

The Road Towards a Carbon-Free Society

A Nordic-German Trade Union Cooperation on Just Transition

DENMARK
FINLAND
GERMANY
ICELAND
NORWAY
SWEDEN



This publication is part of a joint project entitled **“The Road Towards a Carbon Free Society – A Nordic-German Trade Union Cooperation on Just Transition”**. The project is a collaboration between the Council of Nordic Trade Unions (NFS), the Friedrich-Ebert Stiftung (FES) and the German Trade Union Confederation (DGB). Represented by the Council of Nordic Trade Unions (NFS) in the project are 13 national Trade Union Confederations within NFS, from five Nordic Countries: Denmark (FH, Akademikerne), Finland (SAK, STTK), Iceland (ASÍ, BSRB, BHM), Norway (LO-N, Unio, YS) and Sweden (LO-S, TCO, Saco).

A Just Transition towards a carbon neutral future is the most urgent environmental, social and economic issue of our times. This project aims to develop strategies and requirements from a trade union perspective on how to manage the process to a carbon free society. The participating labour organisations are united in their vision that this goal can only be reached, if the social costs of this transition process are socially mitigated. This means harmonising efforts to combat climate change with the aim of ensuring decent working and living conditions. To this end the participating labour organisations have not only analysed their respective countries transition path towards a fossil free future but have also formulated joint policy recommendations for the national and European arenas. The ensuing discussions and debate have strengthened the cooperation and dialogue between the Nordic and the German trade union movements on common challenges and solutions.

A total of six country reports on the Just Transition path of the participating countries (Denmark, Finland, Germany, Iceland, Norway, and Sweden) have been formulated. Each contains an analysis of the climate policies, economic and societal consequences, an evaluation of the respective national instruments and offers European perspectives. The main findings of the country reports are brought together in a synthesis. It features policy recommendations that aim to help guide the transition to a decarbonised society and an economy that is just and sustainable. The reports and their results are presented and discussed in a series of events nationally as well as in terms of Nordic and European cooperation and at the international level.

This is the Norwegian country report and is written by **Anne-Beth Skrede** at the Norwegian Confederation of Trade Unions (LO Norway).

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01 CURRENT STATE OF PLAY

Table 1: Overview

	Norway	EU-28/OECD
Population 2019 (EU-28 and Norway + Iceland)	5,300,000	519,160,000
Real GDP aggregates per capita, 2019	€ 69,890	€ 28,630
GHG emissions CO ₂ e per capita (excl. LULUCF), 2017	10 t	8.5 t
GHG emissions CO ₂ e (excl. LULUCF), 2017	53 mt	4,323 mt
Difference (excl. LULUCF) from 1990 to 2017	3%	-23%
Net GHG CO ₂ e emissions/removals from LULUCF, 2017	-25 mt	-258 mt
Share of renewable energy in gr. final energy consumpt. 2018	73%	18%
Workforce, "active population", (aged 20-64), 2019	2,596,000	238,515,000
Collective bargaining coverage, 2016	73%	32%
Union density, 2018	49%	N/A

(Data source: Eurostat 2019a, Eurostat 2019b, UNFCCC 2017, Eurostat 2018, Eurostat 2019c, OECD 2016, OECD 2018)

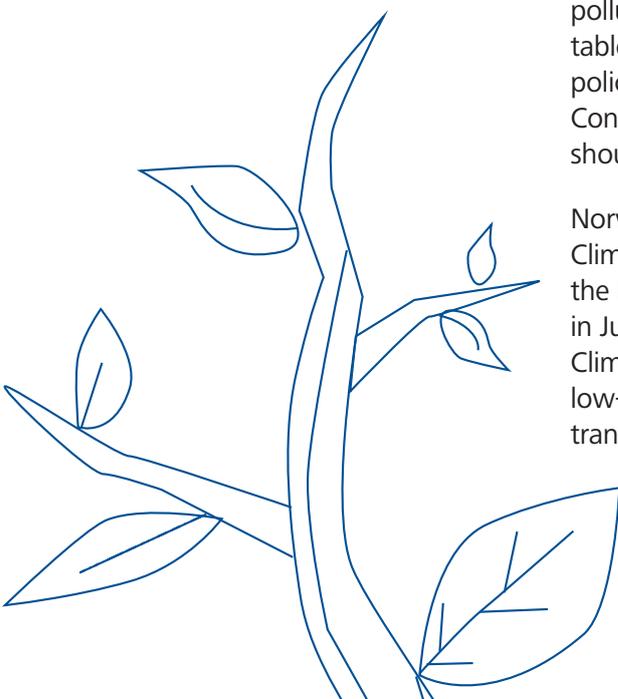
1.1 THE IMPACT OF CLIMATE CHANGE ON NORWAY

In recent years, the mean annual temperature in Norway has generally been higher than the normal temperature for 1961–1999. The only exception was 2010, which was one of the coldest years since 1900. In 2014, the temperature was 2.2 °C above normal, which is the highest level since measurements began. Other warm years, all with a mean annual temperature 1.8 °C above normal, were 1934, 1938, 1990, 2006, 2011 and 2015. In 2018, the mean temperature was 1.4 °C above normal.

The difference between mean annual temperatures and the normal value is greater in the Arctic than in mainland Norway. For example, the mean average temperature at Svalbard airport in 2018 was 4.9 °C above normal. Higher temperatures are melting more of the snow and ice. The extent and thickness of the sea ice has also been declining. The mean annual temperature on the Norwegian mainland is expected to rise by about 4.5 °C (range 3.3–6.4 °C) by 2100 if greenhouse gas emissions remain at the current level. The largest rise in temperature is expected in winter in North Norway. The most extreme changes are expected in Svalbard. If emissions remain high, the mean annual temperature in the archipelago may rise from minus 8–9 °C to plus 1–2 °C towards the end of this century. Climate change will also result in higher precipitation, more rain-related flooding and more frequent landslides and avalanches. Sea levels will continue to rise, but because of glacial rebound, the rise is expected to be smaller in Norway than in many other parts of the world. Norwegian seas are also expected to become warmer and more acidic, which again will influence fish stocks and fish population migration, hence fisheries, the economy, jobs and workplaces in the fisheries sector.

The objectives and principles of Norwegian climate policy are anchored in broad political agreements made in the Storting (Norwegian parliament) from 2008 and 2012. These political agreements include measures and action points and refer to the sector-specific climate action plans and targets for individual sectors. Key principles guiding the national climate policy include: the precautionary principle, the polluter pays principle, the principle of a common commitment, equitable distribution and international solidarity. Furthermore, the climate policy builds on the (Norwegian) Nature Diversity Act and the Pollution Control Act. A central premise in both of these statutes is that decisions should build on environmentally friendly technologies and methods.

Norway ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1993, the Kyoto Protocol in 2002 with the Doha Amendment in 2014. Norway ratified the Paris Agreement in June 2016. In June 2017, the Storting adopted the national Climate Change Act, which makes Norway's goal of becoming a low-emission society by 2050 legally binding and includes Norway's transformation to a low-emission society as a statutory target. The



1.2 CLIMATE TARGETS

target of at least 40 per cent reduction by 2030 is also established by law in the Climate Change Act. The act introduces a system of five-year reviews of Norway's climate targets, on the same principle as the Paris Agreement. An update of Norway's nationally determined contribution (NDC) was delivered to the UNFCCC in February 2020 (UNFCCC 2020). With this submission, Norway updated and enhanced its nationally determined contribution under the Paris Agreement to reduce emissions by at least 50 per cent and towards 55 per cent compared to 1990 levels by 2030, and claims it will fulfil this emissions reduction target in cooperation with Iceland and the EU.

For the first time, the government reported on Just Transition in connection with the NDC for 2021-2030. The international trade union movement has worked to include Just Transition in the reporting, and The Norwegian Confederation of Trade Unions (LO) has repeatedly called for this reporting to the Norwegian authorities since the Paris Agreement was adopted. The mention is marginal but should still be looked at as progress: "Norway has an extensive system of social protection and institutionalised tripartite dialogue between the government, trade unions and labor organisations as early as the 1960s. This serves, among others, to stabilise the economy and work life in periods of transition. It is a priority for the government to facilitate the creation of profitable green jobs through pricing, public procurement, regulations and measures that support technology development." (UNFCCC 2020: 8).¹

¹ The report can be found in the NDC for 2021-2030 under: Information necessary for clarity, transparency and understanding (ICTU) of Norway's NDC; -> 4 a II, Planning processes; -> Other contextual aspirations and priorities acknowledged when joining the Paris Agreement; -> c. Just transition (UNFCCC 2020).

Figure 1: Norway's domestic greenhouse gas (GHG) emissions, indexed to 1990 (100%)

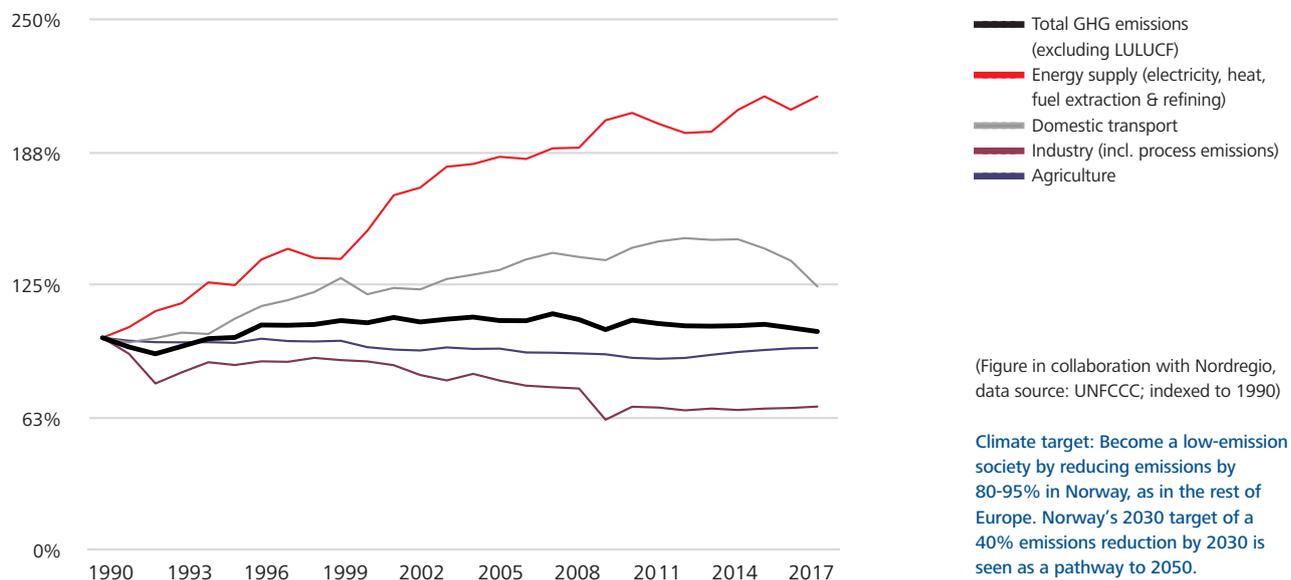
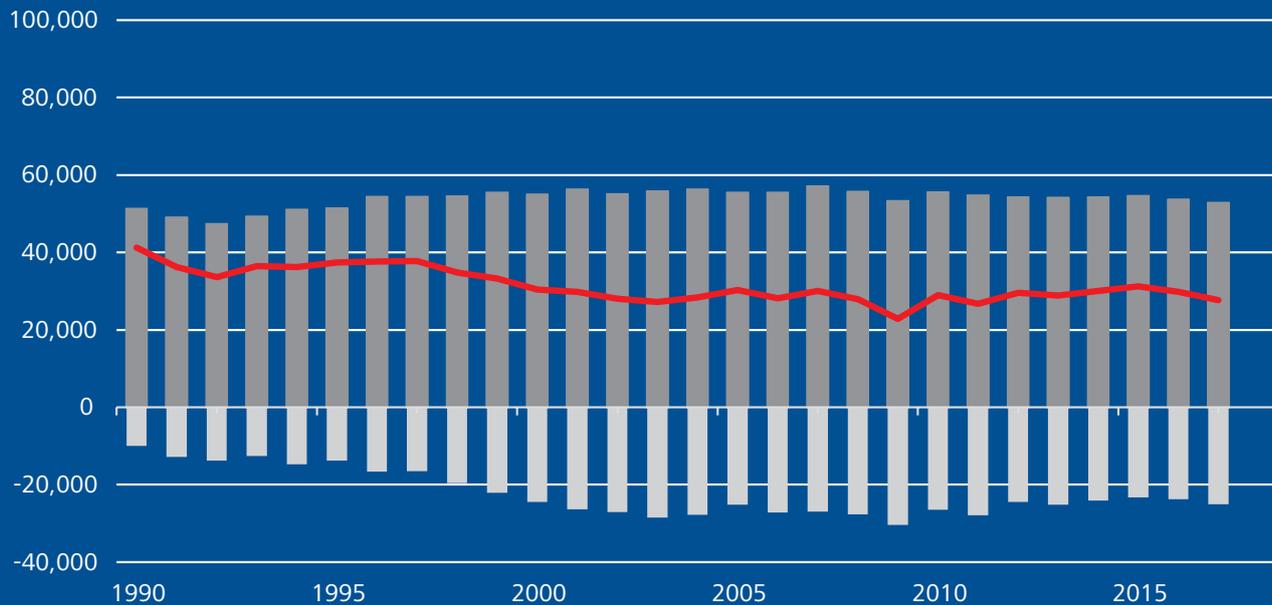


Figure 2: Norway's total domestic GHG emissions including and excluding LULUCF in kt CO₂e



█ GHG net emissions/removals by LULUCF, kt CO₂ equivalent
█ Total GHG emissions excluding LULUCF, kt CO₂ equivalent
— Total GHG net emissions/removals including LULUCF, kt CO₂ equivalent

(Figure in collaboration with Nordregio, data source: UNFCCC)

Norwegian greenhouse gas emissions have been rather stable over the last three decades, despite substantial growth of both the population and the economy. In 2018, emissions were 52 mt CO₂ (+1.1% over 2017), but in 2019, emissions dropped by 3.4% to 50.3 mt CO₂, the lowest in 27 years. However, Norway did not reach its 2020 targets, where the goal was to emit a maximum of 48.6 mt of CO₂.

Emissions in Norway can be divided into four main areas: production of oil and gas, industry, transport, and "other" (waste, buildings, agriculture).

Oil and gas production emissions (emissions from Norway's extraction and production of crude oil and natural gas) have increased sharply since 1990, especially since the policy has been to empty the wells as much as possible as a means of resource efficiency, and it is very energy-intensive to extract the last drop. There are several projects ongoing to electrify oil and gas production to cut these emissions.

In January 2020, the state majority-owned energy company Equinor (previously named Statoil) launched a plan to cut 40 per cent of the company's emissions from its operating offshore fields and onshore facilities in Norway by 2030, 70 per cent by 2040, achieving close to zero emissions by 2050. Offshore wind and Carbon Capture and Storage (CCS) are important parts of this plan, which is said to support and strengthen industrial development in the country and strengthen the company's growth and value creation.

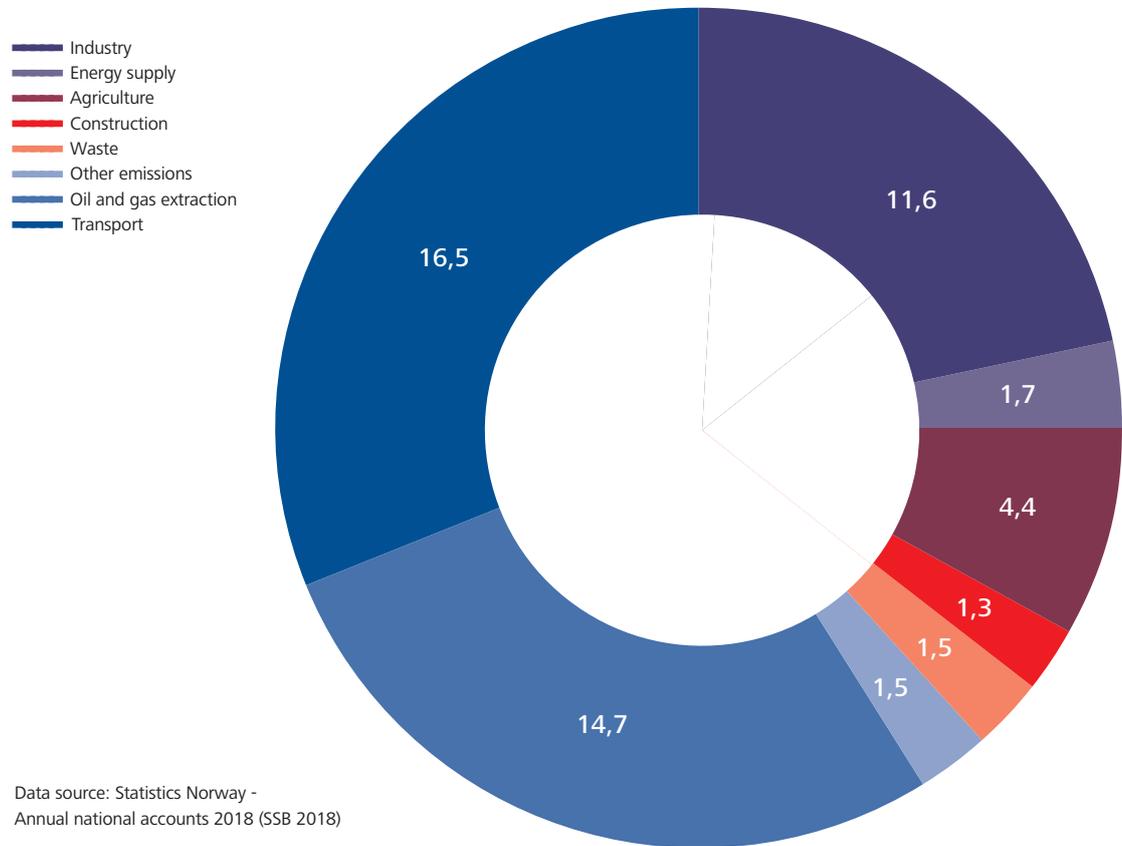
Industry emissions have declined markedly by almost 40 per cent over the last few decades and Norwegian industries have shown they want to be forerunners in developing low-emission industries. They are also eager to introduce CCS for various industry emissions, such as cement production.

Transport is responsible for almost a third of emissions and has had extra focus as the main area of potential for emissions cuts. The focus on electric cars and vehicles has been successful to the extent that more than half of the new cars purchased privately are now electric, bringing the share of electric cars up to 20 per cent. In addition, 15 per cent of new cars sales are plug-in hybrids. There are major incentives to encourage the purchase of electric cars, and it should be underlined that these are not subsidies, but rather exemptions from taxes and fees. There are about 14,000 charging points around the country and the expansion of charging infrastructure continues to be a high priority. Estimates by the Transport Economic Institute (TØI) show that due to the policy on electric cars, emissions from cars will be reduced by about 45 per cent by 2030 and 75 per cent by 2040 compared to 2018 levels. The Storting has decided that fossil-fuel cars should be phased out, and that new fossil-fuel cars should not be sold in Norway from 2025. The Storting has, however, not made this into an act through legislation, since most political parties believe that the market will make this a reality. Ferries, fishing vessels, heavy trucks, construction sites, transport and heavy machinery, as well as smaller aeroplanes are now becoming the focus of the next phase of electrifying the transport sector.

In sharp contrast to most other countries, energy production causes about two per cent of Norwegian emissions, due to the high proportion of hydropower. Approximately 95 per cent of all electricity is produced by hydropower. The policy is to electrify as much as possible: energy, heating, the building sector (diggers and heavy equipment), transport and even oil and gas production. The use of oil for heating of buildings was banned from 1.1.2020, and more areas will follow (such as a ban on oil in heating/drying of buildings under construction at building sites, effective from 2022).



Figure 3: Norwegian emissions from various sources



Emissions from agriculture represent about 8 per cent of total national emissions and are mainly biological emissions from animals, manure and land cultivation. Only around 4 per cent of Norwegian land is arable and only small portions of that are suitable for growing fruit, vegetables, berries and grain. The emissions from machinery and transport are included in calculations for the transport sector. Since 1990, this sector has cut its emissions by 5 per cent while total national emissions have risen. The agriculture sector plans to cut 15 per cent of its emissions by 2030, and in addition follow up on the transport sector's roadmap where all fossil emissions from agriculture's transport emissions will be cut by at least 50 per cent by 2030 and 100 per cent by 2050.

Waste incineration is a source of both electricity production and heating. The biggest waste incineration facility in Norway, Klemetsrud (Oslo), is working to establish CCS in the process as part of the Norwegian full-scale CCS project. It is estimated that Klemetsrud can cut about 400,000 tonnes of CO₂ annually with CCS. About half of the CO₂ emissions from Klemetsrud are from burning biomass (organic waste material), which will reduce emissions even more. Several other



facilities in Norway are planning to follow Klemetsrud's example. There are more than 450 similar waste incineration facilities in Europe, and the goal is to be an example for others to follow, cutting millions of tonnes of CO₂ in Europe, and hopefully globally as well.

Decomposition of organic matter and material in landfills causes emissions of methane and other climate gases. Disposal of organic waste in landfills has been banned in Norway since 2009.

"Climate Cure 2030"

In May 2019, six ministries (Ministry of Climate and Environment, Ministry of Finance, Ministry of Transport, Ministry of Trade and Fisheries, Ministry of Agriculture and Food and Ministry of Petroleum and Energy) commissioned the "Climate Cure 2030" report to identify possible measures and instruments to meet the 2030 climate targets, where emissions in the non-quota sector should be cut by 50 per cent compared to 2005, as well as net-zero emissions in the forest and land use sector (LULUCF). Furthermore, barriers and possible triggering instruments were assessed. The Environment Directorate had the lead and coordinated the work carried out by several institutions.

"Climate Cure 2030" was launched in January 2020 and is a knowledge base showing how 60 different measures can cut 40 million tonnes of CO₂ in the non-quota sector in Norway in the period 2021–2030. Many of the measures presuppose changed behavior and technology development, implying that the necessary technology will be accessible at lower costs and that consumers and producers will demand and offer different solutions than today. For the measures to be implemented, a considerable effort will be needed both by the state, municipalities, the population and businesses. The measures presuppose a diversity of new and reinforced means, and that these will be available very soon.

The "Climate Cure 2030" report does not give recommendations but provides a basis for making decisions on measures. It highlights what could happen rather than what to do. The comprehensive 1,200-page work is largely based on the "Climate Cure 2020" report from 2010. Although barriers and consequences for society was underlined in the mandate as important to the report, effects on working life, employment and transitions were not at all included. Similarly, to the work with "Climate Cure 2020" ten years ago, the agencies did not bring in input or conduct any dialogue with business organisations and trade unions, which was protested against. For example, the trade unions found it disturbing that such a detailed outline of a largescale transition had no mention of employees' knowledge, skills and competences, and nor any mention of safeguarding the right for a decent and safe job.

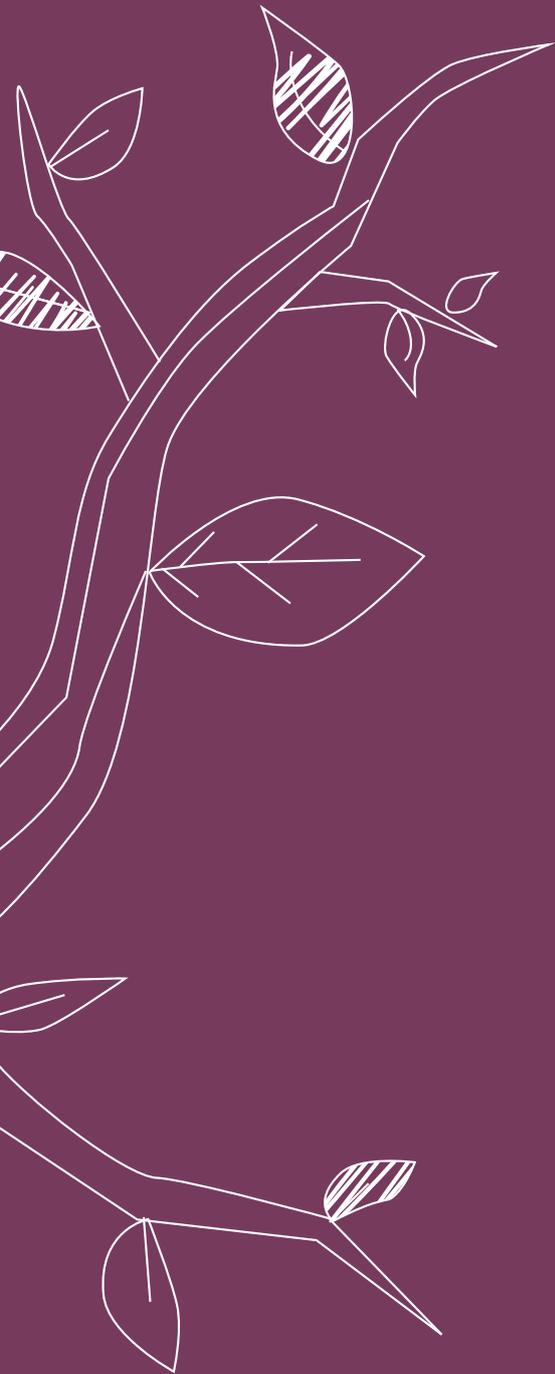
1.3 ECONOMY

In response, trade unions pointed out that climate change will have a major impact on working life, and that participation and social dialogue must be included when discussing measures and instruments. The Nordic Model is a competitive advantage for Nordic societies and at the same time an important reason why we are good at adapting to challenges. Nonetheless, everybody had a chance to respond and give written feedback after the report was launched. The government has announced it would produce a white paper on climate policy in autumn 2020 in which new measures will be decided.

After the discovery of one of the world's largest offshore oilfields in 1969, Norway's economy grew dramatically. Over the past 50 years, petroleum has been regarded as Norway's largest and most important industry. According to the state budget put forward in 2018, oil income was NOK 331 billion, contributing to 21.9 per cent of state income. At the same time, the state's expenses connected to the petroleum sector were NOK 27 billion. The petroleum industry is expected to be important for several decades but will probably contribute less to growth than other sectors of the Norwegian economy. In the last few years there has been a fall in demand from the petroleum industry which illustrates this, also highlighting the importance of new jobs in other sectors. The profitability of the Norwegian petroleum industry will also be influenced by global climate policies. Implementation of the Paris Agreement will result in lower demand for fossil fuels and put downward pressure on prices.

The Norwegian petroleum sector has proved to be profitable across a wide range of oil prices. In a high-cost country like Norway, growth must be based on knowledge. To maintain wage levels that are higher than in almost every other country, Norway will have to be more productive than other countries and need to make commercial use of new knowledge and new technologies both quicker and better. Growing competition from renewable energy sources will also put pressure on the oil and gas industry in the coming years. But we also see that this sector is moving into and embracing development in the renewable sector.

Regional employment in the petroleum sector is especially high in western parts of Norway, particularly in Rogaland and the Stavanger region. As the shelf has matured and offshore activities have moved north, so have the activities onshore. Currently, world-leading oil and gas clusters and a globally competitive oil service industry exist in many parts of the country. Statistics show that, by the end of 2014, there were employees in petroleum-related industries in 415 of Norway's 428 municipalities. Bodø Science Park publishes annual reports on the petroleum activity in the northern counties Nordland, Troms and Finnmark. In 2018, the report concluded that 174 northern Norwegian companies made deliveries to the petroleum industry.



In and around Oslo, one finds well-established engineering expertise and a cluster of seismic companies. Trondheim has a strong position in education, research and development, while the Bergen region has become a hub for platform maintenance and subsea equipment. In Viken County, especially in Kongsberg, there is a strong cluster focusing on subsea technology, automation and dynamic positioning equipment. Southern Norway is home to world-leading companies specialising in drilling technology. In Northwestern Norway, the Aalesund Region is home to maritime companies, which together make up a complete shipbuilding and outfitting cluster.

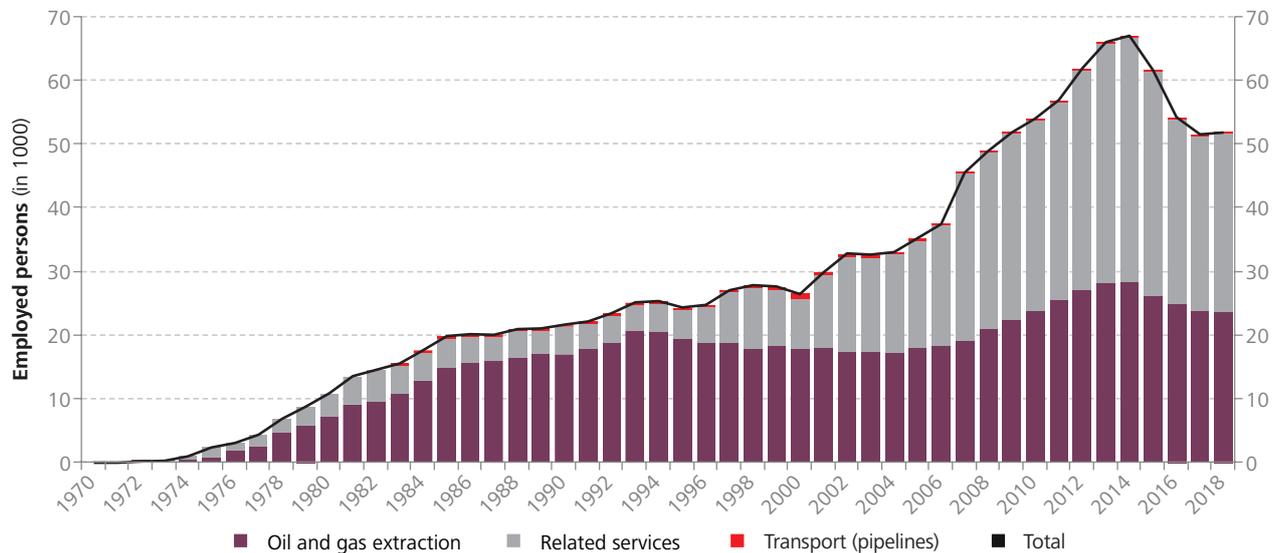
A 2019 report published by Menon Economics, funded by the Ministry of Petroleum and Energy, showed that around 225,000 people were either directly or indirectly employed in the petroleum sector in Norway in 2017. The study includes the number of employees who are linked to services and value creation that takes place directly on the Norwegian continental shelf, as well as the effect of exports from the offshore supply industry. In order to calculate the employment effects of operations, investments and exports for the offshore supply industry, Menon Economics used ITEM, their own model which calculates spill-over effects. The model is based on Statistics Norway's (SSB) input-output analysis. Indirect employment is a result of demand from the petroleum industry for goods and services in a variety of sectors, including wholesale and retail, IT equipment and services, employment agencies, renting of machinery and equipment, hotels and restaurants, and legal and accounting services.

The illustration below, based on data from the National Budget and SSB, illustrates direct employment in the oil and gas industry since the early 1970s. Employment in companies not fully targeted towards the upstream sector are not included in these figures. This includes major parts of the oil service and supply industry. From 1972 to 2014, employment increased from 200 to 67,000. The illustration also captures the first ever drop in employment from 2014 to 2018.

There is an established and relatively well-functioning cooperation and participation between employers and trade unions in the Norwegian petroleum sector. The trade unions in this sector are strong, ensuring safe, decent and well-paid jobs. The workers and their trade unions support the Paris Agreement, and are well aware that their jobs might shift sooner rather than later. It is an important task to ensure a Just Transition for the workers in this sector.

A large employer with low direct emissions is commerce. Approximately 370,000 people work in this sector, creating NOK 200 billion in value, thus comprising a major part of the Norwegian economy. This sector is especially vulnerable to changes caused by digitalisation and changes in purchasing trends. In 2016, LO and the employers' organisation Virke (Federation of Norwegian Enterprise) drew up a road map towards

Figure 4: Direct employment, number of employees in the Norwegian petroleum sector, 1970-2018



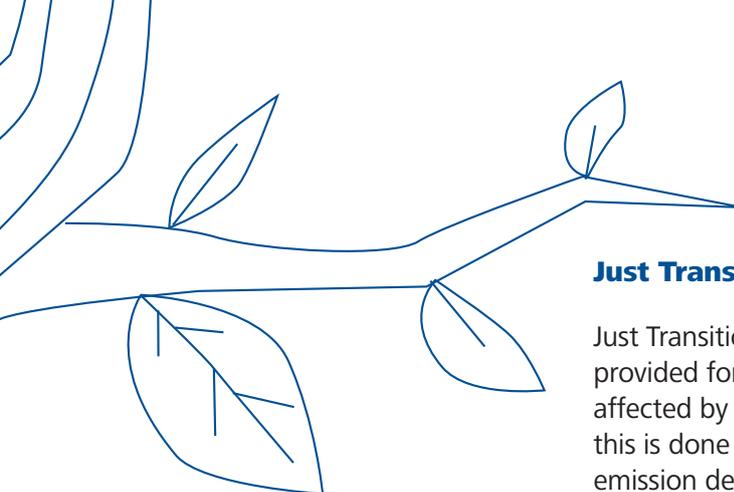
low-emission and green trade by 2050, in which employee involvement and participation were seen as key to future success. More and more companies in commerce see their future role as service providers rather than sellers of end products, and are looking into ways of leasing, reusing, repairing, and other models of future green business.

Circular Economy

In Norway, there is a strong belief in the transition from a linear to a circular economy. The social partners have pushed for clearer national strategies and plans for this transition. The government has responded very slowly, however, but has announced it will put forward their plans for how Norway can become a frontrunner of circularity by the end of 2020. The social partners believe there will be many thousands of new jobs as a consequence of this shift, ensuring both high-skill and low-skill jobs.

1.4 SOCIETY

Norway has undergone radical change in the past hundred years. The population has risen from 2.3 million to 5.3 million, and high revenues from oil and gas production have altered both social structures and people's way of life. Norway's petroleum resources have provided a basis for developing and expanding welfare schemes and raising standards of living, not least due to social democratic political governance, under which natural resources were deemed a common good, paving the way for common prosperity. Consumption levels have risen together with income levels, and these changes have influenced Norway's greenhouse gas emissions.



Just Transition

Just Transition means that decent work and social protection are provided for those whose livelihoods, incomes and employment are affected by the need to act against and adapt to climate change, and this is done through socially responsible green investments and zero-emission development strategies.

In Norway the trade union movement has fought and won several of the rights connected with a Just Transition. But no right is won forever, and we still need to fight for these rights.

We need better measures to ensure that people can get access to new skills and lifelong learning. In Norway we have seen that workers' access to training and skills development has been reduced in recent years and in 2019 the number of workers participating in lifelong learning activities was at its lowest level in ten years. This negative development is particularly strong for workers aged over 50. Unfortunately, we have seen less investment in upskilling and competence over the recent years. However, the corona pandemic has probably reversed this trend.

The government recognises the importance of an organised working life and the crucial role of the social partners. However, its politics do not necessarily confirm this view. LO advocated for a commitment on Just Transition and for rules obliging the government to report on the involvement of social partners and civil society to be included in the 2017 Climate Act, but the conservative political parties voted against the proposal, which was forwarded and supported by the opposition parties. Nonetheless, trade unions are engaged in a quite constructive dialogue with the Norwegian government on climate and Just Transition – issues the government does support, especially in international climate negotiations – but we have not succeeded in convincing the Norwegian government to establish a national Just Transition Council or Task Force – yet.

At the Global Climate Action Summit in San Francisco last year, LO's president and the governing mayor of Oslo presented a pledge to establish the Oslo Model on Just Transition, where a Just Transition Task Force will discuss and give advice on ways to ensure that Oslo's ambitious climate plan is merged with a Just Transition of the workforce. There have been delays though, and the Task Force has still not begun its work. Other cities are encouraged to follow up.

The Confederation of Unions for Professionals (Unio) and LO have had representation and participated in the Norwegian delegation to the UN High-Level Political Forum on Sustainable Development Goals (SDGs), and also participated in the ETUC and TUDCN work on SDGs. Unio's main focus is SDG 4 on Education and to ensure the SDGs will be an integral part of cooperation between the government and authorities and the social partners, both nationally and locally. LO's work, in particular, focuses on the SDGs from the basis of four

of the goals: Goal 8 on Decent Work and Economic Growth, Goal 5 on Gender Equality, Goal 10 on Reduced Inequalities and Goal 13 on Stopping Climate Change. Goal 8 aims to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (UN 2015).” It is central for the trade unions to emphasise the importance of organised labour, collective bargaining agreements, social dialogue and a Just Transition to a low-emission society – the ILO’s Decent Work Agenda – as a necessary part of Goal 8. We need to merge Goal 8 with the Paris Agreement and the call for a Just Transition.

All of the Norwegian trade union confederations have implemented several workplace projects together with the employer organisations to promote participation on climate issues and workplace measures. The confederations of both social partners’ sides have also worked closely with the government to promote a Just Transition. In January 2018, we started a tradition with a “Working Life’s Climate Week” to highlight climate measures and participation at the workplace. The government shared the costs of establishing the campaign and ministers and politicians took part in the kick-off events, in 2018, 2019 and 2020.

The trade union confederations organise members in many sectors, and there is a certain tension between trade unions whose members work in the so-called polluting sectors and those which don’t on “how far” the confederations’ demands for climate policies and measures should go. Overall, the confederations’ policies and work on climate has broad support from the unions. The confederations and many of their unions hold climate seminars, conferences, workshops and training sessions for members.

The agreements between employer organisations and trade unions have stated that environmental issues and climate change should be subject to participation and involvement of the workforce. We have yet to see many specific paragraphs in the collective bargaining agreements (CBA) on climate change-related demands, but several trade unions have raised the call for such paragraphs to be included in the CBAs. The LO-trade union, The Norwegian Union of Commerce and Office Employees, managed to include green elements in their CBA in this year’s negotiations, and expects this to be just the start for green CBAs. However, so far there have not been strong demands from members to prioritise such claims over other claims during CBA negotiations.

Results from LO’s annual shop steward survey shows that in 2019 only 25 per cent say they have worked concretely on climate and environment issues in the last two years, down from 32 per cent in 2016, and that these issues are seldom on the agenda at their local meetings. However, 42 per cent say that these issues have been highlighted in the participation and involvement arenas at their companies in 2019, up from 36 per cent in 2016.

02

NATIONAL INSTRUMENTS

(see also the section on “1.2 Climate targets” above)

In general, the trade unions have been supportive of the national climate policies, both when it comes to national measures and to Norway’s international engagement. There is a clear attitude that Norway should contribute to help poor countries abate, mitigate and adapt to climate change. At the same time, there is a clear demand that national measures should have global effects, not cause carbon leakage, and that existing jobs and industries should be developed into sustainable jobs and industries – not shut down. It would also be fair to say that Norwegian businesses and industries have so far been quite optimistic when it comes to the prospects and opportunities in a climate-friendly future.

Of course, the debate on Norway’s simultaneous role as oil producer and climate front-runner is lively. Polls indicate, however, that a clear majority of Norwegians are supportive of both the existing petroleum policies and a long-term phase-out.

The trade union confederations call for full employment and jobs for all, an organised working life, decent and safe jobs, and full involvement of workers and their unions in the transition to a zero-emission society, demanding social dialogue and Just Transition councils, change in legislation and investments in climate-friendly businesses and opportunities.

The 2015-2020 road map process

In 2015, the government appointed an expert committee on green competitiveness which was tasked with proposing an overall strategy for promoting green competitiveness leading towards 2030 and for a low-emission society in 2050. The two-person committee consisted of the former EU Commissioner for Climate, the Danish politician Connie Hedegaard, and Idar Kreutzer, CEO of the employer and industry organisation Finance Norway. The committee engaged in extensive dialogue with key industries, companies, organisations and academia. Eleven sectors submitted their own road maps for green competitiveness to the committee. LO and several of its trade unions

participated in developing roadmaps for the transport sector, the oil and gas sector, green commerce, and contributed in different stages and debated several of the other road maps in the process.

The committee's mandate was to contribute to an informed public debate, study international and national framework conditions, challenges and opportunities, and propose measures for strengthening and further developing green competitiveness in Norwegian business and industry. During the study period, the committee engaged business, industry and business organisations, environmental organisations and other relevant actors. Their report was delivered to the prime minister in 2016, pointing out that the state must play a more active role, among other things, as a framework setter and as a public purchaser. It pointed to a number of offensive measures to facilitate a green transformation of the business community, and it looked at how to facilitate conditions for conscious consumers and sustainable consumption.

After the expert committee's report was delivered, about ten additional business sectors and industries produced road maps for a climate-neutral business future, made with broad participation in the various sectors, with trade unions participation in some of them. There is a general consensus that the green competitiveness process facilitated dialogue and cooperation in various sectors, which again triggered a commitment to reach the zero-emission goal in the different industries.

In 2018, the Ministry for Climate and Environment tasked EY to study the results of the road map process through the green competitiveness project and analyse the speed of the transition to a low-emission society, and to examine how businesses and industries could contribute. This study concluded that the rate of change was too slow. Businesses and industries focus too much on direct emissions from own operations and energy-saving measures and too little on climate requirements for suppliers, raw material production and the use of products. Many industries demanded more specific requirements and bans from the authorities through their road maps. For example, the retail sector wanted a ban on food waste and deforestation, while the forest and wood industry asked for requirements for documentation of the environmental impact of building materials. Furthermore, the business community requested the authorities to strengthen policy instruments to ensure the necessary technological development. The EY study shows that one of the main reasons for the slow rate of progress is that the government has so far not done its part to follow up on the recommendations from the road maps.



The Government Pension Fund Global

It was decided quite early in Norway's oil production history that revenue from oil and gas should be used cautiously in order to avoid imbalances in the economy and that the oil income should be regarded as a common good. Norway's oil fund, officially named the Government Pension Fund Global, was set up to shield the economy from ups and downs in oil revenue according to legislation in the Storting in 1990 to help finance the Norwegian welfare state for future generations.

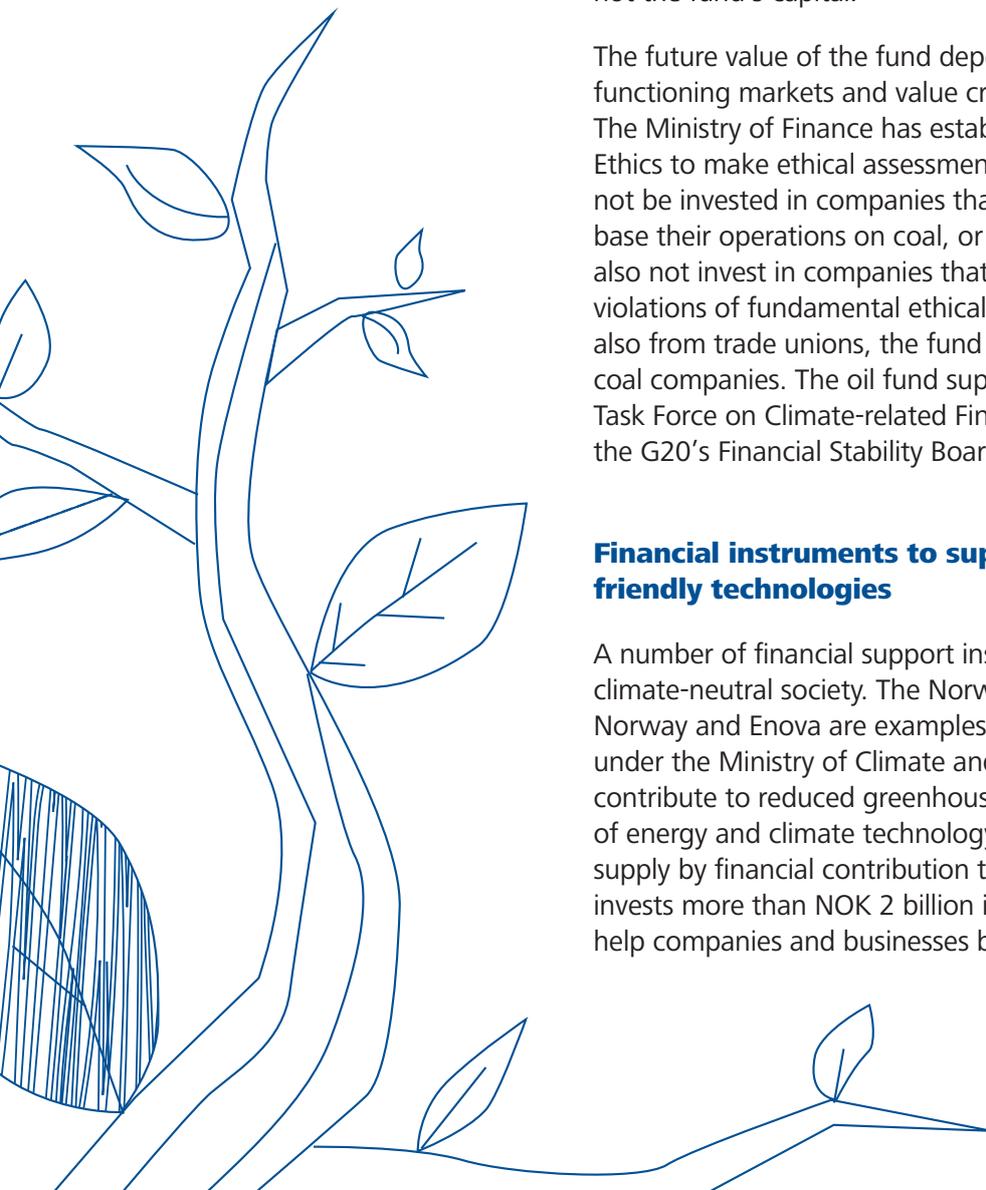
It was decided that the fund should only invest abroad. The fund's value reached NOK 10,000 billion in 2019. The fund is now one of the world's largest funds, owning almost 1.5 per cent of all shares in the world's listed companies. This means that it has holdings in around 9,000 companies worldwide.

There is a broad political consensus on how the fund should be managed. On average, the government is to spend only the equivalent of the real return on the fund, which is estimated to be around three per cent per year. This way, oil revenue trickles gradually into the economy. At the same time, only the return on the fund is spent, and not the fund's capital.

The future value of the fund depends on sustainable growth, well-functioning markets and value creation at the companies it invests in. The Ministry of Finance has established an independent Council on Ethics to make ethical assessments of companies and the fund must not be invested in companies that produce certain types of weapons, base their operations on coal, or produce tobacco. The fund must also not invest in companies that through their conduct contribute to violations of fundamental ethical norms. After a lot of public pressure, also from trade unions, the fund itself decided to divest from several coal companies. The oil fund supports the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) set up by the G20's Financial Stability Board.

Financial instruments to support the transition to climate-friendly technologies

A number of financial support instruments assist in the shift towards a climate-neutral society. The Norwegian Research Council, Innovation Norway and Enova are examples. Enova is a state-owned enterprise under the Ministry of Climate and Environment. Its purpose is to contribute to reduced greenhouse gas emissions, to the development of energy and climate technology and to a strengthened security of supply by financial contribution to such projects. Each year, Enova invests more than NOK 2 billion in public resources in solutions that help companies and businesses build a green Norway.



The carbon tax and the emissions trading system

Carbon tax and/or the emissions trading system apply to more than 80 per cent of Norwegian emissions.

The carbon tax was first introduced in 1991 and is one of the government's main climate policy instruments. The standard tax rate is currently NOK 500 per tonne CO₂-equivalent emitted. The tax applies to fossil fuels used for most purposes and to HFCs. Both Norway and the EU set up emissions trading systems in 2005, and Norway joined the EU system (EU ETS) in 2008. This created a European carbon market where companies must buy tradable emission allowances to cover their emissions. The EU ETS is a 'cap and trade' system: the cap is the limit on total emissions of greenhouse gases covered by the system. The scope of the system has been expanded, and it now applies to most emissions from large industrial plants and the offshore oil and gas industry – these sources account for about half of Norway's total emissions.

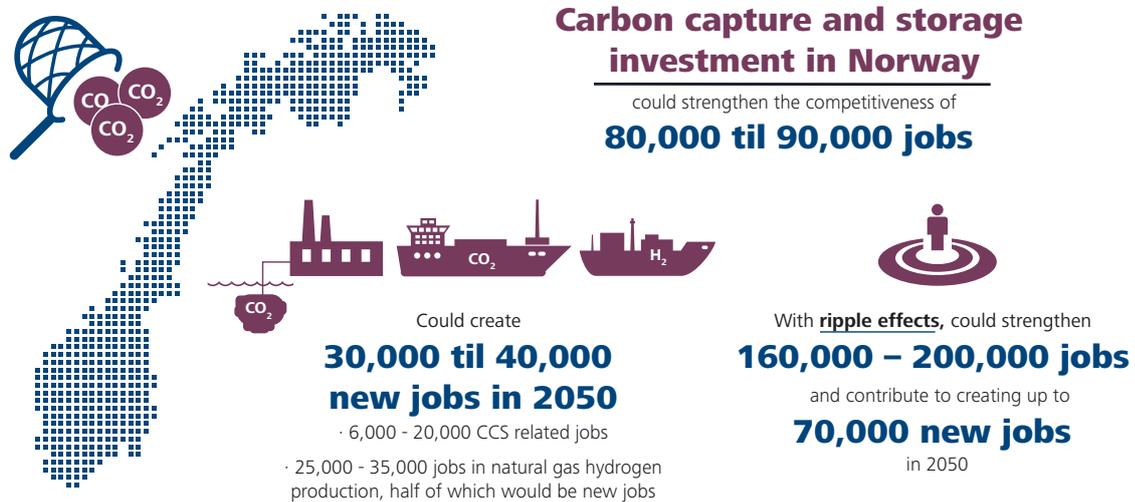
More than 80 per cent of Norwegian greenhouse gas emissions are currently subject to the carbon tax, included in the EU ETS, or both. In addition, some emissions are regulated through the Pollution Control Act, standards, agreements and grants for emission reduction measures. Agriculture and fisheries are the only sectors where emissions are not regulated using these policy instruments.

CCS

Carbon Capture and Storage (CCS) is imperative to reaching the climate goals, but also as a tool for a Just Transition. Both IPCC (the Intergovernmental Panel on Climate Change) and the IEA (the International Energy Agency) agree that CCS is absolutely essential to meet the world's climate goals. And we are many who agree with them. This is no paradox – CCS is a future major area for development and green growth, especially for industrial processes. We see it as extremely important to share knowledge about CCS, and to discuss ways forward.

Europe can build a CCS future on the shoulders of today's high-competence workplaces in the oil and gas sector, the maritime industry and the process industry. For Norwegian trade unions it is obvious that a Norwegian CCS industry will be essential in the transition to a low-carbon society. Together with the largest employer organisation in Norway, the Confederation of Norwegian Enterprise (NHO), LO commissioned the research institution Sintef to conduct a report in 2018 to analyse the potential for jobs and businesses through a Norwegian full-scale CCS project for several industries. The study shows that investments in Norway could create 30,000–40,000 new jobs by 2050 and strengthen and secure 80,000–90,000 existing jobs. It further shows that CO₂-capture represents the largest market in the CCS value chain.

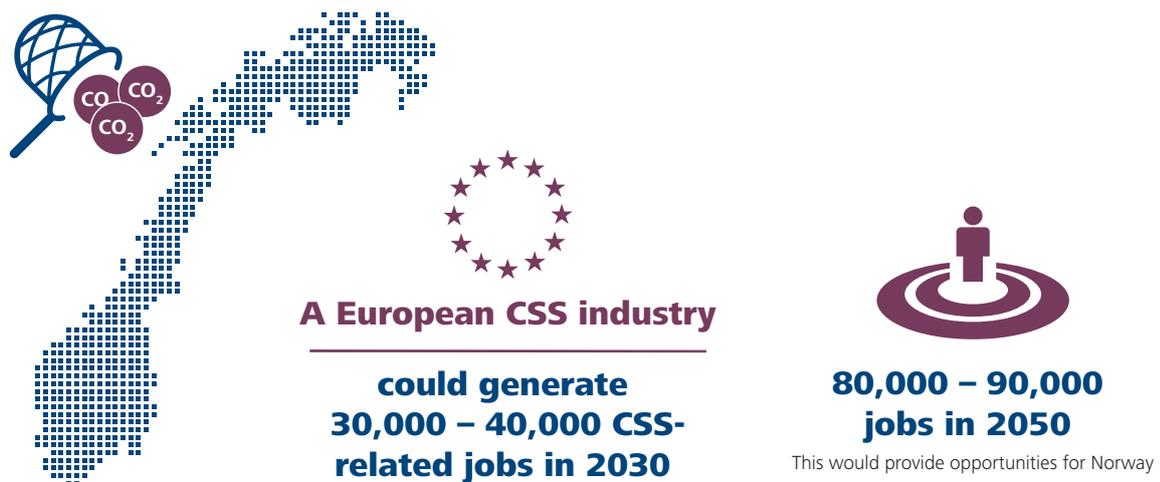
Figure 5: Carbon capture and storage investment in Norway



SINTEF
From the SINTEF report:
Industrial opportunities and employment prospects
in large-scale CO₂ management in Norway.

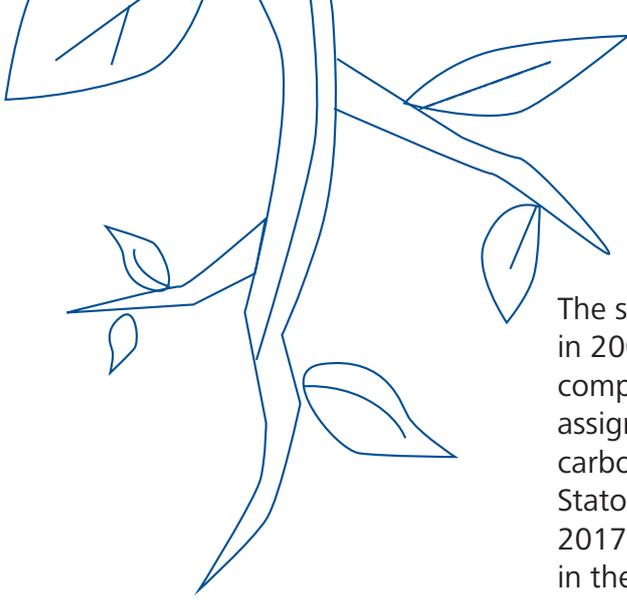
Source: SINTEF 2018

Figure 6: Potential jobs created by a European CSS industry



SINTEF
From the SINTEF report:
Industrial opportunities and employment prospects
in large-scale CO₂ management in Norway.

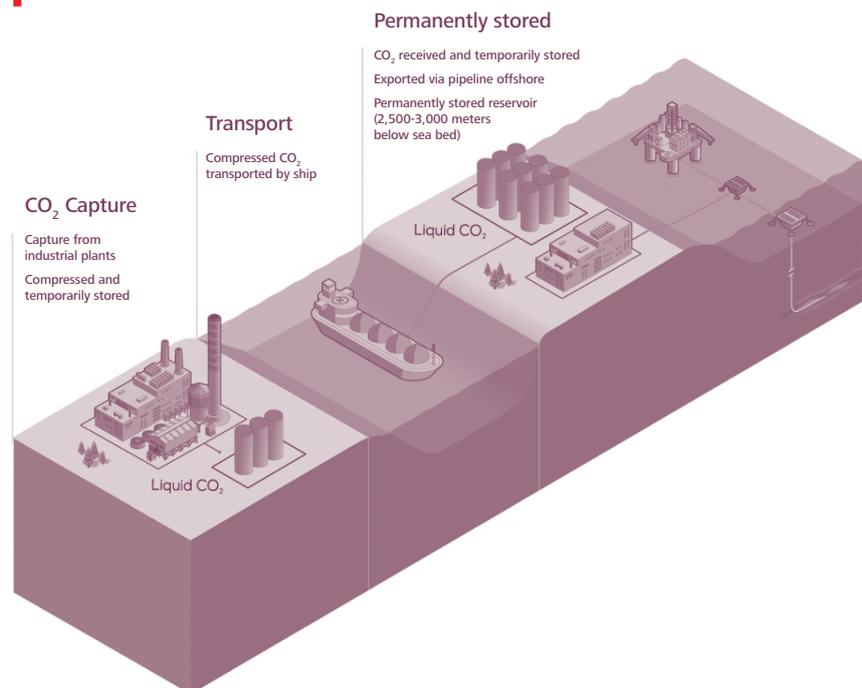
Source: SINTEF 2018



The state enterprise Gassnova (established by the government in 2005 to promote technological development, build CCS competence and administer research and support schemes) assigned Statoil (now Equinor) to evaluate the development of carbon storage on the Norwegian continental shelf in 2017. Statoil, Shell and Total entered a CO₂ storage partnership in 2017. Shell and Total decided to join Equinor with investments in the Northern Lights project in May 2020.

The Northern Lights project is part of the Norwegian full-scale CCS project. The full-scale project includes capture of CO₂ from industrial capture sources in the Oslo Fjord region and shipping of liquid CO₂ from these capture sites to an onshore terminal on the Norwegian west coast. From there, the liquified CO₂ will be transported by pipeline to an offshore subsea storage location in the North Sea for permanent storage. This set-up, using ships from the CO₂ capture sites to the Northern Lights onshore site, is a unique solution and enables the storage of large amounts of CO₂ volumes – from across Europe – that would otherwise have been emitted.

Figure 7: The Northern Lights CSS project



Source: Equinor 2020



Norway's International Climate and Forest Initiative

Norway has pledged up to NOK 3 billion a year to help save the world's tropical forests while improving the livelihoods of those who live off, in, and near the forests. Norway's International Climate and Forest Initiative (NICFI) is financed through the Norwegian aid budget and managed by the Ministry of Climate and Environment. The main objective of the grant is that reduced and reversed loss of tropical forests will contribute to a stable climate, protect biodiversity and enhance sustainable development. Most of the NICFI team is based in Oslo, but special envoys for climate change and forests are also based in several embassies.

Projects funded under the scheme will contribute to reaching one or more of the outcomes set out in the initiative's results framework: approved and implemented policies for sustainable forest and land use in tropical forest countries and jurisdictions, improved rights and livelihoods for indigenous peoples and local communities in tropical forest countries, effective international incentive structures for reduced deforestation in tropical forest countries, increased transparency in land management, land use, value chains and financing, using commodity markets to stimulate deforestation-free production in tropical forest countries, using financial markets to stimulate deforestation-free commodity production in tropical forest countries, and reduced forest crime. Actors who contribute to reaching the goals can receive grants from the initiative, such as authorities, organisations, public and private institutions, financial institutions, international, national and local competence communities, alliances and networks. In 2020, the Norwegian Agency for Development Cooperation (Norad) also launched a call for proposals for funding civil society organisations for NICFI's 2021-2025 grant period.

Trade unions have supported NICFI and have often reminded the NICFI team and politicians that Just Transition measures are necessary for the workers in the regions where tropical forests would no longer create jobs, along with transparency and participation.

The Green Climate Fund

The Green Climate Fund (GCF) was established by the parties to the United Nations Framework Convention on Climate Change (UNFCCC) in 2010 to financially help the international community meet the goals set out in the Paris Agreement, assisting the most vulnerable countries become more resilient to climate change. In the period 2015 to 2018, Norway contributed NOK 1.68 billion to the fund. The GCF has approved projects in approximately 100 countries, with a total value per 2018 of over USD 5 billion. Norway's annual contribution to the GCF doubles from 2020 to NOK 800 million. ITUC takes part as an observer in the GCF board meetings, and though Norwegian trade unions encouraged and applauded a greater Norwegian contribution, no national trade union or trade union confederation has made it a priority to participate in this work at the international level.

03

EUROPEAN INSTRUMENTS

Through the EEA agreement and the Schengen Agreement, Norway is very closely linked to the EU. The goal of climate neutrality by 2050 is a common target for EU and EEA countries. A great deal of the legislation also applies directly to Norway. Prime Minister Erna Solberg stated in a letter to the Commission President in March 2020 that “(...) the green transition should be based on a scientific, fact-based and cost-effective approach (...).” (Government of Norway 2020) Norway is also an active participant in the informal “Green Growth Group” in the EU.

In the government’s most recent political platform (Granavoldenplatform), it is stated that the government intends to voluntarily reduce Norway’s non-ETS emissions by 45 per cent from 2005 to 2030. This will represent additional efforts beyond the 40 per cent Norway will be committed to under the Effort Sharing Regulation. The government’s ambition is to reduce non-ETS emissions through domestic policies and measures. The flexibility in the EU framework can be used, if strictly necessary. In its February 2020 submission, Norway updated and enhanced its nationally determined contribution under the Paris Agreement to reduce emissions by at least 50 per cent and towards 55 per cent compared to 1990 levels by 2030, and claimed it would fulfil this emissions reduction target in cooperation with Iceland and the EU.

A decision by the EEA Joint Committee (No. 269/2019) requires Norway to report on the progress and fulfilment of the commitments in the Effort Sharing Regulation and LULUCF regulation. Every other year, Norway will report on greenhouse gas policies and measures, and on projections. In these reports, a status update on the development of policies and measures and their effect on emissions with an eye on 2030 will be provided.

Table 2: Net removals in the LULUCF sector in mt CO₂e (historical and projected)

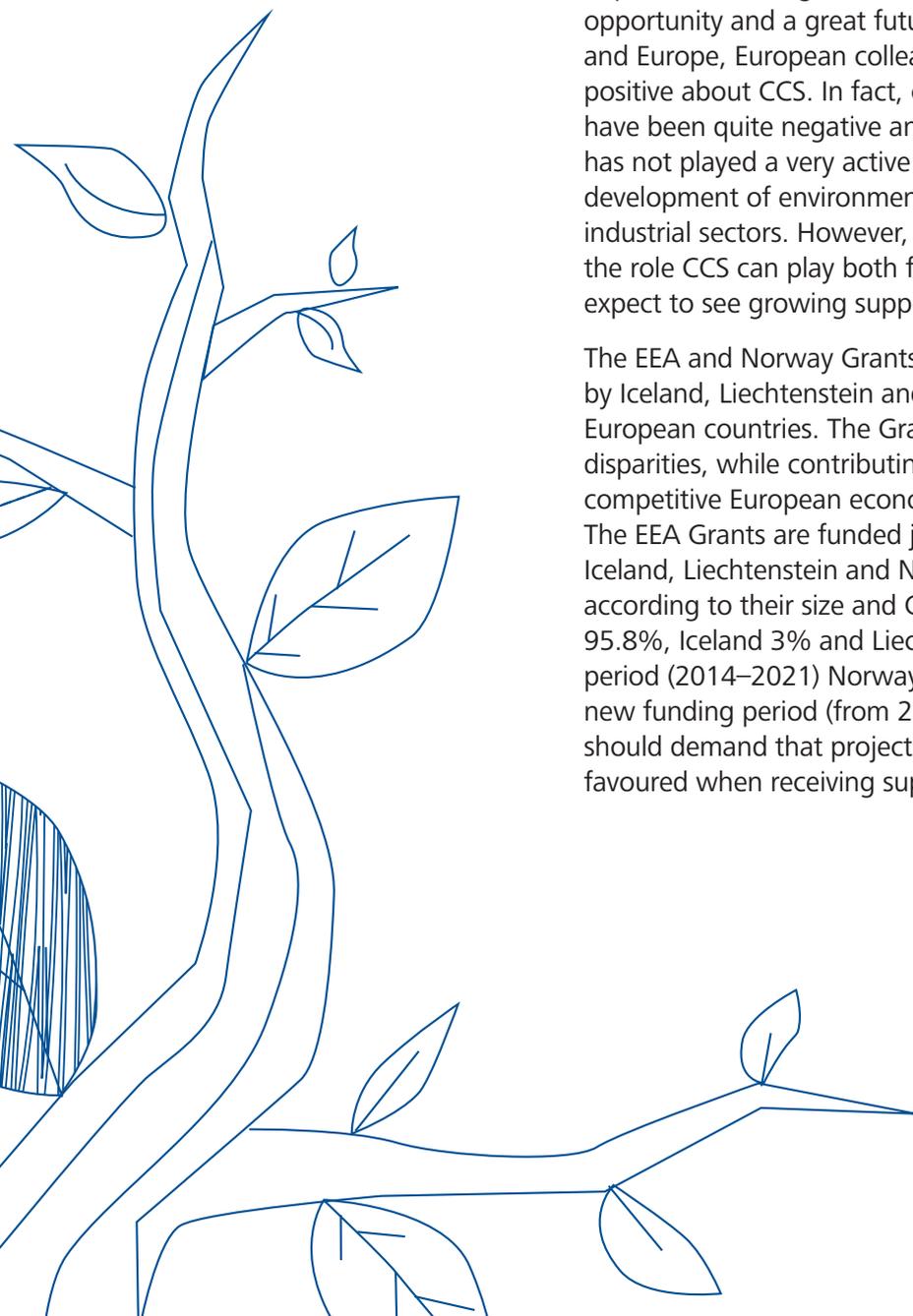
Year	1990	2005	2010	2017	2020	2030
LULUCF	-10.0	-25.1	-25.6	-25.0	-21.7	-20.3

The Norwegian trade unions participate in a wide range of committees and working groups in and through the ETUC, which has managed to get Just Transition on the agenda in various European political institutions, and have demanded and promoted the establishment of the Just Transition Fund through the European Green Deal.

The European trade union movement holds very similar goals and views throughout the different European countries on social rights, workers' rights and what is to be regarded as socially fair. There are of course differences both in traditions of social dialogue, the degree of organisation in the country and among the various trades and branches, and in light of the national political situation. The ETUC is expected to speak with a bold and clear voice for all the members towards and against European political institutions.

While the Norwegian trade unions, particularly LO, advocate Carbon Capture and Storage (CCS) as a very important Just Transition opportunity and a great future job creation area for both Norway and Europe, European colleagues have been less excited and less positive about CCS. In fact, colleagues in some European countries have been quite negative and reluctant about CCS, hence the ETUC has not played a very active role in promoting this important area for development of environmentally friendly technology, particularly for industrial sectors. However, we see emerging signs of acceptance of the role CCS can play both for climate, Just Transition and jobs, and expect to see growing support from European trade unions.

The EEA and Norway Grants are financial mechanisms financed by Iceland, Liechtenstein and Norway and provided to different European countries. The Grants intend to address social and economic disparities, while contributing towards a dynamic, green and competitive European economy, through investments in innovation. The EEA Grants are funded jointly by all three donor countries – Iceland, Liechtenstein and Norway. The donor countries contribute according to their size and GDP – Norway provides approximately 95.8%, Iceland 3% and Liechtenstein 1.2%. During this funding period (2014–2021) Norway is contributing €2.8 billion to the EU. A new funding period (from 2022) will soon be negotiated. Trade unions should demand that projects promoting Just Transition should be favoured when receiving support from the contributed funding.



04

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LO

LO Norway, established in 1899, is Norway's largest confederation of trade unions; 970,000 members are organised in 25 unions, covering all sectors in both the private and public sectors. Male and female members each make up 50 per cent of the total membership. LO's main purpose is to ensure the members' safe working conditions and fair pay through negotiations with employers and by influencing politics.

UNIO

Unio (The Confederation of Unions for Professionals) is Norway's second largest labour confederation with 375,000 members. Unio is politically independent and has 13 national affiliates. Most of Unio's members work in the public sector – in occupations that provide services to young and old citizens in both rural and urban areas.

YS

The Confederation of Vocational Unions (YS) is a politically independent umbrella organisation for labour unions and was established in 1977. YS has 13 affiliated unions organised according to profession, with 226,000 members. YS represents the unions in the national tripartite cooperation, development of labour policy and in matters that affect members, such as economic development, welfare, inclusion, labour participation and the workplace environment.

NFS

The Council of Nordic Trade Unions (NFS) is a regional trade union council. Its affiliates are 15 national trade union confederations of the Nordic countries which together represent more than 8.5 million members from blue collar, white collar and academic sectors in Denmark, Finland, Iceland, Norway, Sweden, Greenland and the Faroe Islands.

Founded in 1972, the main task of NFS is to coordinate and foster regional trade union cooperation in the Nordic countries, particularly with regard to employment, economic and social policy and in relation to ETUC, ITUC, TUAC, ILO and PERC. NFS represents its members in relation to the Nordic Council and the Nordic Council of Ministers and has close ties with the Baltic Sea Trade Union Network (BASTUN).

The Friedrich-Ebert-Stiftung

The Friedrich-Ebert-Stiftung (FES) was founded in 1925. It is the political foundation with the longest history in Germany. It has remained true to the legacy of its founder and namesake, and it upholds the values of social democracy: freedom, justice and solidarity. Its ideals are linked to the Social Democratic Party and free trade unions.

The FES promotes social democracy primarily through:

- political education work to strengthen civil society
- political consultancy work
- international collaboration with foreign offices in over 100 countries
- providing financial support for gifted students
- preserving the collective memory of social democracy with facilities including an archive and a library.

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Abstract

In Norway the trade union movement has fought and won several of the rights connected to a Just Transition. But no right is won forever, and the fight for these rights in a period of great transitions continues. This report highlights Norwegian climate policies, the importance of the petroleum sector, the trade unions' focus on a Just Transition in a number of sectors, and the emphasis on involvement, participation and social dialogue in a time when fighting climate change is a priority.