NORDIC CEOs' VIEW OF RAISED CLIMATE AMBITIONS IN THE NORDIC COUNTRIES

- An interview study among leading businesses in the Nordics



Skift Business Climate Leaders





The IPCC report confirms that we have a burning world, and it paints a scary picture. If we needed any incentives or motivation to think about how to move faster, this report provides it quite clearly.

Søren Skou, CEO of A.P. Møller - Mærsk A/S

Authors: Deniz Butros and Nina Ekelund, Haga Initiative

Layout: Caroline Gränsbo, Haga Initiative **Cover photo:** Nikola Johnny Mirkovic

Steering group: Björn K. Haugland, Skift Business Climate Leaders (NOR) Jenny Rogdo, Skift Business Climate Leaders (NOR), Jouni Keronen CLC Finland (FIN), Senni Raunio, CLC Finland (FIN), Nina Ekelund, Haga Initiative (SWE), Deniz Butros, Haga Initiative (SWE), Ulrika Erkenborn Rugumayo, Haga Initiative (SWE)

Reference group: Anders Turesson, chair (SWE), Jeanette Krantz (SWE), Hugi Ólafsson (ISL), Taru Savolainen (FIN), Bo Storrank (FIN), Elin Økstad (NOR), Kiristine Jespersen (DEN), Laura Hoffman (DEN), Marie Karlberg (Nordic Council of Ministers), Hans Jakob Eriksen (Nordic Council of Ministers)

This report has been conducted by <u>Haga Initative</u> (SWE), <u>Skift Business Climate Leaders</u> (NOR), and <u>Climate Leadership Coalition</u> (FIN) and is financed by the Nordic Council of Ministers.



TABLE OF CONTENTS

TABLE OF CONTENTS		3
EXECUTIVE SUMMARY		4
KEYFINDINGS		5
BACKGROUND		6
INTRODUCTION		7
THE REPORT		8
RESULTS		9
COMPANIES' RESPONSE TO THE IPCC REPORT	OF 2021	9
CLIMATE CHANGE AS A THREAT AND ENABLER	₹	11
IS YOUR COMPANY ALIGNED WITH THE 1.5°C TA	RGET?	14
THE COVID-19 PANDEMIC'S IMPACT ON COMPA	NIES' CLIMATE TRANSITION	16
THE ROLE OF POLICY		18
TRACKS TO TRANSITION		25
Track 1: From Linear to Circular		25
Track 2: Skills Development in the 2020s		27
Track 3: Promising Innovative Green Tecl	nnologies in the Nordics	29
Track 4: Measuring Foot-and Handprints		31
MESSAGETO NORDIC POLICYMAKERS		33
MESSAGETO BUSINESS		35
ANALYSIS		37
APPENDIX A: INTERVIEW QUESTIONS		40
APPENDIX B: COMPANIES INTERVIEWED		41



EXECUTIVE SUMMARY

The current Paris Agreement pledges will limit global warming to nothing less than 3.2°C by the end of the century. In order to reach the 1.5°C targets, pledges must be fivefold. The Nordic Council of Ministers has set the vision "The Nordic region will become the most sustainable and integrated region in the world in 2030." Therefore, this study's overall aim is to examine Nordic business leaders' views on climate change, what business needs from politics, how business has been affected by COVID-19, and other geopolitical changes.

The 40 respondents represent companies with approximately 1.2 million employees across the globe. The aggregated revenue of the companies is around EUR 326 billion, corresponding to approximately 24 per cent of the GDP of the Nordic region.

The results of the study show that Nordic business leaders have a grave concern about climate change and its consequences. All of the respondents regarded climate change as a threat. The leaders of these Nordic enterprises were alarmed, felt great commitment and responsibility to be a part of the solution by aligning with the 1.5°C target. The COVID-19 pandemic has had few negative effects on the Nordic climate transition. Instead, the report shows that the pandemic has brought new perspectives on how to handle a severe crisis.

Nordic business leaders are not opponents to policy makers and are, on the contrary, asking policy makers for collaboration and strong incentives. Nordic business leaders are clear about which incentives they want to see. It is about both carrots and sticks. The most preferred method was carbon pricing, either in the form of carbon tax or emission trading schemes, as an instrument for decarbonisation. Most of the business leaders interviewed had low carbon products, but many respondents stressed the high costs of renewable, circular, and low-carbon pathways.

In addition to carbon pricing, strict legal instruments such as prohibition and binding carbon disclosures were preferred by several interviewees.

Climate transformation spurs Nordic competitiveness on a global market while also developing inclusive, welfare societies – the Nordic region can become the most sustainable region in the world, with business and national governments joining forces.

.

KEY FINDINGS

The results of the study show that business leaders have grave concerns about climate change and its consequences. All of the respondents regarded climate change as a threat. The leaders of these Nordic enterprises were alarmed but also felt great commitment and responsibility to be a part of the solution by aligning with the 1.5°C target.

Policy incentives

The most needed instruments for a faster climate transition, reflected by the companies are:

- Carbon pricing through taxes or emission trading schemes
- Higher climate requirements in public procurement
- Binding and transparent methodology on companies' climate reporting
- Phasing out fossil fuel subsidies or prohibiting fossil fuels

Most of the companies responding are working with circularity, and primarily three themes came up when asking about the obstacles: lack of recycled raw materials, legislation, and costs.

The green transition will create more jobs compared to the grey economy. Skills development is considered essential for company development. Skills development is on all companies' agendas. Companies reported a need for the following skills in their sector:

- Digitalization
- Al
- ESG
- Sustainability

Further collaboration with Nordic companies and policy makers

When asking the Nordic business leaders what they would like to discuss with Nordic policy makers, it is clear that they require higher climate ambitions, collaboration, public-private partnerships, and integrating climate in other policy areas. Carbon pricing was especially stressed as a good incentive. The Nordics as a stakeholder is considered a good role model in sustainability implementation, but the European Union is considered a frontrunner.

"Act not talk" is the key message from Nordic business leaders to other CEOs. Collaboration with other companies is vital to the success of decarbonisation. Based on the discussions, there is a need for companies to discuss value chain cooperation and partnerships, as well as collaboration to push policy for higher climate ambitions.

BACKGROUND

The current Paris Agreement pledges will limit global warming to no less than 3.2°C by the end of the century. In order to reach the 1.5°C target, pledges must fivefold¹. While greenhouse gas emissions increase worldwide – they are decreasing in the Nordic region. The Nordics have a history of climate leadership; Finland, Norway, and Sweden were the first to set carbon taxes at the beginning of the 1990s and have for long had higher domestic targets than those required from required from the international community.

The Nordic Council of Ministers financed a similar study in 2018, focusing on climate transition and profitability. The study resulted in the report *Nordic businesses on climate transition, competitiveness, and growth – An interview study among leading businesses in the Nordics*² which concluded that climate transition within companies:

- Creates new business opportunities
- Reduces costs through energy and resource efficiency
- Strengthens employer branding, and employees are more satisfied
- Increases customer demand which leads to increased sales
- Creates a demand for environmental requirements in public procurement

Climate transition has evolved since 2018. The IPCC published their special report Global warming of $1.5^{\circ}C^{3}$ in which they stated that human activities already have caused approximately $1.0^{\circ}C$ of global warming above pre-industrial levels and that there will be severe consequences even with a $1.5^{\circ}C$ warming. That report shifts the focus from the previous $2^{\circ}C$ target towards the $1.5^{\circ}C$ ambition in the Paris Agreement.

The COVID-19 pandemic resulted in a decrease of 7 per cent of global greenhouse gases compared to 2019, but these effects will have a negligible climate impact due to temporary changes. As vaccine programmes slowed the spread of the virus, emissions began to rise again in 2021 and were already back to normal levels at the end of 2021. However, the pandemic rapidly changed the way of living and the business sector.

The IPCC published the report Climate Change 2021 — Physical Science Basis 4 in August 2021. The report states grave concerns about anthropogenic emissions. It also highlights that the world risks world risks exceeding the 1.5°C target within 10–20 years and threshold effects, with greater risks and irreversible effects which may further exacerbate climate change, lie ahead of us.

The Nordic Council of Ministers' vision for 2030 is "The Nordic region will become the most sustainable and integrated region in the world." In the autumn of 2021, they presented the analysis St # teog s k u f f else - $Holdninger til nordisk samarbeid^5$, on which matters Nordic citizens would like to see increased Nordic collaboration; climate issues were stressed as one of the most important ones. Climate transition calls for cooperation between Nordic governments, businesses, and organisations. Therefore, this project is financed as a vision project and acts as a pre-study, the results of which will be drawn on in follow-up projects.

¹ UNEP (2021) Emission Gap Report 2020

² Haga Initiative, Fossil Free Sweden, Climate Leadership Coalition, Icelandic New Energy and Norway 203040 (2018) Nordic businesses on climate transition, competitiveness, and growth – An interview study among leading businesses in the Nordics

³ IPCC (2018) Special report: Global warming of 1.5 °C

⁴ IPCC (2021) AR6 Climate Change 2021: The Physical Science Basis

⁵ Nordic Council of Ministers (2021) Støtte og skuffelse – Holdninger til nordisk samarbeid

INTRODUCTION

Our world is changing rapidly. We have seen unprecedented consequences of climate change, such as record ice loss in Greenland and extremely high temperatures in Siberia. The COVID-19 virus has caused a pandemic with drastic consequences worldwide, including the Nordic countries. The IPCC states in their report released in August 2021 that it is "unequivocal that human influence has warmed the atmosphere, ocean, and land." Moreover, they state that those temperatures will likely exceed the 1.5°C target within the next two decades. Rapid and drastic reductions in emissions in this decade can prevent a climate breakdown.

The European Union has stepped up its climate leadership; the European Commission launched their European Green Deal and new climate targets for 2030 with the ambition to decrease greenhouse gas emissions by at least 55 per cent by 2030.

This new global order demands fast and flexible responses from Nordic governments, businesses, and organisations. It is possible to decrease emissions and enhance welfare societies while strengthening Nordic competitiveness, and making the Nordics the world's most sustainable and integrated region. It is time to level up together.

The Nordic region needs policy and businesses to engage and interact to accelerate the climate transformation. This will lead to a reinforced societal process leading to a more competitive, inclusive, and sustainable Nordic region.

The overall aim of this study is to examine Nordic business leaders' views on climate change, what business needs from politics, how business has been affected by the COVID-19 pandemic and other geopolitical changes.



THE REPORT

This report is produced in the light of the Nordic Council of Ministers' 2030 vision of climate and integration. It calls for cooperation between Nordic governments, businesses, and organisations. There are synergies to be found and developed in the three pillars of the Nordic Council of Ministers' goals for a green, competitive and socially sustainable Nordic region. The most significant is that climate transformation spurs Nordic competitiveness on a global market while developing inclusive, welfare societies.

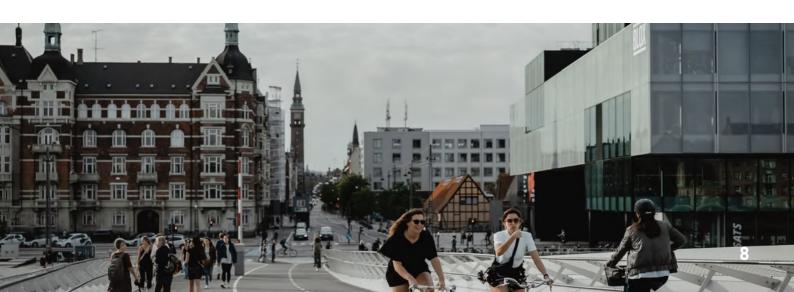
This report is based on 40 interviews with business leaders from all Nordic countries, conducted during May and September of 2021. In total, 34 of the interviews were with the companies' Presidents or CEOs and the rest with other senior management. We will further refer to these interviewees as "Nordic business leaders". Sector and country specifics can be found in appendix B.

Every interview consisted of ten open-ended questions, and the results collected from the interviews give a cross-section view of business climate efforts in the Nordic region today. One question was added after the IPCC published their report on climate in August. The selected companies represent all sectors of the economy, including some fossil fuel

companies. Large, well-known Nordic companies were chosen since large corporations have a greater climate impact.

Together, the respondents represent companies with approximately 1.2 million employees across the globe. The aggregated revenue of the companies is around EUR 326 billion, corresponding to approximately 24 per cent of the GDP of the Nordic region.

Sector	Number
Energy	7
Materials	5
Industrials	4
Consumer discretionary	5
Consumer staples	3
Health care	5
Financials	4
Information technology	3
Utilities	1
Real Estate	3
Total number of companies	40

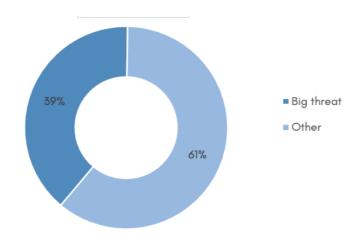


RESULTS

COMPANIES' RESPONSE TO THE IPCC REPORT OF 2021

The IPCC published the report Climate Change 2021 – Physical Science Basis in August 2021. The report states grave concerns on anthropogenic emissions. It also highlights that the world risks exceeding the 1.5°C target within 10–20 years and that threshold effects, with great risks and irreversible effects, which may further exacerbate climate change, lie ahead of us.

1. What are your thoughts on the newly published IPCC report?



Company answers

The results show that the 23 company CEOs who got the question to regard the IPCC report as underscoring climate change as a threat (39 per cent). The other 61 per cent of the companies see this report as confirming what they already know and that the report is a signal to speed up the transition. Many of the CEOs use strong wordings to express their grave concern.



"The IPCC report confirms that we have a burning world, and it paints a scary picture. If we needed any incentives or motivation to think about how to move faster, this report provides it quite clearly."

Søren Skou, CEO of A.P. Møller - Mærsk A/S



"There is no question how planet and human health are interconnected, and how economic development could take place within planetary boundaries. The climate issue affects all of us, individuals, companies and governments, with an even bigger need for collaboration and a science-based approach."

Helena Helmersson, CEO of H&M Group



"Now it is stated, and we have the facts on the table. Nothing in the IPCC report was a surprise per se; it was confirmative and shows that we need to speed up our actions to drive impact."

Nathalie Ahlström, President and CEO of Fiskars Group

"The IPCC report is a code red for humanity. We need to step up from a business perspective and take steps forward to set targets to develop our business within the Paris Agreement. It is also a reminder we need a global, political agreement."

Steffen Syvertsen, CEO of Agder Energy AS

"The latest IPCC report confirms that the climate crisis is not "a crisis" but THE crisis. And this is a crisis like no other. It has been slow to develop and so action to address it has been slow too."



Börje Ekholm, President and CEO of Ericsson

"It is great that we have common information about the situation. However, I am worried about the situation. There is so much we need to do. Meanwhile, politicians are making decisions and creating new agriculture policies that lack a long-term perspective."

Annikka Hurme, CEO of Valio

"The IPCC report highlights the importance of fighting climate change; that is our number one priority as a company and society."

Markus Rauramo, President and CEO of Fortum

"I am not surprised by the IPCC report. The journey to an emission-free society is going at a very slow pace right now. Next year we will build infrastructure for natural gas and potentially biogas. If biogas becomes a possibility in terms of sufficient capacity and lower prices, then we can switch to biogas. If that switch is possible for all fuels, then it will most likely bring us to a 50 per cent to 2030 reduction of our 2030 emissions. But that's only a hypothetical scenario."

Michael Lundgaard Thomsen, Managing Director of Aalborg Portland Holding A/S

"It was a very clear reminder of the urgency, and that climate change is not something that happens in the future, it is happening here and now. Urgent and forceful action is needed,"

Mads Nipper, Group President and CEO of Ørsted



CLIMATE CHANGE AS A THREAT AND ENABLER

The current Paris Agreement pledges will limit global warming to no less than 3.2° C by the end of the century ⁶. In order to reach the 1.5° C target, pledges must be fivefold ⁷. Therefore, the Nordic business leaders' perception of climate change consequences is central in climate transition.

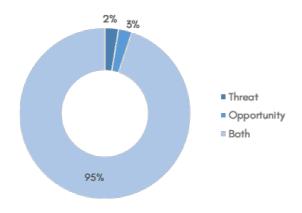
2. Do you see climate change as a...







- Threat

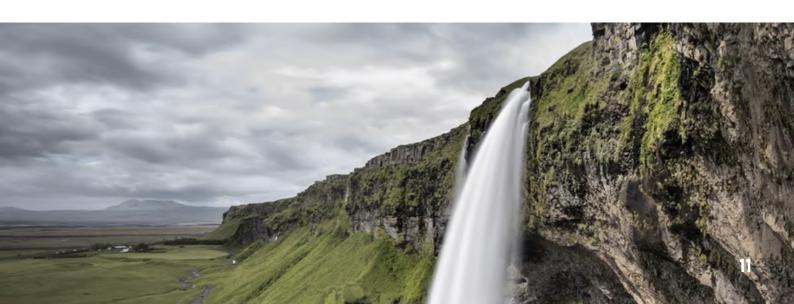


Reflections of the answers

Climate change is clearly both a threat and enabler for companies. Many business leaders tend to separate their business from the general perspective on climate change. An overwhelming majority perceive climate change as a threat to humanity and the planet but recognize it as an opportunity or commitment for their own company. The leaders of these Nordic enterprises are alarmed, and the quotes show grave concern. Businesses attempt to seize the opportunity; they have been transforming for hundreds of years, and now it is time to grasp the opportunities ahead.

In the report published in 2018, climate transition was considered a possibility with a potential profitable outcome. The climate debate and scientific evidence have since evolved, and the sense of urgency is now much more evident.

- 6 UNEP (2021) Emission Gap Report 2020
- 7 Ibid





"The climate crisis is the biggest challenge of our time. It is a risk and an existential threat. But it is also an opportunity. The most sustainable companies in the world are the most successful and resilient in many respects."

Peter Vanacker, President and CEO of Neste

"We have a huge task when it comes to climate change. Without carbon capture and storage, we will not reach our climate goals. Climate change is a severe threat, but in it, there lies opportunity if we take on the challenge and rapidly reduce emissions."



Edda Aradottir, CEO of Carbfix

"Today, 90 per cent of our top 200 customers worldwide have set Science Based Targets for all three scopes. Many of our customers have a majority of their emissions in scope three, and they can only deal with that if we offer carbon-neutral products."

Søren Skou, CEO of A.P. Møller - Mærsk A/S



"It's just a threat to humanity and the planet. If you are an industry leader, then perhaps it can lead to industry opportunities. If we find better solutions than the competitors', it can lead to a competitive advantage. But overall, it is a threat."

Magnus Groth, President and CEO of Essity

"Climate change is a threat to the way we are currently living. The world energy system is responsible for 70 per cent of greenhouse gas emissions, so a fast energy transition is key,"

Remi Eriksen, Group President and CEO of DNV

"Both. There are three big threats. Firstly, how long will a country accept that you have an energy-intensive industry that does not reduce emissions fast enough? Secondly, if you don't reduce your emissions and your environmental footprint in the product, you will not be competitive. Thirdly, if you don't reduce your emissions, it will eventually be too expensive to run your company."



Michael Lundgaard Thomsen, Managing Director of Aalborg Portland Holding A/S

"The transition to a low carbon society will have a significant impact in our business."

Odd Arild Grefstad, CEO of Storebrand Group



"Climate change will not only have tragic human and planetary consequences, but it will also lead to huge costs for companies. So even those that only focus on maximizing short-term shareholder value should take action. Ultimately, the costs of dealing with climate change will be much higher than the cost of trying to make it humanly possible to mitigate it."

Mads Nipper, Group President and CEO of Ørsted

"Climate change is a threat to us all. But in times of crisis, we all need to act and that also creates opportunities. While our company's climate impact is limited, we are part of an industry that is critical to solving the climate problem. ICT is a solutions sector. The technology we provide can reduce greenhouse gas emissions by 15 per cent in other sectors."

Börje Ekholm, President and CEO of Ericsson

"Climate change poses an immediate to the future and us all today. At Huhtamaki we are addressing this by making significant commitments to addressing this challenge in the best way we can, working with others to find solutions where we do not have these in hand today."



Charles Héaulmé, President and CEO of Huhtamäki

"Insurers can play a bigger role in reducing climate change. As large investors, Folksam have an impact on companies, bonds, and infrastructure investments. We can accelerate the transition to more sustainable business models".

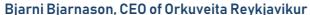
Ylva Wessén, President and CEO of Folksam



"If we don't act, it is a threat to existence on the planet. It threatens our livelihoods, economic welfare, and many aspects of life. However, this is also an opportunity to be at the forefront, to develop new strategies and business models."

Daniel Kjørberg Siraj, CEO of OBOS

"Climate change is the worst threat mankind has seen for decades. But as a company, we see it as an opportunity."





"If we do the right thing going forward, it is possible to turn this around. When you gather strength from companies and politics, there are many solutions to reduce emissions and even become climate neutral in the future."

Anders Danielsson, President and CEO of Skanska

"Climate change is a big threat for the globe and humanity. Our company wants to be a part of the solution and our goal is to become carbon neutral."

Gunnar Hovland, President and CEO of Tine

"I can only agree on the sense of urgency. The climate question impacts health, social and economic development globally, therefore, not addressing is something we can't afford." Helena Helmersson, President and CEO of H&M Group

"Above all, climate change is a threat and especially to our future generations. It is also an opportunity, as it speeds us up. It is positive that countries and societies work together because this is a universal challenge. The corporate world recognizes that we cannot solve climate change on our own."

Christian Levin, President and CEO of Scania

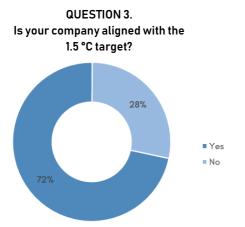
IS YOUR COMPANY ALIGNED WITH THE 1.5°C DEGREE TARGET?

The Paris Agreement stated the target "Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5° C above pre-industrial levels." The special report on 1.5° C, published by the IPCC in 2018, resulted in a shift away from the 2°C target. Hence, the 1.5° C target is now the target governments and businesses are focusing on.

3. Is your company aligned with the 1.5 °C target?

Answers

A majority of companies have targets to align with the 1.5°C target (70 per cent) and the need to set scientifically correct targets.





Reflections of the answers

All respondents answered whether they believed their company is aligned with the 1.5 °C target. There is strong determination to contribute to climate transition, and several CEOs answered that they are continuously pushing their limits to increase their contribution. A majority of the companies considered themselves, or at least their targets, aligned with the $1.5\,^{\circ}\text{C}$ targets.

The graph above illustrates how the companies' targets differ in the Nordic countries. Danish companies focus on 2050 as the target year, or lack climate targets. Approximately half of the companies in Norway and Finland have targets to halve emissions or become climate neutral by 2030. The other half has unclear targets or no concrete climate targets. Icelandic companies are committed to becoming climate neutral by 2030. Sweden has most companies halving their emissions by 2030 or becoming climate neutral by 2030. The two companies with "other" targets have targets of 2 °C or well-below 2 °C.

Reducing emissions in the value chain is on rise on companies' agendas. Five companies responded that they have reduction targets for value chain emissions.

"We are aligned with the Paris Agreement. Our goal is to have netzero CO2e emissions in the entire value chain by 2045."

Anders Danielsson, President and CEO of Skanska



"We have set a group-wide target to be aligned with the 1,5 °C target. We have set a target on reducing our emissions with 6,7 per cent per year to be aligned with the emission gap report and move towards net zero in 2050."

Odd Arild Grefstad, CEO of Storebrand Group

"2.5 years ago, we thought solving the environmental crisis was a technical problem. Then, we regarded it as a cost problem. Today, we are in a different place in our thinking. We will have the same motors, but they will be running on other green fuels, like ammonia or green methanol."

Søren Skou, CEO of A.P. Møller - Mærsk A/S

"The next ten years will be a game-changer in regards to keeping up with the objectives of the Paris Agreement. We are committed to reaching a carbon-neutral production in 2035."

Peter Vanacker, President and CEO of Neste

"Having a science-based approach to our work on climate has always been fundamental to us, helping us to push the boundaries and our ambitions."

Helena Helmersson, CEO of H&M Group

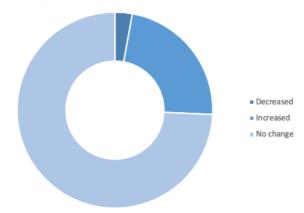


THE COVID PANDEMIC'S IMPACT ON COMPANIES' CLIMATE TRANSITION

The COVID-19 pandemic emerged at the beginning of 2020 and is an ongoing global pandemic. The pandemic resulted in severe global social and economic disruption, including the largest global recession since the Great Depression of the 1930s, according to the International Monetary Fund (IMF)⁸. The Nordics have been equally affected by the pandemic, and all the Nordic governments have taken measures to mitigate the economic and social consequences. The business sector was heavily affected and this makes it interesting to examine how the pandemic affected their climate transition.

- 4. Has the corona pandemic affected your company's climate transition?
 - Decreased ambition
 - No change
 - Increased ambition
- 5. Has the corona pandemic changed your business model?
 - What are the main changes?
 - What changes are permanent?

QUESTION 4 - Has the corona pandemic affected your company's climate transition?



8 IMF Blog (2020) The Great Lockdown: Worst Economic Downturn Since the Great Depression



Answers

20 per cent of the companies responded that the pandemic increased their climate transition, while 65 per cent responded "no change." Only one company interviewed responded that their projects had been delayed due to the pandemic. The pandemic and the new health regulations forced companies to quickly adapt, which several CEOs stressed affected them and their climate actions positively. The COVID-19 pandemic made companies:

- Realize that big changes can be rolled out in a shorter time
- More cooperative
- Use the pandemic as a catalyst for new business models
- 1 in 5 companies increased their climate ambitions, a majority of companies saw no change

"Maybe we dare to be more ambitious in climate action because we have learnt that if we don't negotiate the target and just go on with it, we can do more than we thought was possible."

Jacob Riis, President and CEO of Falck





"The business environment has changed more quickly than we thought was possible. However, it was eye-opening to see that even if we stopped society completely, our greenhouse gas emissions would not stop. We need to take drastic measures if we want to do something quickly."

Henrikki Talvitie, CEO of St1 Nordic OY

"The pandemic has demonstrated the relationship between health and our natural environment and that collective action is important. So, we have rather accelerated our sustainability ambitions."

Katarina Ageborg, Executive Vice-President Sustainability, Chief Compliance Officer and Sweden President at AstraZeneca.

"COVID-19 was an opportunity to visualize what the world can do and mobilize around a common challenge."

Remi Erikssen, Group President and CEO of DNV

"We have accelerated our efforts in recent years. An interesting consequence of the COVID-19 pandemic is that it seems like consumers have become more interested in sustainability issues. They have also shown a willingness to buy and pay more for sustainable products."

Magnus Groth, President and CEO of Essity

"Corona has been a clear catalyst for rapidly increased customer demand for sustainability products and our product innovation has increased, as customers want green mortgages and ESG funds.."

Johan Ekwall, Chief of Staff, Nordea





"Our business models and circularity and transport schemes are local to every region in operation. Therefore, our business model was ideal in a pandemic. The different regions are not dependent on each other but have independent strategies in each country."

Jens Birgersen, President and CEO of Rockwool

THE ROLE OF POLICY

Policy incentives will be needed to abate emissions efficiently. Nordic businesses seek more cooperation with policymakers as well as more incentives to implement the ambitious targets. We asked the companies what policy instruments they need at a national, Nordic, EU, and global level.

Several respondents preferred carbon taxation, emission trading schemes, carbon border adjustment mechanisms, and phasing out of fossil fuel subsidies. We have aggregated these instruments under the subtopic 'Effective carbon pricing' since, in most cases, the main point was the change of relative prices with the help of carbon pricing instead of a specific taxation change.

Moreover, public procurement or other demand-based policies should be implemented to enhance demand and create markets for new products.

6. What policy instruments do you require to stimulate your company's climate transition?



"We can not afford to only utilise some of these instruments, we need all of them. We are a diverse company engaging in many industries, and various tools are needed. We need to use the whole toolbox."

Remi Erikssen, Group President and CEO of DNV

National level

Nordic companies require the following instruments to speed up their climate transition:

- Effective carbon pricing
- Simplified permit processes
- Higher climate requirements in public procurement
- Financial support for scaling up pilots
- Increase support research and development
- Enhanced policies on circular economy
- Secure a role for biofuels in the transition



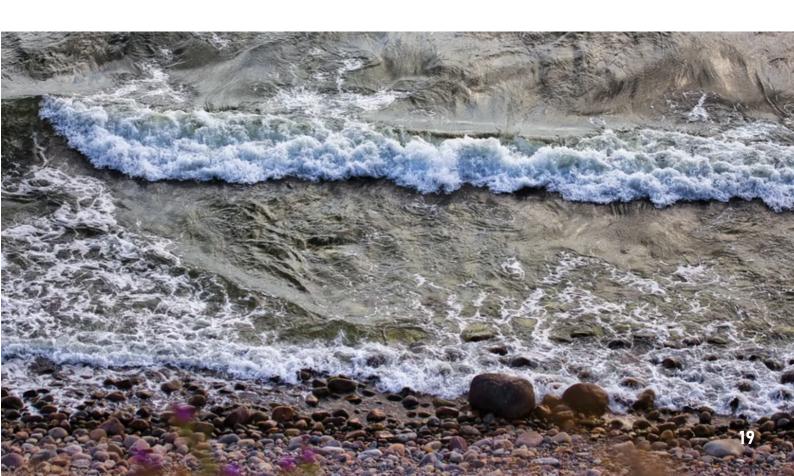
Reflection of the answers

Nordic CEOs recognize that the region generally has high climate ambitions and targets. However, incentives and clear timelines are required to implement ambitious policy into action. A level playing field requires predictability, which will lead to new, green investments.

Moreover, companies from all Nordic countries asked for more investments in research and development and incentives for scaling innovations. Icelandic companies stressed the need for economic incentives, Norwegian companies mentioned the need for more climate requirements in public procurement, while Swedish businesses emphasized the ineffective permit processes. Finnish companies were more likely to stress the role and need for biofuels in the transition, while Danish companies were more focused on global leadership.

More than half of the respondents preferred policies related to carbon pricing, either carbon taxes, emission trading schemes, carbon border adjustment mechanisms, or phasing out of fossil fuel subsidies in their answers.

Several respondents emphasized the importance of policies that support new markets for low-carbon products. Furthermore, public procurement, different demand-based policies, and support for pilot projects were desired policy instruments in this context.





"Time is running out! Everything takes a very long time, and the heavier the industry, the longer the adjustment time. We weigh about 1 billion tonnes, and if you are going to rebuild these large facilities, it takes time. The most time-consuming is that we are constantly under permit testing."

Jan Moström. President and CEO of LKAB

"Today, we expect that green fuel would be 2–3 times more expensive than fossil fuel. It is not a trivial problem. Last year Maersk spent 4.5 billion dollars on fuels. If we need to spend 9 million more, even if we can transfer a lot of the cost to the consumer, it would help a lot if we could make fossil fuel more expensive. That is the most important regulatory thing that we need."

Søren Skou, CEO of A.P. Møller - Mærsk A/S

"When we invest in a new truck, it takes normally more than seven years before we re-invest. We therefore have to be as assured as possible before we invest in, for example, a biogas truck that taxes, tolls, etc. will be predictable over the next seven years."



Gunnar Hovland, President and CEO of Tine

"Politicians should do more in the energy production area. We have utilized the existing policies, and we have solar panels in our factory that are now covering four hectares, and we are expanding. However, after expansion the panels only generates 8 per cent of our energy demand in our factories."

Juha Grön, CEO of Atria Plc.

"In the Nordic countries, 50 per cent of our sales are to customers in the public sector. However, I see too few climate requirements in public procurements. That is a power we could make better use of."

Anders Danielsson, President and CEO of Skanska

Nordic level

Nordic companies require the following incentives to speed up their climate transition:

- Raise climate standards of labels (i.e. the Nordic Swan ecolabel)
- Incentives for biofuels and hydrogen
- Joint requirements in the Nordic region

Reflection of the answers

Several companies stressed that the Nordics have been world-leading in decarbonising their societies and, thereby, showing others what is possible. Moreover, the Nordics have the potential of taking more collective climate leadership.

Two companies raised the need for climate roadmaps in all Nordic countries. Climate roadmaps already exist in all Nordic countries. However, since there is a lack of knowledge within business, governments should communicate and use their roadmaps to a greater extent.

Joint requirements and better connectivity in the Nordics were other issues raised by the respondents. Joint requirements were raised in the light of collective financial risks in green investments, the collective demand for carbon neutrality in public buildings, and access to green electricity.

"The Nordics can be a lamp post that show the way because the Nordics are further ahead of many other countries"

Deborah Dunsire. President and CEO of Lundbeck





"When it comes to the opportunity of tackling this issue, the Nordics are providing an example that we can have a clean and circular energy and material system. And at the same time have an equal society, good infrastructure, affordable and accessible health care, and have global competitive industries."

Markus Rauramo, President and CEO of Fortum

"The Nordics should set an ambition to be part of the green transition of the countries around us. When other countries transition, we have the competence and possibilities to help. It is important political work for the Nordic countries."

Steffen Syvertsen, CEO of Agder Energi AS

"The Nordic countries have a special role to play because we have strong, well-organized public sectors with a high level of trust. When you convert from the standard ways of doing private-public partnerships, collaboration, and innovation where you allow more flexibility and new solutions, trust is a key element."

Jacob Riis, President and CEO of Falck

"We all know that reaching global agreements is incredibly difficult, and at a European level as well. I think the Nordic level could be a good aggregator"

Mads Nipper, Group President and CEO of Ørsted

EU level

In the summer of 2021, the EU Commission announced their Fit-for-55 package and new climate targets for 2030. Nordic companies require the following instruments to speed up their climate transition:

- Enhanced carbon pricing via taxes and ETS
- Prohibit CO2 emissions
- Revise the Common Agricultural Policy
- Transparent and standardized methodology on companies' climate reporting
- Phase out fossil fuel subsidies
- Mandatory TCFD reporting
- Embracing and developing EU Taxonomy

Reflection of the answers

Many respondents considered the EU as a frontrunner and an important global actor in terms of climate legislation. However, there is a general perception that EU regulation changes too slowly. The EU Green deal and EU Taxonomy are welcomed, but there is hesitation on how fast regulation might be implemented into national law. Some companies mentioned the EU Taxonomy as positive, but with deficiencies that can and should be solved.

Pricing carbon emissions was on the table in various interviews; framed as carbon taxation, emission trading, prohibition of fossil fuel subsidies. Many companies also requested clear end-dates, such as a prohibition of new fossil cars and lorries, and specific numbers such as a strengthened EU ETS linear reduction factor or updated regulation on CO2 capture.

"EU is leading the way these days. We see the taxonomy coming into place, reporting requirements for financial products, and the important emission taxation for green solutions to become profitable and get into the EU."





"If we have a global deal on taking down fossil together with a high price on CO2, then we will have an energy price that is good enough to build enough renewable energy."

Steffen Syvertsen, CEO of Agder Energi AS



International level

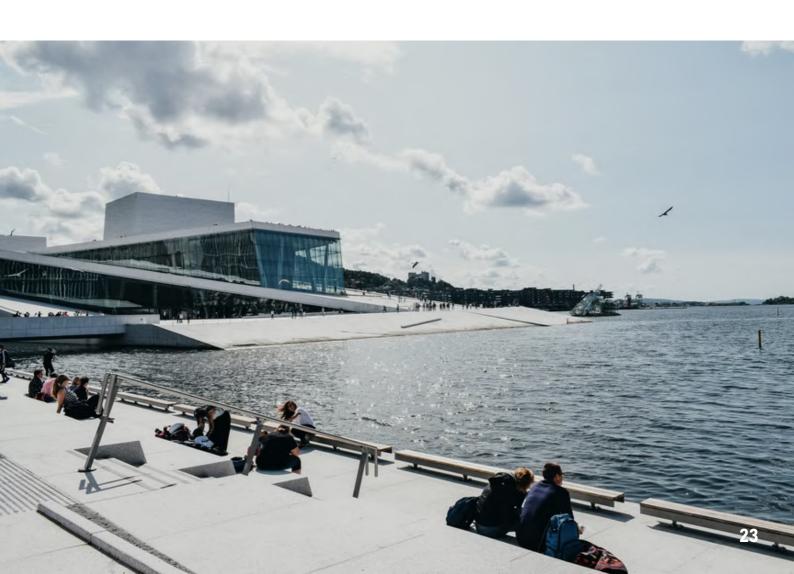
Nordic companies require the following instruments to speed up their climate transition:

- Effective carbon pricing
- Global taxonomy
- Global programme for shutting down fossil production
- Binding and transparent methodology on companies' climate reporting
- Stimulate the production of green energy
- Infrastructure for circularity; re-collecting and recycling

Reflection of the answers

International regulations are preferable due to global value chains and global markets. Carbon pricing at a global level was stressed, asking for a significant price on carbon emissions. Carbon tax on emissions from shipping was especially pointed out as an area of interest by a majority of the companies. Some companies asked for binding international agreements for ending fossil production.

Also vital to the level playing field is the companies' transparency. Several of the 40 interviewed companies stressed the need for a binding and transparent methodology in carbon disclosures.





"All product calculations must have a price on the environment. The environment is considered a free resource, while steel, plastic, rubber, software, electronics have market prices. We must regulate and set a price for what the environmental impact costs."

Ola Rollén, CEO of Hexagon

"Although sustainability will be on our agenda without any monetary incentives, the fact is that money talks. These needed changes have to turn to money somehow. Carbon must have a meaningful price to motivate change. Therefore, the price of fossil energy should be much higher."



Hannu Keinänen, President and CEO of Ensto

"To have a carbon tax is very important and put the cost on externalities that come from oil, gas, and coal. By increasing that price, we will get new technology that can compete with the old technology much faster."

Odd Arild Grefstad, CEO of Storebrand Group



"If you do not have the same rules globally, there is a risk that some companies and businesses will move their factories abroad to avoid European regulation. We are going to lose this game if we do not have common global rules regarding climate change."

Annikka Hurme, CEO of Valio

POLICY WISH LIST

The most needed policies for a faster climate transition, according to the companies are:

- Carbon pricing, for instance through taxes or emission trading schemes
- Higher climate requirements in public procurement
- Binding and transparent methodology on companies' climate reporting
- Phasing out fossil fuel subsidies and prohibiting fossil fuels

"On top of my wish list, which is holistic, legislation need to be a long-term focus and predictable with an established pathway with the information on how to reach it, from year to year."

Peter Vanacker, President and CEO of Neste

TRACKS TO TRANSITION

Climate transition is diverse. Therefore, this report delves into four current topics which are seen as central onwards. These topics are mentioned as tracks since they are pathways towards climate neutrality, used together or separately. From Linear to Circular covers the topic of circular economy, Skills Development in the 2020s covers the just transition perspective. Track three, on Promising Innovative Green Technologies in the Nordics, cover new technologies, and the last track Measuring Foot-and Handprints cover the topic of transparency and reporting.

Track 1: From Linear to Circular

A more circular economy can make deep emission cuts from heavy industries (steel, plastics, aluminium, and cement) with 296 million tonnes of CO2 per year in the EU by 2050, out of 530 Mt in total – and some 3.6 billion tonnes per year globally, according to Material Economics ⁹. Circular economy has been identified as an important tool to reduce emissions; Sweden, Norway, and Finland have published action plans for accelerating this transition.

7. What would you need to change your business model from linear to circular, to decrease your climate impact? Do you work with circular economy?

- What are the obstacles?
- What are the enablers?

Answers

Almost all responding companies are working with circularity, and five themes came up when they were asked about the obstacles:

- Lack of recycled raw materials
- Legislation
- Costs
- Behaviour
- Collaboration

Reflection of the answers

All companies responded that they are working with a circular economy to some extent, and all companies thought this will increase in the coming years. Profitability was the main enabler going from linear to circular. Reselling waste heat to the municipality and reselling cooling to the big hospitals were two examples mentioned.

However, costs and lack of profitability are perceived as the main obstacle for creating circular economies. One mentioned obstacle is that new raw materials are cheap, while recycled materials are expensive. Recycling in itself is also connected to costs.

⁸ The Circular Economy - a Powerful Force for Climate Mitigation - Material Economics

Except for costs, companies responded that legislation on recycled materials and waste is hindering. Specifically, rocks and soil masses were mentioned in this context. Moreover, consumer behaviour was mentioned as a challenge; offering repaired products instead of new ones, and suggesting renovations of buildings instead of building new ones, are two areas where respondents see a challenge in customer demand and what is best from a climate perspective. Lastly, building trust between companies is needed to speed up circularity.

"We need to change the mindset about repairs. Today many customers expect a product to be replaced when damage occurs but repairing is often much more sustainable."

Ylva Wessén, President and CEO of Folksam



"We are very committed to going into a circular economy. There is a different culture in the company now than before, and the circular initiatives we have taken have not cost us any money, but rather saved us money."

Jon Sigurdsson, President and CEO of Össur

"A huge problem with circularity in new buildings is to know the quality of recycled materials. We need external help to get the best system for tracking building materials and having certifications for recycled building materials. That could be a huge step forward."

Tor Olav Mork Morseth, Managing Director of Snohetta Oslo

"We are importing waste products from Finland, Sweden, and Norway, and it has always been a part of our business model. It will just keep growing, and we will continue to recycle and reuse as much of the material as possible."

Michael Lundgaard Thomsen, Managing Director of Aalborg Portland Holding A/S

"Once the cost of depositing goes up, other alternatives would turn financially viable seen from a building material producer's perspective. This would pave the way for a larger deployment of recycling plants in existing quarries. Our Group has successfully invested in a large scale recycling business in Australia. The idea is to share learnings and best practices across regions such as Northern Europe, where we expect that the emphasis on circular economy would over time favour the establishment of recycling businesses."



Giv Brantenberg, General Manager of HeidelbergCement Northern Europe

"There is more and more legislation coming in where you are getting added value of handling certain types of side streams waste streams. That is already built into our company and the investments we make in solid biomass and biofuels."

Henrikki Talvitie. CEO of St1 Nordic OY

Track 2: Skills Development in the 2020s

The green transition will create more jobs compared to the grey economy. The change in the labour market can be divided into three parts: firstly, new jobs in new sectors, secondly innovations and new needs in traditional ones. Thirdly, and the most difficult, are those sectors that must change radically to new businesses (such as oil and gas). Skills development is considered a key component for company development. In the light of the yellow vests' movement and the EU statement of "leaving no one behind", there is a need to understand how businesses and governments cooperate on skills development.

8. What type of skills/competence development do you see a need for in your sector over the next ten years?

Answers

Companies showed a need for the following skills in their sectors:

- Digitalization
- Al
- ESG
- Sustainability
- Engineering
- Innovation
- Technical competence
- Interdisciplinary knowledge

Reflections of the answers

Skills development is an important means for increased productivity, private-sector development, and economic growth. Skills development is on all companies' agendas, and they see the need for continuous development due to the fast technological advancement. The answers above were the same regardless of the sector. Understanding sustainability in combination with technical skills or engineering is considered vital for this decade. Some respondents stressed the need for a new leadership post COVID-19.

Changing the competence and skills of the current staff is seen as difficult in many sectors; rather, there is a wish for closer collaboration with universities. However, several of the responding companies answered that they are developing skills among their staff on circularity, climate adaptation, and other areas of sustainability.



"We need people who have a holistic perspective on business, because there are way too few people who do."

Bjørn Arild Thon, CEO of Renas A/S

"We still need the basic skills which have been demanded for hundreds of years: people that can solve problems and understand the processes."

Juha Grön. CEO of Atria Plc.



"One of the big questions in the future will be the difference between those who are connected and those who are not. Digital inclusion is an area where we as a global community must take responsibility and here, Sweden can play a more prominent role both locally and globally"

Börje Ekholm, President and CEO of Ericsson

"We will have to work with educational institutions and have close cooperation with universities. We also need more structured and targeted education internally, as we change significantly in our production process."

Jan Moström, President and CEO of LKAB



Track 3: Promising innovative green technologies in the Nordics

Scaling-up low-carbon solutions has significant potential to contribute to climate transition. ¹⁰ The Nordic region has a history of successful low-carbon solutions, and there is a need to continue this development. There is a need to make Nordic countries a testbed for new technology, innovations, and business models. There are several innovative development projects in the field of green technology and scalable solutions underway in the Nordic region.

9. In your view, what are the most promising innovative green technologies and/or solutions to the climate crisis being developed in the Nordic countries?

Answers

Companies listed the following areas as especially promising green technologies in the Nordics:

- 1. Wind power, incl. offshore wind
- 2. Carbon neutral steel
- 3. Hydrogen
- 4. Battery production
- 5. Carbon capture (and storage)
- 6. Circularity
- 7. Carbon neutral cement
- 8. Biogas
- 9. Carbfix

Reflection of the answers

Wind power has a significant role in Nordic climate transition, and almost all companies who stressed the need for wind power mentioned offshore wind power. Nordic innovations such as carbon-neutral steel and battery production were pointed out as especially important for the companies' climate transition since this relates to value chain emissions.

Previous Nordic experiences have given examples of how Nordic innovation can contribute to global climate transition. The list above of new technologies and innovations would gain to scale up in the Nordics as well as globally. Nordic business leaders stress the need for joint Nordic leadership and challenge Nordic and other countries to innovations and implementation of new, green technology.

10

Sitra (2019) Green to Scale - Sitra

"I think that the Nordics are leading the game in a way. I am very impressed with how well Sweden invests in batteries and energy systems in the north of Sweden, and there are good activities in industrial companies as well. I think it is very exciting to see what Sweden is doing with the green steel."

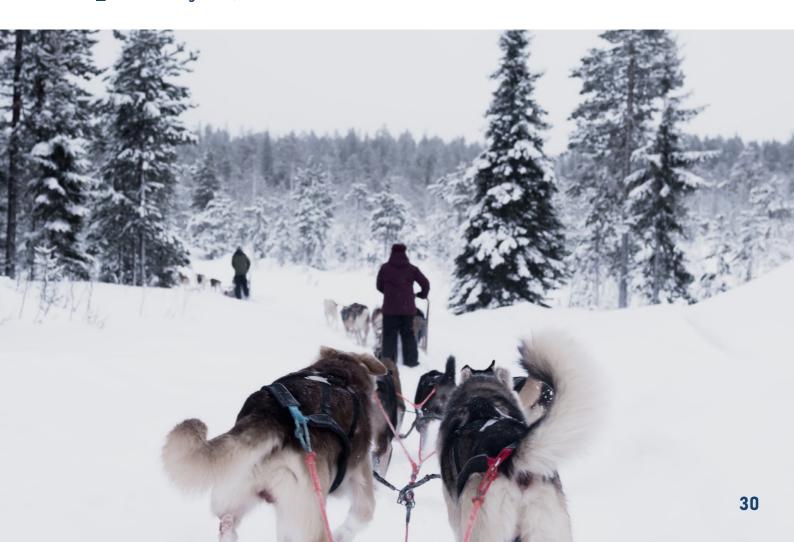
Risto Murto, CEO of Varma

"Why are the Nordic countries the first with a battery factory? Why is it that almost all battery electric vehicles we manufacture, we sell in the Nordic region? Why? The answer is green electricity. We have not understood how extremely important access to green electricity is at a reasonable price. It should be at the top of the agenda for all our European policy makers."

Christian Levin, President and CEO of Scania

"Often there is too much focus on developing new technologies to combat climate change. We already have good technologies to reduce energy consumption and global emissions. We need to do the work to make it easier for people to invest in energy efficiency. Politicians are short term, they worry about the next elections, and our goals are long term".

Jens Birgersen, President and CEO of ROCKWOOL



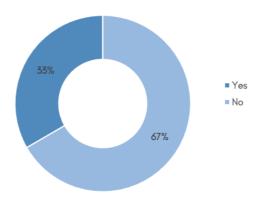
Track 4: Measuring Foot-and Handprints

Measuring and reporting emissions are done by most big. Nordic companies. However, measuring the positive climate impact is new to Nordic businesses.

Carbon handprint <u>The Carbon Handprint Guide</u> was established in 2018 by VTT and LUT University. Finland. The definition stated by the authors is as follows: *An indicator of the climate change mitigation potential. Describes the GHG emission reduction in a user's activities that occurs when the user replaces a baseline solution with the offered solution.*

Carbon handprint helps a company to develop products and services that allow its customers to reduce their own carbon footprint 11 .

10. Have you estimated the positive climate impact your products or services have (providing solutions to climate change, reducing carbon footprints or similar)?



Answer

Measuring and reporting on carbon emissions (or footprints) are done by all responding companies. However, there is a variety among respondents on the handprint. Five of the ten Finnish companies reported that they are measuring their handprint, while the equivalent number in Sweden, Denmark, and Norway were three. No Icelandic company measured their handprint.

^{11 &}lt;u>Footprint:</u> An LCA-based metric that describes the potential negative environmental impacts of a product system. Limited to a specific environmental theme or impact category. For example, carbon footprint (climate change impacts) (ISO 14067) or water footprint (water-related impacts) (ISO 14046)

Reflection of the answers

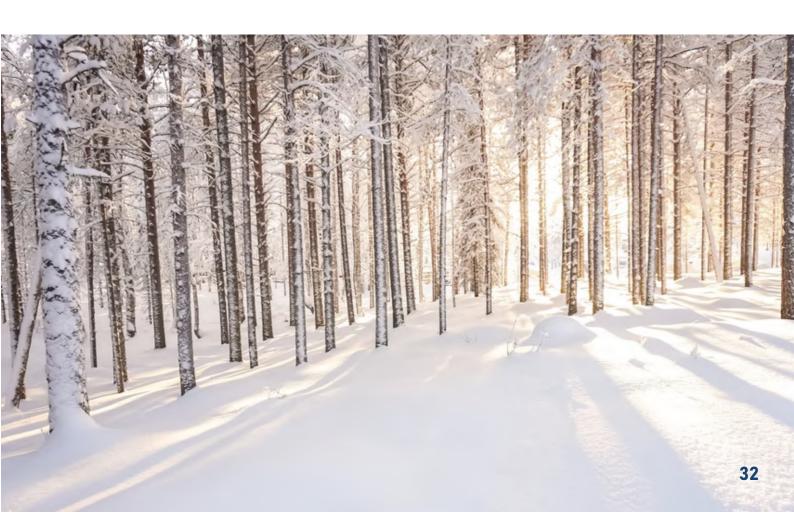
The EU has ambitious emission reduction targets and the Fit-for-55 package includes 13 legislative proposals related to greenhouse gas emission reductions. Currently, the focus is on measuring emission reductions within Europe's borders, and no EU regulation shows the positive climate impact of a product or service. Carbon handprint is a positive measure indicating the climate benefits of climate-friendly solutions implemented by companies. The Nordic countries are at the forefront of developing this methodology and can contribute to introducing it at the European level.

The future economy will demand more products and services with low footprints. There will also be a large demand for products and services with low footprints and large handprints. By using the term handprint, it is possible to stress the positive climate impact the product has compared to competitors. It makes it easier for customers to make climate-friendly choices.



"We naturally carry the responsibility of our footprint, using the most circular processes and creating as little waste as possible, but our key contribution is through our handprint. It is not a 1 to 10, but rather a 99 to 100 divide of where the impact is. The 1 is our own operations, and the 99 is how we can impact the world through the products and solutions we provide."

Kai Öistämö. President and CEO of Vaisala



MESSAGE TO NORDIC POLICY MAKERS

To succeed with climate transformation and stay below 1.5°C, all respondents emphasized the need for cooperation. For instance, there is a need for collaboration between companies, researchers, and in particular policymakers. This is why all respondents were asked to reflect and comment on how they wanted to contribute to the vision of the Nordic countries.

The vision of the Nordic countries is "The Nordic region will become the most sustainable and integrated region in the world in 2030."

11a. What would you as a CEO like to discuss with policy makers in the Nordic countries to enable the vision on climate?

Answers

- Higher ambition from policy
- Speed; is important in urgent times
- Importance of predictability of the policies and level playing field with competing countries.
- Collaboration; to reach our common goals of a 1.5°C world
- Work on Nordic strength; between policy in the Nordics and with business
- Support for research and innovation
- Global impact; the Nordics can take lead in the world
- Procurement; climate neutral procurement can contribute to a faster transition
- Reporting; is important for business to be able to reduce climate impact in the value chain
- Public private partnerships
- Skip silos; integrate climate in all relevant policy areas
- High speed rail between capitals
- Green fuels; an important strategy to reach climate transformation



"Now, it is the business community that drives the politicians. We are no longer opponents, we play in the same team, and we have the same goals."

Christian Levin, President and CEO of Scania



"In regards to our industry, this transition has accelerated the last two years, much driven by the invested capital around the world. We need to set concrete requirements for the green transition to ensure future investments. We have to recognize that we are driven by the economy. If you stand there with a "brown" construction, you won't get any investments – or it will get very expensive. But if you present a green construction, you will get money, and it gets cheaper. If politicians can strengthen that even further, it will be what pushes us forward."

Jimmy Bengtsson, CEO of Veidekke

"The topic could be; how can we make Nordic a superpower region of smart electricity?"

Hannu Keinänen, CEO Ensto

"I think politicians will have to agree on policies and strict plans to progress with climate issues at local and regional levels in the Nordics. I believe it is crucial that they actually commit to defining very clear targets. It's time to walk, not just talk."

Katarina Ageborg, Executive Vice-President Sustainability, Chief Compliance Officer and Sweden President at AstraZeneca

"The energy transition requires collaboration and a collective effort. The Nordics are a large power in Europe but small globally. A country-by-country approach results in fragmentation and won't get us to the much-needed scale. By working together with coherent policies, attracting capital, and approaching this massive transition that is happening in Europe together, we will become a driving force"

Markus Rauramo, President and CEO of Fortum

"While we need to be aware of our differences, we have to focus and identify our common interests, possibilities, and shared interests."

Bjørn Arild Thon, CEO of Renas A/S OK

"What the Nordic countries can do is to increase collaboration. We could be the leading region globally if we bring our climate solutions to scale. We will need to work on the various strengths of the different Nordic countries and cooperate on them."

Edda Aradottir. CEO of Carbfix

"We can become the most sustainable region in the world, but if you want to integrate the Nordics, you need to have better transportation systems. You must invest in sustainable connections."

Daniel Kjørberg Siraj, CEO of OBOS

"Look across the Nordics instead of looking at only one country. I can imagine that through collaborating, we may become even more efficient. The Nordics are like-minded in reducing the carbon footprint, and collaboration could produce a better outcome on the climate."

Deborah Dunsire, President and CEO of Lundbeck

"Fewer visions and more implementation of laws and regulations at the national level. There is no point in discussing visions unless Sweden, Denmark, and the Nordic countries implement the legislation."

Ola Rollén, CEO of Hexagon

"We engage closely with our corporate customers. Together our ambitions are good, and if we keep the pace, level of ambition, and the requirements for reporting are not changing, then we will achieve it."

Johan Ekwall, Chief of Staff of Nordea



MESSAGE TO BUSINESS

Business leaders emphasize the importance of working with other businesses. There are various reasons for cooperation, and a common factor is that emissions in the value chain cannot be reduced unless cooperation increases between companies. A company's emissions in the value chain are another company's emissions.

Moreover, collaboration enhances the chance of impact. Therefore, we asked the business leaders about the Nordic vision and what they want to discuss with other CEOs.

The vision of the Nordic countries is "The Nordic region will become the most sustainable and integrated region in the world in 2030."

11b. What would you as a CEO like to discuss with other CEOs to gear up your climate transition?

Answers

- Collaboration; for new technology, business models, collaborations, etc.
- Value chain cooperation; for transparency and the possibility to reduce climate impact
- Partnerships; long term valuable cooperation
- Act not talk; acting for climate reductions is credible
- Push policy for higher climate ambitions



"Industries and businesses have taken steps to provide solutions, and it is very encouraging to see at the moment. The Nordics are leading the way, and we should ask big companies to take more leadership. It is a great opportunity."

Risto Murto, CEO of Varma



"It is always interesting to see how companies are evaluating the whole value chain. We are working with this internally, but we also have a key role in choosing suppliers for our projects. It would be useful for us to understand more about how other companies work with their value and supply chains."

Tor Olav Mork Mørseth, Managing Director of Snøhetta Oslo

"It is about being at the forefront. We need less talking and more action, clarity, a long-term vision, and predictability. Many companies are taking action, us included, for quite some time. However, when looking at governments and societies overall, there has been a lot talking and planning – but not always the action required."

Kai Öistämö, President and CEO, Vaisala.

"The transition that is taking place is the biggest business opportunity that exists. Make sure to use it and position your company so that you can capitalize on the enormous expansion we will see of sustainable systems."

Ola Rollén, CEO of Hexagon



"I would like to discuss how other companies organize their value chains, work with the innovation processes in material and processes, and in combination with, how we can build sustainable recycling models in different industries. It is important to understand how we can do this efficiently and not only idealistically; how can we efficiently do this right?" Lars Ivar Røiri, CEO of Flokk

"Join the UN's Global compact Business ambition for 1.5 °C. It is not enough not only to commit to net-zero by 2050 because it's so far away but make concrete plans year by year to also reach your 2030 science based targets "well below 2 °C". Many have not done so yet, which is surprising."

Magnus Groth, President and CEO, Essity

"Building operations have a significant impact on our environment, making up more than 25 per cent of global CO2 emissions. Reducing environment emissions is a key priority for ISS and one that we as CEOs need to partner up on to accelerate."

Jacob Aarup-Andersen, Group CEO, ISS



"You must execute, do something about it, and not just only talk about it. Do not wait for government policy, just do it."

Bjarni Bjarnason, CEO of Orkuveita Reykjavikur

"Transition is coming, and it is happening whether you like it or not. Come on board, or you will be left behind. We need to take charge of what we can while telling and sharing good stories. Don't be afraid of sharing your good examples, it inspires others. Even the small ones, because we need to start small."



Bjørn Arild Thon, CEO of Renas A/S

ANALYSIS

Strong sense of urgency

This year's report shows grave concerns about climate change and its consequences. All of the respondents regarded climate change as a threat. The leadership of these Nordic enterprises were alarmed but also felt a great commitment and responsibility to be a part of the solution by aligning with the 1.5°C target.

2020s' challenges

In the 2010s, many companies began to measure, set targets, and cut their emissions. Many Nordic companies have stressed that they decreased their emissions to a large extent. However, the new decade has other, more complex challenges. CEOs stressed the need for emission cuts in their value chains, which demands transparency in reporting by other companies in the value chain. Binding and standardized reporting were highlighted as one of the most pressing incentives by the companies.

Two-thirds of the companies responding were, according to themselves, aligned with the 1.5°C target, which is ambitious in a global context. The report shows differences within the Nordic countries and how the companies have set their climate targets and their level of ambition.

Opportunities this decade are circular economy if the price of recycled materials compared to new ones could be affordable. Digitalisation and interdisciplinary skills were also highlighted as needed in the 2020s. These types of skills will be needed in all kinds of sectors and are difficult to learn from current staff. Collaboration with universities will be even more important, whereas Nordic governments need a plan for the changing labour market. Nordic innovations have been important in reducing emissions internationally, but in the future, they will be even more important. The large-scale innovations and solutions such as green steel, wind power, and battery factories will enable many companies to reduce their emissions. At the same time, more innovations, especially in the green sector, need to be scaled up and provide value to more businesses.



Many companies have reduced their emissions, set net-zero targets, developed strategies for climate neutrality, but are now facing new challenges in how to contribute to negative emissions. Measuring footprints and own emissions are already a natural part of companies' climate transparency. Handprint, on the other side, is a fairly new concept to the Nordic businesses, despite that 35 per cent of the companies responded that they are measuring their positive climate impact. Since the future economy will demand more products and services with low footprints and, thereby, larger handprints, it is important to further develop and use the term in the Nordics.

Nordic business leaders are clear about which incentives they want to see. It is about both carrots and sticks. The most preferred policy was carbon pricing, either in the form of carbon taxation or emission trading schemes, as an instrument for decarbonisation. Simultaneously, it will contribute to developing or gaining benefits from the products and services that lead to climate transformation.

In addition to carbon pricing, strict legal measures such as prohibition and binding carbon disclosures were presented by several interviewees. The only policy demand that has remained the same since the previous report is the need for higher climate requirements in public procurement.



Comparison with the 2018 report

The report Nordic businesses on climate transition, competitiveness and growth — An interview study among leading businesses in the Nordics conducted in 2018 called on Nordic policy makers to be more ambitious in their climate targets and policy. Climate was important and in the top three of the companies' priorities. Contrastingly, this year's report shows that climate change is a top priority. Nordic business leaders show grave concerns about climate change and its consequences on society and the economy.

In 2018, the business leaders interviewed said that the Nordic region can contribute to reaching the goals of the Paris Agreement, and the Nordic impact can be greater than what is proportional for this small region. There has been a slight shift in this position since the EU has been taking the lead on climate with the EU Green Deal and Fit-for-55 package. The EU is now seen as a frontrunner compared to the Nordics. However, with its innovations and historically strong climate leadership, the Nordic region is still an important player in the international climate arena. According to the interviewees, the Nordics have the potential of taking greater climate leadership due to Brexit. The Nordic countries are in a European context consisting of smaller nations, and thus with less direct power in the EU. The United Kingdom was the first country to establish a climate law and has been an important ally in the EU. With Brexit, a major player who has been a driving force in the climate debate leaves a void. This gap should be filled by an actor who is at least as proactive as the UK. This will especially be important in the coming years when the EU Green Deal and Fit-for-55 packages are implemented. There is a void to be filled and the Nordics could be this stakeholder.

There are also differences in the level of incentives required. The represented companies require distinct measures and increased pace to gear up the climate transition. The demand for climate-neutral procurement and more proactive governments was stressed both in 2018 and 2021.

In conclusion, Nordic business climate leaders are gravely concerned about climate change and stress the urgency of climate action. They are committed to decarbonising their companies and, thereby, aligning to the 1.5°C targets. The COVID-19 pandemic had small negative effects on the Nordic climate transition, and it has rather given new perspectives on how to handle a severe crisis. Nordic business leaders are not opponents to policy makers. They are, on the contrary, asking policy makers to collaborate and ask for substantial incentives. Climate transformation spurs Nordic competitiveness on a global market while also developing inclusive, welfare societies – the Nordic region can become the most sustainable region in the world by joining forces with business and national governments.



APPENDIX A: INTERVIEW QUESTIONS

- 1. What are your thoughts on the newly published IPCC report?
- 2. Do you see climate change as a...
- Threat
- Opportunity
- Both
- 3. Is your company aligned with the 1.5 °C target?
- Regarding climate target
- Regarding business model
- 4. Has the corona pandemic affected your company's climate transition?
- Decreased ambition
- No change
- Increased ambition
- Comment
- 5. Has the corona pandemic changed your business model?
- What are the main changes?
- What changes are permanent?
- 6. What policy instruments do you require to stimulate your company's climate transition?
- a. ... on a local/regional level?
- b. ...on a national level?
- c. ...on a Nordic level?
- d. ... on a European level
- e. ...on a global level?
- f. What policy is on the top of your wish list?
- 7. What would you need to change your business model from linear to circular, to decrease your climate impact? Do you work with circular economy?
- What are the obstacles?
- What are the enablers?
- 8. What type of skills development/competence do you see a need for in your sector over the next ten years?
- 9. In your view, what are the most promising innovative green technologies and/or solutions to the climate crisis being developed in the Nordic countries?
- 10. Have you estimated the positive climate impact your products or services have (providing solutions to climate change, reducing carbon footprints or similar)?
- If yes, how could your product or service provide solutions to climate change?
- If yes, have you considered how the positive climate impact of your products could be improved further?
- 11. The vision of the Nordic countries is "The Nordic region will become the most sustainable and integrated region in the world in 2030." What would you as a CEO like to discuss with:
- A) Policy makers in the Nordic countries to enable the vision on climate?
- B) Other CEOs to gear up your climate transition?

APPENDIX B: COMPANIES INTERVIEWED

Country	Company	Business sector	Interviewee	Position
Denmark	A.P. Møller – Mærsk	Industrials	Søren Skou	CE0
Denmark	Aalborg Portland	Materials	Michael Lundgaard Thomsen	Managing Director
Denmark	Falck	Health care	Jakob Riis	President and CEO
Denmark	ISS	Consumer discretionary	Johan Bjørn Jeppesen	SVP, Group Strategy and CEO Office
Denmark	H. Lundbeck	Health care	Deborah Dunsire	President and CEO
Denmark	Rockwool International	Materials	Jens Birgersson	President and CEO
Denmark	Ørsted	Energy	Mads Nipper	Group President and CEO
		0		
Finland	Atria	Consumer staples	Juha Gröhn	CEO
Finland	Ensto	Information technology	Hannu Keinänen	President and CEO
Finland	Fiskars Group	Consumer discretionary	Nathalie Ahlström	President and CEO
Finland	Fortum	Energy	Markus Rauramo	President and CEO
Finland	Huhtamäki	Materials	Charles Héaulmé	President and CEO
Finland	Neste	Energy	Peter Vanacker	President and CEO
Finland	St1 Nordic	Energy	Henrikki Talvitie	CEO
Finland	Vaisala	Industrials	Kai Öistämö	CEO
Finland	Valio	Consumer staples	Annikka Hurme	CEO
Finland	Varma	Financials	Risto Murto	CEO
Iceland	Carbfix	Energy	Edda Sif Pind Aradóttir	CEO
Iceland	Orkuveita Reykjavikur	Energy	Bjarni Bjarnason	CEO
Iceland	Össur	Health care	Jon Sigurdsson	President and CEO

Country	Company	Business sector	Interviewee	Position
Norway	Agder Energi	Energy	Steffen Syvertsen	CEO
Norway	DNV	Industrials	Remi Eriksen	Group President and CEO
Norway	Flokk	Consumer discretionary	Lars Ivar Røiri	CEO
Norway	HeidelbergCement Northern Europe	Materials	Giv Brantenberg	General Manager
Norway	OBOS	Real estate	Daniel Kjørberg Siraj	CEO
Norway	Renas	Utilities	Bjørn Arild Thon	CEO
Norway	Snøhetta Oslo	Industrials	Tor Olav Mork Mørseth	Managing Director
Norway	Storebrand Group	Financials	Odd Arild Grefstad	CEO
Norway	Tine	Consumer staples	Gunnar Hovland	President and CEO
Norway	Veidekke	Real estate	Jimmy Bengtsson	CEO
Sweden	AstraZeneca	Health care	Katarina Ageborg	Executive Vice- President Sustainability, Chief Compliance Officer and Sweden President
Sweden	Ericsson	Information technology	Börje Ekholm	President and CEO
Sweden	Essity	Health care	Magnus Groth	President and CEO
Sweden	Folksam	Financials	Ylva Wessén	President and CEO
Sweden	H&M Group	Consumer discretionary	Helena Helmersson	President and CEO
Sweden	Hexagon	Information technology	Ola Rollén	CEO
Sweden	LKAB	Materials	Jan Moström	President and CEO
Sweden	Nordea	Financials	Johan Ekwall	Chief of Staff
Sweden	Scania Group	Consumer discretionary	Christian Levin	President and CEO
Sweden	Skanska	Real estate	Anders Danielsson	President and CEO



Haga Initiative
Business Climate Leaders