but at the same time socially sustainable (or fair and just).

It is therefore a matter of implementing a structural transition into a green society in which regions, businesses and marginalised population groups are not lost in the socioeconomic development. To achieve this, the Nordic societies must be aware of the inequality-creating effects that the green transition can have, while also introducing measures that reach out to the affected groups. A socially sustainable green transition is thus strongly linked to Agenda 2030's basic principle that no one should be lost in the development (*"leaving no one behind"*).

The analysis is based on a basic assumption that in the Nordic welfare states there is a correlation between equality and social sustainability, and that excessive inequality in personal opportunities and finances will be a challenge to social cohesion. There are many different views on inequality, but the starting point of this analysis is that the majority of the population in the Nordic countries support societal development and policies – especially distribution policies – that maintain the current situation, i.e. on the whole inequality is lower than it is in the rest of the world. This means that the negative effects of the green transition must be distributed fairly evenly in society. The latter forms the core of this study, in which we look at the effects of the policy tools in the green transition on various social groups as well as potential measures to mitigate these effects.

In the analysis, we work with social inequality in three dimensions:

THE SOCIOECONOMIC DIMENSION

The analysis of the socioeconomic dimension reveals how the green transition affects Nordic citizens' opportunities, personal finances and consumption opportunities differently, depending on their socioeconomic position, i.e. in terms of their health, education, income and working lives.

THE CULTURAL DIMENSION

The analysis of cultural inequality reveals how the green transition affects citizens' ability to be a participating and respected part of society, including having the opportunity to express their identity and live in the way that they want to. Cultural inequality must therefore be understood broadly and include, among other things, the consideration that a green transition must not lead to increased polarisation between social groups, genders and generations.

THE GEOGRAPHICAL DIMENSION

The analysis of the geographical dimension reveals how the green transition affects geographical inequality in the Nordic countries and their regions, as well as between rural and urban areas, including how people in different geographical areas experience being a real, participating and respected part of society.

It is an important premise for the analysis that the three dimensions of inequality are connected, but also important separately.

Data basis

The analysis and data collection were carried out in the spring of 2020 by Oxford Research and Lauritzen Consulting. The following sources were used for the analysis:

- Desk research of existing knowledge and material on measures and policies.
- Interviews with relevant authorities, researchers and stakeholders from the Nordic countries and autonomous areas.
- Discourse analysis of the Nordic citizens' concerns about growing inequality in connection with the green transition of society.

Desk research

Desk research was carried out in all the Nordic countries both initially and on an ongoing basis during the analysis with a view to collecting existing knowledge in the field and elaborating on and seeking out themes from the interviews. Insights from the literature review were included as background knowledge for the preparation of interview guides, and as a knowledge base for the final design of the report.

Interviews

In connection with the study, we conducted a total of 58 interviews with people from public authorities, academia and interest groups. The objective of the interviews is to shed light on what a socially sustainable green transition means for the Nordic countries, autonomous areas and selected social groups, as well as which policies have been initiated, are in the pipeline or are being debated. The interviewees consist of civil servants and researchers, as well as representatives of NGOs, trade unions, employers' associations and green organisations from across the Nordic region (see the appendix for a list of the organisations represented).

The interviews and thus the report are characterised by the fact that the subject field is future societal development. It is thus typically the interest groups that are most clear in their concerns and proposals for mitigation measures. Conversely, researchers and civil servants predominantly focus on the larger contexts and are more cautious about commenting on the specific policy tools that are on the drawing board.

Discourse analysis

An independent discourse analysis of social media debates has been carried out with the aim of investigating the concerns of ordinary citizens about increased inequality as a result of the green transition. This is not a representative survey that can determine the prevalence of these concerns, but a qualitative analysis that highlights the various nuances that can be difficult to identify in interviews with professionals (politicians, researchers, interest groups). The study reveals, among other things, how citizens' attitudes are reflected in climate action debates. The results of the discourse analysis are regularly included in the study to support or refine other findings.

As pointed out above, the analysis does not say anything about how widespread the

concerns are. The examples mentioned have been selected as the most typical among people who, for various reasons, are sceptical of a green transition, and thus serve to shed light on the objections that exist at citizen level. However, it must be stressed that many posts on social media, on the other hand, support the green transition and/or show concern that it is not going far or fast enough. These voices are not included in the analysis, as its purpose is solely to investigate the fear of inequality-creating effects caused by the green transition.



Photo: Mats Bjerde / Norden.org

The green transition's impact on social sustainability

The Nordic countries have adopted ambitious goals to implement a green transition in the coming decades. Generally speaking, it is about ensuring a transition to a sustainable production and consumption system. To achieve these ambitious goals, the Nordic countries must use a wide range of policy tools. These tools will affect citizens and companies in society, and thus also socioeconomic, cultural and geographic inequality.

This chapter is divided according to the various policy tools that will affect this inequality:

- Climate change taxes on production
- Environmental regulation of production
- Taxes on and subsidies for consumption
- Phasing out fossil fuels
- Location of green infrastructure
- Industrial development, innovation, research and training

As described in the introduction, the data basis for the analysis is a large number of interviews with important stakeholders affected by the green transition, as well as players who, through research, deal with the impact of the transition on society, including authorities, researchers and interest groups. The interviews are supplemented with desk research and an analysis of social media debates.

Climate change taxes on production

The most important tools that are already in use in the Nordic region and that will from now on be used in the green transition include taxes on emissions of carbon dioxide (CO₂) and other greenhouse gases (for example methane and nitrous oxide). A number of industries are already covered by the EU Emissions Trading System (ETS) of CO₂ allowances, just as some of the Nordic countries have already introduced a tax on companies' emissions of CO₂.

In several of the countries, there is a discussion in the current debate about how and to what extent a tax system based on "the polluter pays" principle should be a greater element in the green transition than thus far. Part of the debates is the different models of carbon taxes on companies' greenhouse gas emissions. This may, for example, be a tax that increases in parallel with an expected technological development and thus provides a growing economic incentive for transition. It is a dominant view among climate experts and economists in all the Nordic countries that increasing carbon taxes will to some extent be a necessary part of the green measures if the climate targets are to be met. They think that the tax should in principle be at the same level regardless of where the emission comes from, and that it should be introduced quickly and gradually increase, so that it ends up at a significantly higher level than today.

The expected green effect of carbon taxes (or CO₂ allowances) is that companies will be encouraged to change their energy consumption so that the use of carbon dioxide-intensive fuels is reduced, or energy-saving methods will be used to a greater extent than thus far. The companies will thus also be motivated to introduce and possibly develop new technologies, production methods and business models that save energy. In this way, it will to a greater extent be market forces that drive the green transition.

Of course, the burden of climate change taxes will primarily fall on companies. Nevertheless, these may have a major impact on the inequality between individuals and groups of individuals, as companies will pass on the part of the tax burden that they cannot avoid through technological change to consumers or their employees. The impact on consumers comes in the form of higher prices and, for workers, in the form of lower wages – or smaller pay rises than they would otherwise have received. A more far-reaching consequence for workers may be the shutdown of production and job losses. Here, there is particular concern among the players that in some cases this will be so widespread that it will be difficult for those who have been made redundant to find new jobs.

Inequality-creating effects of climate change taxes on production

The analysis indicates that a broad tax on production's CO₂ emissions could have an inequality-creating effect. Ministries and employees' organisations in the Nordic countries are also very aware that the introduction of carbon taxes can be costly for companies. As mentioned, as well as potentially costing owners and shareholders a

lot more, they could also cost workers their jobs.

If the Nordic region introduces a broad carbon tax before the rest of the world, some Nordic companies will find that they are less competitive on an international scale. A more far-reaching consequence may be that Nordic companies with high energy consumption have to close down, or that they move to less climate-ambitious countries in or outside of the EU. A development of this nature will affect Nordic production and exports, lead to job losses and have an adverse effect on socioeconomic equality in the Nordic region.

However, some of the employers' organisations that were interviewed point out that the impact of the taxes on equality will be less than the inequality-creating effects of a number of other factors that have affected companies in recent years. These include, for example, globalisation and national tax reforms. However, these factors have had a different impact in the Nordic countries and across different sectors.

A potential consequence is large job losses, especially in heavy industry and in agriculture. The jobs that are at risk of disappearing are today largely held by unskilled or low-skilled groups.¹

In addition, a large part of agricultural and food production takes place in rural areas and other areas outside of the largest cities. This also applies to most of the heavier, more energy-intensive industry. It is therefore likely that a large proportion of the jobs lost in the green transition will be those in non-urbanised areas. Thus, there is also a risk of a negative impact on *geographical* equality if the jobs lost are not replaced by new ones in the same areas. There is also a risk of greater *cultural* inequality; namely, some social groups finding themselves with skills and qualifications that are no longer in demand.

However, some interviewees point out that in the long term it is possible that such job losses – which will largely consist of a relocation of jobs to other, less climate-ambitious countries – will not reduce overall employment in the Nordic region, as new labour needs will arise elsewhere in the economy. This may be in companies with low energy consumption or, for example, in the service or tourism sector. This may also be in companies that are a direct part of the green transition, including producers of renewable energy and new green technologies. It is therefore difficult to predict the net effect of the green transition on total employment in rural and urban areas. In any case, it is a point meriting special attention that is flagged up by authorities, companies and workers alike.

There is certainly no guarantee that the transition will go quickly or smoothly. Nor is there any guarantee that the new jobs will be created in the same regions and involve the same type of labour as the jobs that disappear. The main socioeconomic inequality effect resulting from carbon taxes must therefore be expected to be that certain labour market groups will find it more difficult than others to maintain a high level of employment.

1. This relationship is examined in more detail later in the chapter.



Many of the cheapest, untapped opportunities for reducing CO₂ emissions are found in industry. So you could just get started here without it costing vulnerable groups a lot. However, it's also clear that we must not chase industry out of the country, so there is a balance that has to be struck

Brian Vad Mathiesen – professor of energy planning at Aalborg University

Mitigation measures

There are already examples of how to attempt to mitigate the undesirable side effects of a carbon tax:

In Denmark, 13 sector-specific climate partnerships have been set up. These are partnerships between companies and trade organisations that have been tasked with drawing up a plan to achieve the agreed reductions in CO₂-emissions in their sectors. The aim is to ensure the companies' input into how the industrial sector can implement a green transition that has as small a negative impact on the companies' conditions as possible (including by safeguarding Danish jobs and Danish production).² Together, the 13 partnerships have made 365 recommendations. However, the recommendations have been criticised for being based on a high level of government subsidy funding for various initiatives, whereas almost no sectors suggest taxes as a tool.

At European level, the EU Carbon Leakage List gives a number of European companies free allowances from the Union's allocation system, ETS, corresponding to a high proportion of their historical emissions. However, the allowances are gradually reduced over time. They are allocated to companies in sectors that are considered to be particularly competitive and where there is thought to be a significant risk of moving production to countries outside of the EU. Such relocation would be undesirable, partly because it would mean the EU losing jobs and production, and partly because it may ultimately lead to an increase in the company's total emissions if the move is to a country with less stringent environmental and climate requirements.³ The measure must therefore ensure that EU citizens do not lose jobs and that growth and production are kept in the EU. However, this type of measure has been criticised for allowing the energy-intensive sectors to do nothing, even though their green transition in the long term will be crucial for meeting climate targets.

In the EU, the Commission and the member states have also agreed to set up the "European Just Transition Fund" as part of the European Green Deal. The foundation will give financial support to the industries that find it most difficult to meet the climate goals.

In addition to existing measures and policies, the analysis also points to a number of

2. <https://kefm.dk/klima-og-vejtr/regeringens-klimapartnerskaber-og-groent-erhvervsforum/>
3. https://ec.europa.eu/clima/policies/ets/allowances/leakage_en

new measures and focus areas that can ensure that the introduction of a higher carbon tax only costs jobs and production to a lesser extent. An overarching point meriting special attention is that organisations, ministries and researchers emphasise that the transition must take place in dialogue and cooperation with companies. It is the employees' organisations in particular that emphasise the importance of companies and their employees helping to identify challenges and solutions in the sectors concerned. This is already happening to a certain extent (see the example of the climate partnerships above), but is being requested on a larger scale across the Nordic region and with greater involvement from both employers and employees at company level.

Furthermore, it is pointed out that special schemes for the most energy-intensive and emitting companies, such as heavy industry and agriculture, must be considered if a broad carbon tax is introduced. Several people mention the possibility of a basic allowance for this type of company. They could be taxed at a lower rate than companies having an easier time of the transition, with an embedded requirement that they use the best available technologies on an ongoing basis to reduce their energy consumption and emissions.

Several of the interviewees in the analysis stress that neither engagement nor a basic allowance can prevent certain energy-intensive industries from disappearing or being changed to such an extent that jobs will be lost. As previously described, some of the interviewees pointed out that new jobs are likely to emerge at the same time. However, this is of no use if they do not match the skills of the unemployed. Many unskilled and low-skilled workers specialise in a single type of work or job function. This is why, not least from an employee perspective, attention is drawn to the importance of focusing on what new skills are needed in the workforce and how to support continuing vocational training for workers whose job functions may disappear. Education and industrial policy is therefore both a key driver in the green transition and one of the solutions for ensuring a socially sustainable green transition (see "Investment in and location of green infrastructure").

In addition to this type of mitigation measure, the possibility of initiatives that compensate for increasing consumer prices for citizens is mentioned. These are discussed in section "Industrial development, innovation, research and education".

Environmental regulation of production

In addition to carbon taxes and similar approaches, companies and industry as a whole are also affected by other forms of environmental and climate regulation. This is regulation that aims, among other things, to reduce the use of chemicals that are harmful to the environment or health, or to promote biodiversity. This is a regulatory area that is less new, but that will still play a role in the green transition. Examples of environmental and climate regulation include bans on emissions of particular greenhouse gases, measures against air pollution, measures to limit industrial packaging consumption, and therefore the generation of waste, and measures to restrict the use of disposable plastics. This list is obviously not exhaustive and covers many different types of activities. Below, we will use examples from the analysis to show how environmental regulation affects socioeconomic,

cultural and geographical equality.

Inequality-creating effects of environmental regulation of companies and industries

Generally speaking, it is the view of several of the trade organisations that all the measures mentioned above are an expression of an environmental policy that is international (i.e. has significant commonalities between EU countries) and that has been gradually, and in a consistent manner, implemented in recent decades. This means that Nordic companies are only to a limited extent more heavily burdened than their competitors in other EU and EEA countries, and that it is therefore not a question of some extra job losses as a result of the environmental requirements. On the contrary, a number of Nordic companies have specialised in environmentally friendly production in a number of areas and have been able to market themselves globally as being green and sustainable.

However, several interviewees also mention that the Nordic region taking the lead and implementing stricter environmental and climate regulation than other regions has a negative impact on international competitiveness. Stricter environmental regulation of industrial production will make it more expensive to produce goods in the Nordic countries. The analysis of social media debates shows that there is also a fear among the Nordic populations that such strict regulation could have a severe impact on local jobs. This fear is seen across the countries.

One of the sectors that will be particularly affected by environmental regulation is agriculture. Many of the requirements for biodiversity and its regulation make farming more difficult and expensive. If the environmental regulation requires a shift to other types of farming (perhaps to organic farming or crop cultivation), the study indicates that funding will be needed to get the farmers on board. The shift may also result in a need for new skills and in some cases – for example when switching to organic farming – for more workers than before.

Agricultural organisations (as well as representatives from other primary industries such as fishing and forestry) express a feeling of being branded the worst culprits in both the media and research. In their view, there is a lack of understanding of what the producer's everyday looks like and a lack of recognition of the important role that food production plays in society. The same is true for a number of the heavy industrial companies.

As fishing and agriculture are already heavily environmentally regulated areas, further regulation will also have a major impact on rural areas' traditional occupations and land use. There is therefore a risk that the polarisation between environmentally and climate-conscious consumers and individuals associated with the primary occupations may be exacerbated, both between rural and urban areas and within rural areas. We also hear from some interest groups for fishing, forestry and agriculture that it sometimes seems as if decisions on new environmental, climate and biodiversity regulation are made without any understanding of how this will affect economic operators in practice. This is illustrated, for example, in the discussions in Finland concerning special protection for the barnacle goose and in

Denmark, Finland and Norway in discussions concerning the wolf. Thus there is also a risk of increased cultural inequality here.

Conversely, environmental requirements to a certain extent cause industrial production to move out of the cities, which can in some cases benefit employment in rural areas. At the same time, many of these areas have already seized the employment opportunities inherent in green technologies. In this way, the green transition also provides a range of opportunities for rural areas.

A completely different effect of environmental regulation affects those groups that actually need the products that are banned. People with disabilities may have a special need for disposable plastic aids that others consider to be a negative environmental factor. The sometimes heated debate about the use of disposable plastic has thus involved shaming certain groups, just as a ban may adversely affect people with a disability.



Photo: Unsplash.com

Mitigation measures

Most of the food industries have business and commerce committees in the Nordic parliaments and the like where the producer organisations have the opportunity to be consulted and involved in the management and regulation of their sector. It makes sense for climate goals to be on the agenda in these contexts as well.

One proposal for a different approach to the climate challenge in the primary sector is the Collective Impact method: a method that involves various stakeholders coming together to solve a specific problem by setting common goals. In agriculture, there

are examples of how diverse Collective Impact groups have used multifunctional land distribution to promote biodiversity, water quality and local communities' access to nature, while reducing greenhouse gas emissions. This has happened while the farmers themselves have been involved in identifying specific solutions together with a neutral, coordinating public sector project manager. A similar approach can be found in the Finnish cooperation and research project "Collaborative remedies for fragmented societies – facilitating the collaborative turn in environmental decision-making – CORE".⁴



We need to create a new world and revisit everything we do – and we need to make room for everyone!

Auður Önnu Magnúsdóttir – chair of Landvernd, the Icelandic Environment Association

Consumption taxes and subsidies

A green transition that achieves the different goals set by the Nordic countries will require major societal changes. Many people stress that we will not achieve these goals unless the Nordic citizens also change their behaviour. For this reason, a number of proposed policies and measures have the additional aim of stimulating behavioural change through taxes on consumption that has a negative impact on the climate and/or environment.

All the Nordic countries have also already, to varying degrees, introduced subsidies or tax and duty cuts to increase the incentive to reduce energy-intensive consumption or other consumption with negative environmental effects. This type of consumption taxes will primarily affect consumers, either because they are imposed at the consumer level or because they are designed in another way so as not to weaken the competitiveness of companies. These include, for example, taxes on domestic heating, heating oil, natural gas for retail customers and district heating; tolls/road pricing; and taxes on air transport, meat or similar consumption, as well as subsidies or tax credits for energy savings and housing improvements.

In addition, an increasing number of Nordic experts, interest groups and parties are suggesting that an appropriate measure may be a flat tax on CO₂-emissions imposed at the level of consumption. The logic here is that the price of a product must also reflect the climate impact that its production entails.

There are therefore many different approaches to work with when using taxes, tax exemptions and subsidies to promote a change in private consumption. And consequently this type of measure may also have an impact on socioeconomic equality/inequality in various ways. This will be discussed below.

4. See <http://www.collaboration.fi/EN/>

Inequality-creating effects

The analysis points to a significant risk of consumption tax increasing inequalities in the Nordic region. The impact varies depending on the type of tax in question. In general, the tax burden on domestic heating, petrol and diesel is heavier for low-income families than for high-income families. In other words, a "bottom-heavy" effect. Conversely, it is also being discussed whether car registration and air travel taxes will produce a "top-heavy" effect. On the one hand, a tax exemption for electric cars will typically benefit the affluent, but on the other hand, it will also typically be the well-off who buy an expensive conventional car with a high registration tax. Similarly, affluent families who fly often will pay more air travel tax. However, some argue that in practice the latter will hit low-income families the hardest, as some of them will completely lose the opportunity to fly on holiday, while the affluent will simply reduce the number of flights they take. Several organisations point out that low-income families in outlying areas may even often need two cars so that both adults in the household can get to and from work. These families will thus be hit harder by higher registration taxes, which may affect their connection to the labour market, as well as their personal health and wellbeing.

Most trade unions and social organisations that we spoke to think that to some extent consumption taxes will always result in inequality-creating effects, as low-income families spend a higher proportion of their disposable income on consumption and not on investments and savings.

Our analysis of social media debates indicates that across the Nordic countries and autonomous areas there is a marked concern that the green transition is making everyday life more expensive for the "ordinary" citizen. In several of the countries, comments on calls for proposals and/or measures for a green transition express nervousness and frustration that such measures affect certain social groups in particular or deprive certain groups of opportunities – for example, that new or higher taxes will, to a greater extent, affect people and families who already have less money to live on than more affluent sections of the population.

In interviews and in the analysis of the debates, there is a particular concern regarding taxes/tax exemptions on conventional cars and electric cars as well as taxes on diesel and petrol. Here there is a particular risk of increasing geographical inequality between rural and urban areas. Several respondents point out that while in and close to the cities there are relatively good networks of charging points, it is in practice more difficult to switch to electric cars in rural areas, especially in the Nordic countries where distances can be great. There is also better access to public transport in the cities. Higher taxes on private motoring may jeopardise the rural population's ability to get to work, take part in leisure activities or pursue occupations where transport is key. In the northernmost regions, this problem also applies to types of farming where snowmobiles or aircraft are necessary for mobility. In addition, some groups, such as those with disabilities who already have mobility issues, may be even worse off because of such a development.

The above are factors that are important to keep in mind when discussing a change in private transport, which, all other things being equal, is more difficult and unrealistic in some rural areas. The debate on taxes (including tolls) on conventional cars and tax exemptions on electric cars is huge in Norway, for example, where the

experience of a socially and geographically unequal policy has led to heated debates and the founding of a new protest party:

Since the 1980s, road pricing or tolls have become an increasingly widespread phenomenon in Norway, partly due to an increase in the volume of traffic and partly due to a greater need for infrastructure investments. In 1990, the toll ring was introduced in Oslo, and over time it has become free to drive through the ring in zero-emission vehicles, while emitting vehicles pay a fee of NOK 50. In connection with the ever-increasing spread of tolls, there has been a debate about whether it has a social and geographical bias. The newly formed party "People's Action No to More Road Tolls" is fighting to abolish tolls. The party believes that the charges are anti-social, unfair and random. This example illustrates how a lack of popular support for green initiatives may lead to a political mobilisation that could, to varying degrees, counteract a green transition of Nordic societies in the longer term.

Citizens have more than just personal financial concerns when it comes to consumption taxes and tax exemptions. The analysis suggests that, for some, this type of policy can be intimidating. On social media, posts say that politicians, with their involvement in purchasing and consumer choices, are crossing the line into the private sphere and personal freedom.

This is a discussion that is also known from, for example, debates on excise duties such as air travel tax, meat tax and similar measures that regulate private consumption. The discussions are often very polarised and concern the state's ideas of which consumption is "right" and "wrong". This makes it clear that consumption is a strong identity marker – it is not just about economics and reshaping habits; the taxes also affect citizens' ability to express themselves through their consumption. Many people associate the green transition with restrictions in this respect. With this in mind, it is worth remembering that, until recently, the Nordic welfare societies were largely built around the tax-paying industrial worker who, as a reward for the day's toil, was encouraged to indulge themselves and consume in whatever way they wanted in their spare time. This is why the green transition also involves some cultural battles that take place around the relationship to consumption, and which may affect cultural equality.

Consumption taxes and subsidies can therefore affect economic, cultural and geographical sustainability in several ways, unless the undesirable side effects are being countered effectively.



Photo: Unsplash.com

Mitigation measure

Mitigating the inequality-creating side effects of taxes and subsidies is something that virtually all of the analysis' interviewees are aware of, even though there are only a few examples of existing initiatives. This is probably due to the fact that consumption-oriented measures have a very direct effect on citizens' personal finances. There is therefore also a debate on how best to address undesirable side effects. One idea that the various proposals share is the idea of redistributing the tax revenue so that low-income families get money back.

One framework that is highlighted by several interviewees is the "carbon fee and

dividend" model. Here, a broad carbon tax on consumption is counterbalanced by a tax-free subsidy. Not surprisingly, there is disagreement about the scope of the subsidy: Should all tax revenue be redistributed? Or should it only be part of it, while the remainder is used for research or other transition, perhaps? It could also be included as state revenue and used for, among other things, tax relief or welfare.

In Denmark, the "green cheque" is an example of how to compensate for higher taxes as part of the green transition. Despite the name, it is an income tax rebate that you receive if you have a low income. The full rebate is received by those whose incomes are below a given lower limit and it decreases as people's income increases.

In the public debate, there is often a focus on the inequality-creating effects of individual tax measures. However, several of the interviewees stress that we should not focus on how each individual tax, tax exemption or subsidy affects equality. Instead, we should look at the overall tax burden as a result of the green transition and assess the cumulative effect on this basis. Then adjustments can be made at an overall level.

For mobility challenges in rural areas in particular, the possibility of a transitional period with differentiated tax on fuels such as petrol and diesel is also indicated for areas where the necessary infrastructure for fossil-free motoring is not yet in place and a transition is therefore less realistic for private individuals.

Phasing out fossil fuels

A key focal point of the green transition is the phasing out of fossil fuels. For several of the Nordic countries, this is a key pledge. In Norway, the ambition is to ban petrol and diesel vehicles as early as 2030,⁵ while from 2029 Finland will ban coal in energy production.⁶ Iceland and Denmark aim to be completely fossil-free by 2050,⁷ while Sweden is in the process of investigating when the country can realistically have phased out the use of fossil fuels and the sale of petrol and diesel cars.⁸ Overall, all the Nordic countries have ambitious targets for reducing CO₂-emissions, which in practice will mean phasing out fossil fuels completely or in part, although such phasing out has not necessarily been adopted as a strategy (given the technologies we have today). Phasing out also affects the industries engaged in the extraction of oil, natural gas and peat, or that manufacture and service combustion engines. In some of the countries, these are industries of national or great local importance. In practice, phasing out can take place through a number of policy tools, such as higher taxes and duties or outright bans.

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5. Find out more at <https://www.tnp.no/norway/panorama/5215-norway-to-get-rid-of-petrol-and-diesel-cars-by-2030#:~:text=Labor%20Party%20wants%20Norwegian%20roads,emission%2Dfree%2C%20writes%20NTB>
 6. Find out more at <https://uk.reuters.com/article/finland-energy-coal/finland-approves-ban-on-coal-for-energy-use-from-2029-idUKL5N20N6QV>
 7. For example, visit <https://ens.dk/ansvarsomraader/energi-klimapolitik/fakta-om-dansk-energi-klimapolitik/dansk-klimapolitik> and https://icelandmonitor.mbl.is/news/politics_and_society/2018/09/10/environment_icelandic_government_plans_to_abolish_f/#:~:text=The%20Icelandic%20government%20has%20a,banned%20in%20the%20year%202030
 8. Find out more at <https://www.regeringen.se/rattsliga-dokument/kommittedirektiv/2019/12/dir.-2019106/>

Inequality-creating effects of phasing out fossil fuels

A particular geographical inequality risk exists in cities and regions where there is currently extensive industry that works directly and indirectly with fossil fuels, including oil extraction. Norway has a substantial oil industry, a large part of which is located in and around Stavanger, while the subcontractor ecosystem is spread across most of the country. In Denmark, Esbjerg is the centre of the Danish offshore and oil industry. Peat extraction is of great local importance in several places in Finland, but is also a significant source of CO₂-emissions.⁹ Phasing out the extraction and use of peat will affect both these regions and the companies and subcontractors involved. While sections of the population are pushing for a ban on peat, there is strong opposition among other social groups, as peat is an important source of energy and heat. In response to this challenge, the Finnish Government has set up a broad-based working group to make proposals on how peat can be used in other products and how a partial phase-out should be tackled.¹⁰

All other things being equal, a phase-out will mean that a large group of workers and their families will lose their livelihoods. Although this is a diverse group, researchers and trade unions state that low-skilled workers in particular will find it difficult to adapt to other occupations. This is because their skills are often linked to the work object and they have not received any formal skills development training. In addition, they do not have the same tradition of continuing vocational training as the highly educated. Similar problems may arise for the professional groups that primarily work with the manufacture or service of combustion engines.

Similarly, in the extractive industries, there is a group of workers whose qualifications and identity are to a great extent linked to the extraction of fossil fuels (typically oil workers). There is a risk that this group of workers will be branded as part of the problem. The way in which this type of industry is referred to in public debate may thus potentially increase the polarisation in society and result in less support for the green transition in certain groups. In a recent campaign in Norway, workers in the oil industry added the text "Proud oil worker" to their Facebook profile pictures.

It is also mentioned that despite the optimism and announcements of the many new opportunities in green technologies and renewable energies, the experience locally is that the contracts "go to foreign companies". This plays a role in making alienation towards the green transition a shared social concern.

In connection with the phasing out of fossil fuels, in sparsely populated areas there may also be problems in creating an economic basis for investing in new electric buses or fossil-free ferries, which will often be more expensive to procure and operate. This is a geographical inequality mentioned by representatives of rural municipalities and rural organisations.

9. Find out more at <https://svenska.yle.fi/artikel/2020/08/01/regeringen-hemsoks-av-torvspoket-grona-beslutsfattare-ar-redo-att-lamna>

10. Find out more at https://valtioneuvosto.fi/-/1410877/laaja-alainen-tyoryhma-selvittaa-turpeen-kayton-nakymia?languageId=sv_SE



Photo: Unsplash.com

Mitigation measures

The analysis has previously touched on how the phasing out of certain occupations and the change in job supply from so-called "black" to "green" jobs creates a great need for active and targeted work on retraining and industrial policy. The retraining must enable workers to see and seize new career opportunities, while industrial policy must prepare the ground for the development of alternative employment opportunities and specialisations in the affected areas. The green transition can thus potentially create new sectors built around new technologies, such as the so-called CCS (carbon capture and storage) and CCU (carbon capture and utilisation) technologies. Such new sectors may take on a number of the workers who were

previously engaged in oil or peat extraction. However, based on the data, the analysis cannot indicate a direct path from the black to the green jobs, although this is an issue that the workers' organisations in particular have a strong focus on.

Investment in and location of green infrastructure

Traffic and infrastructure policies play a major role in the green transition and affect inequality and living conditions for the entire population. The policies include both capacity investments – wind turbines, hydropower plants, solar cells, roads, railways, ports and airports – as well as conditions and prices for public transport. Measures and initiatives in these policy areas help to establish important framework conditions for social and industrial development and may at the same time – intentionally or unintentionally – influence socioeconomic, cultural and geographical equality.

Inequality-creating effects of new, green infrastructure

In several of the Nordic countries, the location of large onshore and offshore wind turbines, solar cells or hydropower plants has resulted in heated debate. It is a complex discussion involving economics, health, landscape values and cultural affiliation. If you live in a scenic area, the construction of onshore wind turbines in the neighbouring field or on the horizon as seen from your holiday home may lower the property's amenity value. The same applies if your new neighbour is a hydropower plant in the river that runs close to the ground. A reduction in the amenity value, possibly combined with noise and shadow nuisance, will of course also reduce the property's market value. In addition, several of the interviewees point out that both light and sound nuisance from onshore wind turbines can have an adverse effect on health over a longer period of time (although this has not been unequivocally proven in the research).¹¹ Last but not least, you can have such a strong sense of attachment to your place of residence that moving might not seem like an option. It may also seem to those living in rural areas that they have to foot a disproportionately large part of the "bill" for the green transition.

There have been discussions in Norway for the past 60 years over whether the Sámi people should receive state compensation for expropriations for infrastructure and energy development. The issue encompasses not only the issue of financial compensation, but also the preservation of living cultural history and the general rights of minorities. In the 1960s, dams and hydropower plants were built, including in the Alta-Kautokeino watercourse, which led to demonstrations as the projects threatened reindeer herding in the area.¹² Road construction has also led to increased human activity near significant grazing areas, making reindeer husbandry difficult. At the heart of the conflict is the fact that the Sámi people are burdened by infrastructure in which they are not themselves interested, while at the same time

11. For example, visit <https://sum.dk/Aktuelt/Nyheder/Forskning/2019/Marts/Vindmoelle-stoej-og-helbred.aspx>

12. Kultur och språk: rapport från Nordisk Lektorkonferens i Bonn [Culture and language: report from the Nordic Associate Professor Conference in Bonn], Heiko Uecker 1996.

foreign companies are being subsidised to establish themselves in areas with which the Sámi have a historic attachment. These infrastructural developments have consequences for the Sámi people's way of life as well as for their values and cultural practice.

It can be argued that this is not an issue that is specifically linked to the green transition, but that the construction of new roads, the development of industrial areas, etc. has always affected the areas in which they have been planned. Nevertheless, it is something that features in the debate, both on social media and in the interview material, and which contributes to the overall experience of the green transition and serves as a breeding ground for popular scepticism.



Photo: unsplash.com

Mitigation measures

The analysis underlines the importance of taking local citizens into account when planning new, green infrastructure. This may be especially true as regards the indigenous people, who have a historical and cultural connection to the affected areas. The interest groups in particular stress the importance of a participative process in terms of the location of the new infrastructure. Here, local meetings are highlighted as an approach that allows citizens and local authorities to be heard. Involvement often comes too late in the process. On the whole, this part of the analysis shows that physical planning must become a more uniform and active tool in the green transition. Planning is currently characterised by the different municipal approaches, and many necessary infrastructure projects at national level come to a standstill at local level.

Attempts have been made in several of the Nordic countries to mitigate the economic consequences of the construction of green infrastructure. A new initiative in Denmark will ensure that citizens and municipalities have better conditions and rights when new wind turbines and solar cells are erected. In November 2019, three schemes were established for expropriation, tax-free dividends and municipal subsidies for new neighbours to solar cells and wind turbines. The initiative will safeguard the rights of residents, especially in rural areas, who are at risk of harmful noise and light nuisance as well as lower property values. In Sweden, legislation from 2017 requires new hydropower projects to be tested against environmental requirements and take into account local cultural conditions – including the cultural value of former dams and power plants, something that the Swedish Society for Nature Conservation has pushed for in particular.

Industrial development, innovation, research and education

In addition to the direct regulation and taxation of companies and consumers, there are a number of policy areas that will play a prominent role in the green transition. Regional and industrial policy – broadly understood to be innovation, education and research policy as well – is key. In that sense, these fields contribute in various ways to the green transition:

- Regional policy, which can generally aim to support new conditions for growth with initiatives in the most affected areas and/or otherwise compensate for the effects of the green transition at regional level.
- Industrial and innovation policy aims, among other things, to create good growth conditions for entrepreneurs and companies that can, for example, create new "green" technologies and jobs.
- Industrial policy and financial regulation aim to create capital markets for companies at all levels of growth, from pre-seed and seed, to scaling and international expansion – for example in the green sector.
- Research policy and collaboration between universities, knowledge organisations and the industrial sector provide fertile ground for the companies

of the future and for innovation.

- Labour market and education policy aims to create a workforce that can, among other things, meet the needs of companies and the public sector for a competent workforce, now and in the future. Including retraining.

This analysis involves measures that have long-term effects and that help in the long run to reduce inequalities rather than increase them. The general picture among the players that have been concerned about these policy areas has therefore also been that all these policy buttons need to be pushed in the coming decades to achieve the goals of the green transition and create a basis for new jobs – partly in companies that can directly contribute to the transition, and partly in other companies that can offer jobs to replace the jobs that disappear.

In general, these problems and the solutions to them align with the increased focus on regional policy that has been seen in all the Nordic countries in recent years. This focus has led to strong demands for more attention on “outlying areas”. Typically, such areas have either been supported by relocating government jobs from major cities or through tax relief and travel allowances for commuters who are resident in rural municipalities. Another example is the deliberate location of educational institutions, including those for both vocational and higher education, in all regions of the individual countries.



Benjamin Suomela / Norden.org

Inequality-creating effects of regional policy, industrial development, innovation, research and education as initiatives in the green transition

In general, the assessment of both trade unions and trade organisations is that active policy in the above areas is an absolutely essential tool, both for achieving the goals of the green transition and for mitigating the inequality-creating effects of other measures (e.g. job losses due to high taxes).

However, the interviewees have expressed concerns related to the effects of industrial policy. One relates to the participation of small and medium-sized

enterprises (SMEs), while the other relates to access to continuing training. These are two existing challenges that may be exacerbated by the green transition. Finally, the high political prioritisation of the green transition, as previously mentioned, creates nervousness among citizens, which can be experienced in social media discussions, among other forums. The three concerns are discussed below.

SME participation in innovation and development

In most Nordic countries, it is a pre-existing challenge to reach out to SMEs when it comes to industrial development and innovation programmes. This is generally a two-fold problem, since the development and innovation programmes often require a lot of resources and/or the participation of universities, and are carried out on a scale that does not promote the participation of SMEs. Innovation funds and programmes may therefore appear closed or too big to the smallest companies. At the same time, SMEs typically have few resources for development work and, on average, fewer highly educated employees, and are therefore perceived from the opposite perspective as uninterested in development programmes.

Concerns about opportunities and access to continuing training

As already described, retraining the workers who lose their livelihoods as individual occupations are phased out or changed is a key part of the green transition. In this context, several parties express concern as to whether the continuing training initiatives can reach the groups that need them most. The concern is that low-skilled workers use continuing training to a lesser extent and have less opportunity to stop working for training purposes. Failure to address these challenges could shut groups of workers out of the labour market altogether.

Citizens' concerns about the consequences of the transition for the welfare state

The Nordic countries and autonomous areas are firmly established welfare states, so it is unsurprising that in the analysis of social media debates it is a broad concern as to whether extensive investments in industrial policy to promote the green transition may have an adverse effect on the welfare level. This applies in relation to both schools and road networks, and perhaps particularly to the welfare states' ability to help vulnerable groups such as the elderly and people with disabilities. The concern may be exacerbated by the current situation, where inequality in the Nordic countries is generally growing.

Furthermore, the climate, environment and biodiversity areas are very knowledge-intensive, something which is also clear from the comments made on social media. Many people are contributing alternative proposals for the green transition that in their view will have a greater effect than the proposed one, while others claim that the proposed one will have a direct adverse effect on the climate, the environment or biodiversity.

The analysis paints a picture of many citizens being particularly aware of the price of the green transition and therefore being concerned that the money is being invested incorrectly. This is a group that does not necessarily disagree with the prioritisation of funds for a green transition, but that is concerned about whether the political decisions being made are the right ones when it comes to achieving the goal.

Mitigation measures

Regional and industrial policy (including innovation, research and education) is being used as tools in the green transition and at the same time as mitigation measures. Many people consider the active regional and education policy to be necessary for the lost jobs in conventional industries to be replaced by new ones. From the trade union side, it is argued that there will be a need for initiatives to guide those who risk losing their jobs along the right training or career paths, as this is a target group that is typically not very interested in continuing training.

However, no specific proposals from organisations and trade unions were mentioned in our interviews. In our opinion, this is because the way in which industrial policy measures affect society can be extremely complex and unfold over very long periods of time, while a number of other factors also come into play. In our view, however, it often makes better socioeconomic sense to use offensive industrial and innovation policy measures to create new jobs rather than to directly compensate industries and workers.

The consequences of the green transition for the ordinary citizen

Given the far-reaching ambitions in the Nordic countries and the pressing global agenda for a green transition, it is worth considering the future effects on social sustainability. Popular opposition to tolls or wind turbines, for example, are existing signs that the green transition may face considerable scepticism among the Nordic populations. In addition, some occupational and education groups may be more severely affected by the change in energy and food production than others. At the same time, the most committed climate activists are proposing norms that may be alienating to many people.¹³ The analysis of the social media discussions reveals a number of pervasive concerns in the population:

- **The green transition affects citizens' personal finances too much:** The analysis indicates a fear that the green transition will mean a more expensive everyday life for the "ordinary" citizen. In particular, rising prices for consumption of things such as holidays, cars or meat stop poorer groups from engaging in this type of consumption, which is considered a good thing.
- **The green transition will have a negative impact on welfare:** Across the Nordic countries and autonomous areas, there is a concern as to whether major investments in a green transition will have a negative impact on the level of welfare. Some groups are already experiencing a reduction in welfare services and are therefore nervous about the amount of government money being earmarked for a green conversion instead of, for example, elderly care.

13. The purpose of the discourse analysis is to highlight different types of concerns among citizens in the Nordic countries that do not reflect positively on various initiatives in the green transition. The analysis has not been carried out as a representative mapping of concerns, but serves to highlight different types of concerns.

- **The green transition will be too hard on the industrial sector:** Across the Nordic region, there is also a fear of how climate measures in the form of taxes and duties etc. will affect the finances and competitiveness of Nordic companies – and thus also jobs.
- **Why should the state decide so much:** The analysis shows several cases of citizens being sceptical about the green transition's intervention in the private sphere, including high taxes on climate-damaging consumption, requirements for behavioural changes and injunctions in connection with which the state, according to some citizens, is encroaching on people's privacy.
- **Why not spend the money on something that works:** Across the countries, some citizens are very aware of the price of the green transition and doubt whether the money is being invested correctly.
- **Why do we need to do more than other people:** With the Nordic countries at the forefront of the green transition, some people fear an adverse impact on their own daily lives, and also doubt that the measures will have any effect on the global climate problems.

This is thus a very wide range of concerns, ranging from the impact of the green transition on citizens' personal finances, career opportunities and individual freedom of consumption, to scepticism about the way in which the green transition is implemented and designed.



Photo: Yadid Levy / Norden.org



Photo: Unsplash.com

Conclusions and recommendations

In this chapter, we present the main conclusions of the analysis on the links between the green transition and the socioeconomic, cultural and geographical inequality in society. The chapter also presents recommendations for how the Nordic countries can work to achieve a socially sustainable green transition. The purpose of the analysis was to investigate:

- Where is there a risk of the green transition resulting in greater social inequality?
- How will the green transition affect the different regions, industries and population groups of society?
- How can policies and initiatives be designed in the future to promote a socially sustainable green transition?

With this starting point, knowledge has been gathered on how green initiatives and policies could increase economic, cultural and geographical inequality in the Nordic countries and autonomous areas, and how such side effects can be mitigated, where appropriate.

The analysis shows that there is considerable support in all the Nordic populations for a green transition in the coming decades. However, it also reveals a widespread concern about how large the bill will be and how it will be distributed among different social groups. In addition, parts of the population feel that they are being neglected or not being given the opportunity to contribute to the green transition. Across the countries, there is a fear that the green transition may increase the polarisation between rural and urban areas and between different education groups that already exists.

Throughout the Nordic region, people are generally very aware of the risk that the green transition may in different ways increase inequality. However, the analysis also shows that at present there are relatively few concrete initiatives targeting the inequality-creating side effects. The ministries rely on general declarations of intent that most countries have drawn up, while the interest groups pay particular

attention to the specific tools that need to be used to ensure a socially sustainable green transition.

In the table, we have summarised the main conclusions on the inequality-creating effect of policy measures:

Potential correlations between the green transition and social sustainability

	Socioeconomic inequality	Geographical inequality	Cultural inequality
Climate change taxes on companies and industries	There is widespread agreement that carbon taxes may to a certain extent lead to the relocation of Nordic companies to other countries and thereby job losses, especially for low-skilled workers.	Carbon taxes put a particular burden on typical industries in rural and industrial areas outside of the major cities – for example, agriculture and heavy industry.	Groups in society may find themselves with skills and qualifications that are no longer recognised as important.
Environmental regulation of companies and industries	In general, environmental regulation of companies will not increase economic inequality.	Environmental regulation may move jobs out of the Nordic region, but only to a limited extent, and will also contribute to the creation of new jobs.	Risk of increasing the perception of lack of influence on the regulation that has a major impact on food production.
Phasing out fossil fuels	Particularly low-skilled workers in the sector will find it difficult to adapt to other occupations, as they rarely have formal skills.	The oil and gas industry is geographically concentrated, and in these areas there may be problems in creating new jobs to replace those that disappear.	A group of workers will find themselves with the “wrong” qualifications and become considered part of the problem.
Investment in and location of infrastructure	Infrastructure investments may lower the value of private property and affect the pursuit of certain occupations, e.g. agriculture and forestry.	Most investments support urbanisation and may therefore increase geographical inequalities.	There is a risk of infrastructure investments increasing cultural polarisation between urban and rural areas.

Regional policy, industrial development, innovation, research and education	Initiatives to promote innovation and R&D may benefit large companies more than SMES – and access to continuing training may be limited for low-skilled workers.	Access to continuing training may be more difficult in rural areas than in urban areas. If development is not ensured in the particularly affected areas, geographical inequality will increase significantly.	Fewer jobs for low-skilled workers may promote the feeling of being “outside” and increase the polarisation between high and low-skilled workers.
Consumption taxes and subsidies	Most taxes, for example on meat or air travel, have a bottom-heavy effect. At the same time, most subsidies, such as those for electric cars, go to the affluent.	More expensive transport, in the form of petrol taxes for example, hits rural areas the hardest. It is also most difficult to establish infrastructure for electric cars here, and more difficult to improve public transport.	Consumption taxes are perceived as a limitation of personal freedom and the right to make one’s own choices.

Recommendations

The analysis has dealt with the question of how to design policies and initiatives in the future so that they both promote the green transition and at the same time ensure social sustainability.

On the basis of this, we have developed five recommendations for future work on a socially sustainable green transition. Recommendations 1 to 3 resemble general principles that the analysis identifies as key. Recommendations 4 and 5 are aimed at two specific challenges which, according to the analysis, are particularly precarious. On the one hand, they concern the people and employment groups who will lose their jobs in the green transition and, on the other hand, the risk that the transition will increase the inequality between rural and urban areas. In many cases, it is a question of overlap between the two challenges.

Recommendations:

1. Strengthen the involvement of civil society, NGOs, organisations and civic groups in the planning of the green transition.
2. Monitor the overall economic inequality resulting from the green transition.
3. Create a balanced narrative around the green transition.
4. Focus on those who risk losing their jobs and livelihoods.
5. Pay particular attention to geographical inequality.

The recommendations are discussed in more detail below.

Strengthen the involvement of civil society, NGOs, organisations and civic groups in the planning of the green transition

Across the interest groups who were interviewed, the analysis shows that there is a great willingness in civil society to implement a green transition – and at the same time a great willingness to offer specific and practice-oriented knowledge of how this transition could impact on each individual group (employers, workers, industrial sectors, social groups, rural/urban areas, etc.). It also appears that lack of involvement may lead to dwindling support for the green transition. Although there is already a relatively high degree of involvement across the Nordic countries, it is repeatedly emphasised from several quarters that involvement is crucial for achieving the goals of a socially sustainable green transition, where “everyone is involved” and where there is no unnecessary increase in the polarisation between population groups.

We therefore recommend a continued and increased focus on creating participative processes where as many people as possible are heard as early as possible. This may, for example, be through the involvement of all relevant NGOs – but also through worker and citizen panels in which everyone can participate.

Monitor the overall economic inequality that results from the green transition

The survey indicates that an increase in economic inequality is a pervasive concern among the stakeholders involved. The most effective tools in the green transition are also considered to be those that could potentially have the greatest inequality-creating effects if measures are not taken to remedy this. These include, for example, carbon taxes, taxes on transport or subsidies for electric vehicles, which will affect different groups to varying degrees. However, the analysis also indicates that it is necessary to take an overall picture of the impact of the green transition on economic inequality as a starting point rather than the individual measures and policies if a fair and just redistribution is to be implemented.

In light of this, we therefore recommend continuous monitoring of the green measures' overall impact on economic inequality – and, by extension, an overall compensation. It would also make sense to let this principle imply that the social consequences of the green transition are seen in the light of how social sustainability and inequality evolve together – regardless of the causes. A strong focus on this can make an ongoing effort possible, which means that the transition problems are solved before they become extensive and noticeable.

Create a balanced narrative around the green transition

Part of the population in the Nordic countries takes a negative view of or is sceptical about the green transition, which they associate with loss of livelihood, consumption opportunities and welfare level. Many have real concerns, and not everyone can see new potential in the transition, while others focus mostly on the “first-mover advantages” that Nordic companies can get on world markets by leading the way in the development.

It does not make sense to discuss who is “right” because everyone is to some extent. But if the cultural cohesion of the Nordic societies is to be maintained, it is crucial that the authorities in the public debate make room for all these groups to contribute to a unified and balanced narrative that leaves no one with a feeling of not being heard.

On this basis, we recommend creating a positive and inclusive narrative around the green transition that recognises the groups that, all other things being equal, will be most severely affected. It is about acknowledging that some groups will be hit harder than others, and the losses and deprivation that it will cause for those groups. And which at the same time says that we in the Nordic region want to and can get everyone involved, and that the Nordic welfare model, including cooperation between the state, industry and workers, is the best model in the world for managing the transition.

Focus on those who risk losing their jobs and livelihoods

Based on the analysis, we consider some groups of low-skilled workers experiencing a marked decline in their job opportunities to be a significant risk of inequality. Agriculture and some energy-consuming industries employ a relatively high number of low-skilled workers. For some of the people who lose their jobs, there may not only be a loss of income but also of their livelihood, skills and culture in a broader sense. Their lives are strongly linked to everyday life as farmers, working with combustion engines or on oil rigs. The analysis does not indicate that the green transition will result in fewer jobs, but only jobs in other sectors (for example, new “green” jobs). It is therefore essential that work is done to lead the vulnerable group into these jobs. This effort may benefit from proactivity, for example in the form of good opportunities for continuing and further education and training throughout working life. Efforts should therefore be made to create new jobs wherever possible, as other jobs fall away, so that unemployment does not rise during the green transition.

We therefore recommend that a strong and proactive labour market and education policy be pursued, whose aims include lifelong learning and skills acquisition through continuing and further education and training at all levels. The focus should be on those groups and areas that are losing their livelihoods as a result of the green transition, including parts of the energy sector and semi-skilled workers in industry and agriculture. If the green transition is not to be alienating to these groups, a number of barriers to continuing education must be broken down before the vulnerable end up in the unemployment queue.

Have a particular focus on geographical inequality

It is our assessment that the green transition will significantly increase geographical inequality. In a number of areas, the transition will affect rural areas more than metropolitan areas. This is due to:

- A number of the occupations that will be hardest hit being mainly in rural areas (for example, agriculture and oil extraction).
- The level of education in rural areas being generally lower, while at the same time there are more elderly people living there.
- Taxes on fossil fuels negatively affecting mobility, which cannot be remedied by support for electric cars and public transport.
- There being a risk of a persistent, partly geographical “cultural divide” between climate activists and food producers.
- Physical investments in energy and infrastructure affecting rural areas more directly.
- There being a particular risk for ethnic groups such as the Sámi in the northern parts of Norway, Sweden and Finland, whose way of life and culture are linked to the landscape and will be affected.
- There being a lack of critical mass and funding in connection with the phasing out of fossil fuels in public transport.

Many people point out that new job opportunities will emerge in these areas. However, there will still be a high risk of a net loss of jobs outside the major cities. If this happens, it could amplify the cultural polarisation that is already underway and push forward a development where job opportunities are also moving towards the larger cities for other reasons.

If the concern about a significantly increased geographical bias in job creation proves to be a reality, it cannot be counteracted by a “green cheque”. On the other hand, it will require a long-term and broad effort in a number of policy areas – industrial, education, research, regional and infrastructure policy. All of these policies work indirectly, which means that the causal links are complex and that the policies alone create framework conditions, while it is up to companies and employees to take advantage of the opportunities. It is also the experience that if these policies are to be effective, they must be long-term and therefore consistently maintained over longer periods of time.

Our recommendation is that the rural-urban balance be a separate point meriting special attention in climate policy in all Nordic countries. To this end, regional and industrial policy should focus on supporting the trends and mechanisms that present potential for rural areas, such as green technologies, the circular economy, greater national self-sufficiency and democratisation of energy production.

Appendix

Organisations interviewed

Sweden

- Ministry of Employment
- Ministry of Health and Social Affairs
- Ministry of Enterprise and Innovation
- Ministry of Finance
- Ministry of the Environment
- Swedish Agency for Economic and Regional Growth
- Swedish Disability Rights Federation
- Swedish National Association for Social and Mental Health
- IF Metall
- Swedish Trade Union Confederation
- LRF Forestry
- Swedish National Pensioners' Organisation
- Kristian Skånberg, sustainability economist, Stockholm Environment Institute

Norway

- Ministry of Local Government and Modernisation
- Nord-Troms Regional Council
- Ministry of Petroleum and Energy
- Sámi Parliament of Norway
- The Future in Our Hands
- Norwegian Confederation of Trade Unions
- Enterprise Federation of Norway
- Carlo Aall, researcher from the Western Norway Research Institute and head of the Norwegian Research Centre on Sustainable Climate Change Adaptation

Finland

- Ministry of the Environment
- Ministry of Social Affairs and Health
- Prime Minister's Office
- BIOS
- Finnish Association for Nature Conservation (SLL)
- Central Union of Agricultural Producers and Forest Owners (MTK)
- Federation of Finnish Enterprises (Yrittäjät)
- Central Organisation of Finnish Trade Unions (SAK)
- Youth Academy Nuorten Akatemia
- Finnish Federation for Social Affairs and Health (SOSTE)
- Finnish Federation of Youth Organisations (Allianssi)

Iceland

- Directorate of Labour
- Ministry of Education, Science and Culture
- Ministry of Social Affairs
- Ministry for the Environment and Natural Resources
- Icelandic Environment Association
- Icelandic Confederation of Labour (ASI)
- SI – the Federation of Icelandic Industries
- Helga Ögmundardóttir, professor of anthropology at the University of Iceland
- Halldor Thorgeirsson, researcher and member of the Icelandic Climate Council

Denmark

- Ministry of Energy, Utilities and Climate
- Ministry of Social Affairs and the Interior
- CONCITO
- Greenpeace DK
- Danish Youth Council
- Danish Trade Union Confederation
- Association New Dane
- Danish Council of Socially Marginalized People
- Brian Vad Mathiesen, researcher in energy systems at Aalborg University
- Jens Villiam Hoff, researcher, University of Copenhagen

Greenland

- Ministry of Science and Environment
- National Confederation of Trade Unions of Greenland (SIK)

Faroe Islands

- Ministry of Environment, Industry and Trade
- Ministry of Social Affairs

Åland

- Government of Åland
- Åland Energy Authority
- Central Organisation of Finnish Trade Unions (FFC) in Åland

About this publication

A SOCIALLY SUSTAINABLE GREEN TRANSITION IN THE NORDIC REGION
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