

EUROPEAN GREEN DEAL

LESSONS FROM DENMARK
AND PROPOSALS FOR THE EU



Confederation of Danish Industry

Introduction

Climate change is the biggest societal challenge faced by the EU and the rest of the world. We all have a shared responsibility in finding ways to accelerate the path to a sustainable future. With the right policies in place, business can drive forward the technology development and innovation needed for a sustainable future in Europe. We see business as an essential part of the solution to climate change. Both at the national, European and global level.

The Confederation of Danish Industry (DI) supports the ambition of the Danish government to reduce greenhouse gasses by 70 per cent by 2030 as well as achieving climate neutrality in 2050. In fact, DI's economic plan for 2030 "Together we create green growth" sets out 160 policy recommendations, which combined will reduce Denmark's CO₂ emissions by at least 65 per cent in 2030, while increasing annual growth to an average of 1.7 per cent and adding 120.000 new private sector jobs to our economy. To reach the 70 per cent target, R&D efforts will have to be strengthened significantly.

Denmark started its low carbon transition in the 1970s. We have since come a long way. Today, most of the electricity Danes use comes from wind or biomass incineration. We have also become much better at using energy more efficiently in our buildings, businesses and private households.

Denmark's CO₂ emissions is expected to be 44 per cent lower in 2030 compared to 1990. This is due, in part, to decisions already adopted by the Danish Parliament to stop burning coal in the electricity and district heating sectors and to build more offshore wind farms.

31 of the 160 recommendations in DI's 2030 economic plan focus on climate and sustainability. If implemented, these measures will cut Denmark's emissions by an additional 20 per cent in 2030. Aside from renewable energy and energy efficiency, these proposals cover circular economy, transport and water technologies.

Denmark cannot solve the climate change issue alone. We need the EU and the rest of the world to take similar ambitious climate actions and promote sustainability more broadly. Danish businesses therefore welcome the Green Deal presented by the Von der Leyen Commission.

An ambitious European Green Deal, with climate neutrality by 2050 as the principal objective, is the right starting point for the EU. To deliver on our ambitious climate targets, both medium and long-term, thorough considerations should be given to the regulatory framework for the green transition. Europe needs a coherent market-based framework that will enable the market to deliver. A confident market is the best way to mobilise private investments in the green transition.

The Danish business community wants to contribute to the discussion on Europe's green transition by proposing concrete initiatives on Europe's green future. Despite being a small EU-member state, we hope that the EU and other member states will look to Denmark as a pilot country and a source for inspiration for the green transition.

Lars Sandahl Sørensen
CEO
Confederation of Danish Industry

Energy & Climate



The rise in CO₂ emissions over the last 30 years and a growing global demand for food, materials, stable electricity, heating, cooling and transportation represent major climate challenges worldwide. The question the EU faces is therefore: How do we reduce CO₂ emissions and ensure access to clean and affordable energy, while also creating economic growth? How do we succeed in furthering our energy use efficiency? And how do we decarbonise our industrial value chains cost-effectively?

NATIONAL LEVEL

Sustainable progress will not be made without firm political commitment. In 2018, Denmark decided to lead the green transition and become entirely climate neutral in 2050. Furthermore, in late 2019, a large majority of parties in the Danish Parliament supported a new Danish Climate Law setting out a 70 per cent reduction target for 2030, compared to 1990 levels.

Energy efficiency

Energy efficiency has historically played a large role in Danish emission reductions. The Danish Industrial sector is today amongst the most energy efficient globally. This has assisted the Danish companies to maintain their competitive edge. Buildings are one of the greatest energy consumers, representing almost 40 per cent of all energy consumed. According to the Danish Energy Agency, approximately 85 per cent of the buildings we will live in by 2050 have already been built.

Decarbonisation of the buildings we use today will therefore be key to reach the



goal of a fossil free society by 2050. Due to an increasingly climate-friendly use of green electricity and green district heating, CO₂ emissions from buildings are already relatively low, compared to the amount of energy they consume. There is nevertheless still further potential in decarbonising our buildings.

Green power

Another key element in reaching climate neutrality is to expand the share of renewable energy harnessed from wind. This also includes driving the development of an intelligent energy system capable of managing supply fluctuations of renewable energy.

Denmark installed its first commercial offshore wind farm 30 years ago and has since been a global leader in the wind industry. In 2019, onshore and offshore wind turbines along with solar power provided around 50 per cent of Denmark's electricity consumption. Implementation of the 2018 Danish Energy Agreement will ensure that 100 per cent of Danish electricity consumption is to be generated by renewable energy by 2030. The

successful deployment of renewable energy production in Denmark has, in part, been driven by technological advancement and significant cost reductions of wind energy. In fact, today, wind energy is cost-competitive compared to fossil fuels.

Green efficient heat

District heating is another key component of Denmark's energy transition. Today, 63 per cent of Danish homes get their heat and hot tap water from district heating. Furthermore, around 70 per cent of heating in Denmark is renewable based in the combined heat and power production with efficiency rates of up to 92 per cent. This makes district heating essential to the Danish heat and power supply. Because of the high efficiency and flexibility in district heating, combined heat and power systems will continue to be a key element in Denmark's vision for climate neutrality by 2050.

Combined measures of scaling up renewable energy production, district heating and cooling and ambitious energy efficiency measures have made Denmark one of the most sustainable countries

in the world. However, with a target of cutting CO₂ emissions by 70 per cent by 2030, climate actions must be accelerated even further. Therefore, as part of our economic plan for 2030, DI published 31 recommendations that will result in an additional 20 per cent emissions reduction. With DI's plan, Denmark could reach 70 per cent reduction of CO₂ emissions in 2030.

How do we reach 70 per cent by 2030? The faster we act, the better chances we have of reaching the 70 per cent goal. In fact, several of our recommendations need to be implemented in the beginning of this decade, in order to give both businesses and citizens time to adapt.

We also need to strengthen Danish companies' ability to compete. Neither our economy nor the planet will win if our climate action results in companies moving jobs or production abroad. This will only relocate our greenhouse gas emissions elsewhere. Therefore, our companies must remain strong competitors in international markets.

The below proposals are part of the 31 recommendations for energy and climate in DI's 2030 plan:

- Renewable electricity should be accessible and cheap for everyone to use. To that end, Denmark should establish two additional offshore wind farms and continue to develop both solar and wind onshore.
- More efficient use of energy in our buildings and companies. A better legal and regulatory framework is required to enable energy efficiency as well as introducing a green transition financing mechanism for industry.
- Better use of surplus heat from ovens and machines in our factories. District heating plants can use this surplus heat for radiators in homes and offices without emitting more greenhouse gases. Outdated rules and taxes stand in the way, preventing our society from utilising surplus heat from one sector to an energy source in another sector.
- Restructure taxes on cars to incentivise purchase of cars that emit little or no greenhouse gases. Rules for

company cars also need to be adjusted to incentivise the purchase of low or zero emission cars.

- The annual public investment in research and development of green solutions should be raised by at least EUR 300 million by 2022.

EUROPEAN LEVEL

While Denmark may serve as a good example for the green transition, neither Denmark nor any other member state will succeed in achieving climate neutrality by 2050 without corresponding ambitious energy and climate policies at the EU level. We need the EU to commit to ambitious climate action, but also to ensure economic growth and welfare. This will require competitive companies. Only a competitive Europe will be able to facilitate transition towards 2050 in which climate action, economic growth and welfare are equivalent pillars.

Furthermore, this will require a coherent market-based framework for EU's energy and climate policies. A framework that covers all sectors of our economy in order to stimulate cost efficiency and decreased

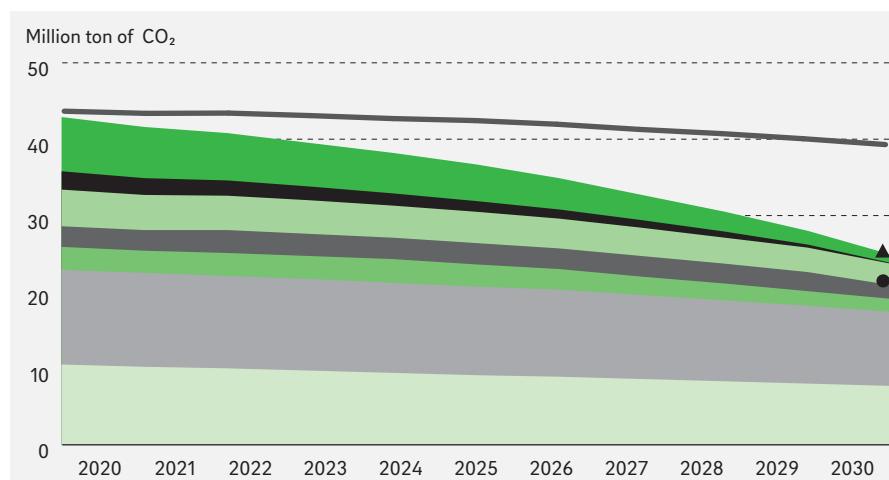
emissions in all parts of the economy. Sector integration will enable us to harvest the benefits of positive symbiosis between sectors and initiatives.

Energy efficiency in an industry has the potential to boost competitiveness. The industrial sector uses more energy than any other end-use sector, consuming about one half of the world's total delivered energy. Lowering energy consumption is therefore an important driver for industrial productivity growth. Energy, on average, represents between 1 per cent and 10 per cent of total production costs – and for energy intensive industries, such as steel, chemical, paper, pharmaceutical, cement and construction materials, the share of energy costs is even higher, between 15 per cent and 40 per cent on average.

A cost-effective low-carbon transition requires acceleration of investments in low carbon technologies across all sectors of EU's economy. Ambitious innovation programmes and utilization of merging opportunities such as digitalization should be promoted to further push the green transition.

DI's plan reduces CO₂ emissions

CO₂ emissions with DI's 2030 plan



- Carbon emissions reduction without further initiatives (baseline)
- Electricity and district heating
- Buildings
- Industry
- Other
- Environment
- Transport
- Agriculture
- ▲ 65 per cent reduction
- 70 per cent reduction

Note: DI's proposals include LULUCF and cancellation of EU ETS quotas. Cancellation of quotas contributes to reduction of CO₂ emissions across the EU rather than only within Danish territory.

Our proposals for the EU

- ④ Adopt an EU climate law enshrining the 2050 climate neutrality target and revise the EU 2030 climate targets. Greenhouse gas emissions should be reduced by at least 55 per cent by 2030.
- ④ Strengthen EU's internal energy market to allow for efficient transportation of green energy between member states and European regions. The EU Emissions Trading System should remain the key instrument to drive forward the green transition based on market-based principles and in a cost-efficient manner.
- ④ Ramp up the deployment of renewable energy production across the EU. Wind energy, especially offshore wind, has huge potential for further scaling in Europe. The EU should adopt a comprehensive strategy for offshore wind.
- ④ Strive to become the most energy-efficient region globally. While European industry is among the most energy-efficient industries globally, there is still a huge potential for cost-efficient measures in industry and in renovating Europe's building stock.
- ④ Adopt a comprehensive strategy for smart sector integration. Smart integration of renewables, energy efficiency and other sustainable solutions across sectors will help to achieve decarbonisation at the lowest possible cost. This will reduce the bill for renewable energy for all citizens, while boosting industrial competitiveness in Europe.
- ④ Invest more in new green technologies, especially for industrial applications. New industrial applications of breakthrough technologies will be a key component to maintain industrial competitiveness as Europe transitions to a low carbon society. This includes battery technology, green hydrogen, energy storage and carbon capture and storage.
- ④ Strive to become a sustainable supercluster. The EU should develop and implement a common strategy to strengthen EU exports of renewable energy solutions to the rest of the world.

Water sector



Europe is faced with water scarcity in some regions and storm water situations in others. Europeans demand quality drinking water. Meanwhile, wastewater treatment is often costly and requires massive use of energy. Improving the European water sector with a view to reduce the sector's energy consumption will be a vital part of Europe's transition to climate neutrality in 2050.

NATIONAL LEVEL

Denmark aims to ensure an energy and climate-neutral water sector in 2030. This goal enjoys broad political support and is also backed by both the water sector and the industry. Innovation and deployment of new technologies and digitalisation will be key to achieve this ambitious goal.

The Danish water sector has reached remarkable milestones. Today, it is considered a global leader in water resource management, water savings, water pricing, resource recovery and energy efficiency. Not to mention water quality. Nearly 100 per cent of our water supply comes from clean groundwater.

Responsible management of water resources

Water resource management is important. Reduction of consumption in households and industries combined with record low leakage rates from water supply infrastructure are the main drivers behind Danish water management optimisation.

The per capita consumption of water in



Denmark is below 104 litres per person per day compared to an EU mean per capita consumption of 144 litres per day. The average leakage rate in Denmark is close to 7 per cent of water supplied. In comparison, some European cities have leakage rates of up to 50.

Denmark's high standards of water supply and wastewater treatment is financed through full cost-recovering water pricing. A national water pricing authority keeps track of the correct pricing, along with enduring efforts into efficiency-enhancing measures within the sector. For the industry, pricing of treatment of wastewater at utilities is based on a basic wastewater load and extra fees for wastewater load, i.e. additional pollution loads. This creates an incentive for businesses to lower their outlet of wastewater and polluting residuals.

SCADA systems in water supply with modern sensors and regulation on pumps and valves lead to significant reductions in leakage rates as well as lower costs for water consumers. Modern online or remote registration of metering

data supports digitalisation of the water sector and reduces costs for consumers and water companies alike.

EUROPEAN LEVEL

According to the International Energy Agency (IEA), water losses in public supply are estimated at a staggering 24 per cent in the EU, amounting to 13 billion cubic meters. The energy consumption of the EU's water sector is equivalent to 3.5 per cent of the EU's electricity consumption and typically represents 30–50 per cent of the local authority's electricity consumption. For comparison in Denmark the consumption of electricity in the water sector is 1.8 per cent.

As the water resource base in Europe is a closed loop, with a circular reproduction of the water resource, the political focus should be on increasing water quality and preserving our water resources. This cannot be achieved without sound management of both abstraction, reuse and recharge and discard of water in EU member states.

The EU should support good management of water resources in Europe. Not least in terms of fostering cooperation between member states on best practices and exchange of knowledge.

Benchmarking

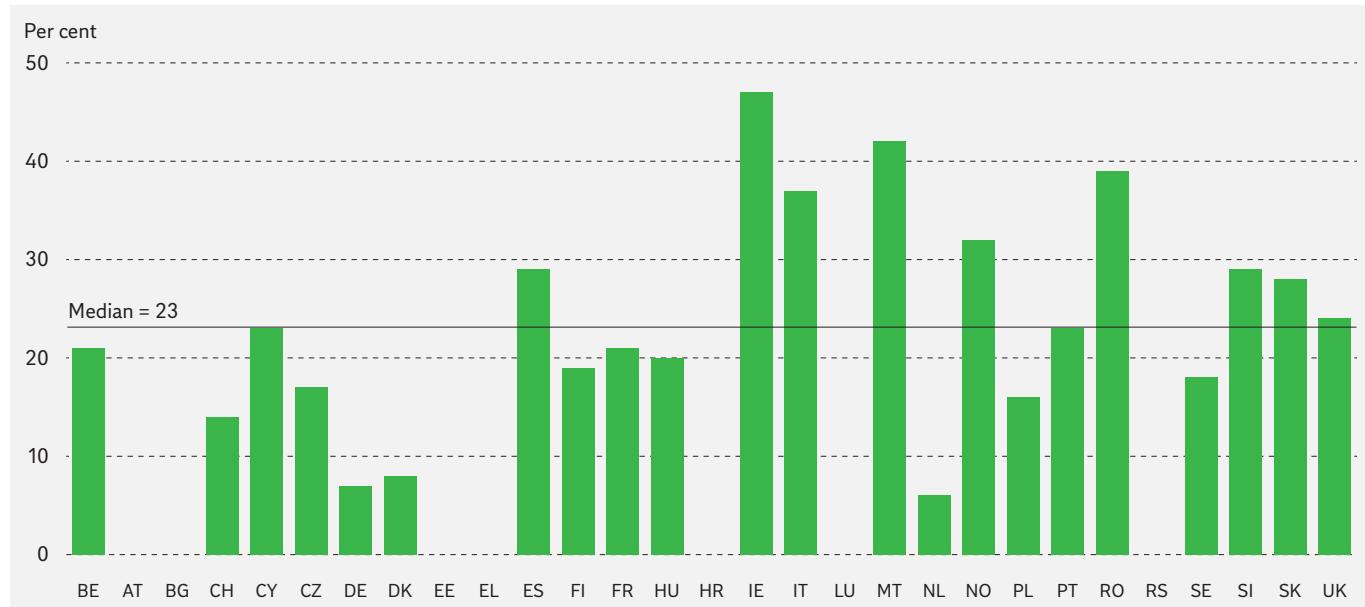
Benchmarking the water resource performance in member states such as water consumption in households, agriculture and industry sectors (e.g. via the Industrial Emissions Directive) is crucial to promote best practice and shed light on weak spots. A market-based exchange of water technology will support use of the best available technologies and encourage innovation in the water sector. A coherent market for water technologies will attract investments in innovative solutions.

Transparent pricing

Transparent water pricing and uncovering subsidies are important instruments in good water management. Consumers will have greater incentive to change their behaviour and reduce their water consumption if they are made aware of the actual prices of their water consumption.

Average water distribution losses

Country EU27 + NO,UK



Source: EurEau: Europe's water in figures – 2017 edition

Digital tools are essential to provide transparent and efficient water markets for taxpayers. Especially if water markets are tax-subsidised. Likewise, open data on performance and quality of water service will make it more attractive for the private sector to invest in the water sector.

Energy efficiency

The water sector consumes approximately 3 per cent of Europe's electricity use. As all wastewater is required to be treated in accordance with EU regulation, this number is predicted to increase to 6–8

per cent. To reverse this trend, energy efficiency in the European water sector is badly needed.

Reduced water consumption in households and industry means that less water will be pumped. In turn, this reduces energy consumption. Furthermore, resources in the wastewater stream should be recovered. The technology to do this is already available. Especially recovery of phosphorus and other nutrients. But for other types of resources, such as metals, the right technologies for a widespread use still need to be identified.

Reporting obligations

EU rules are needed to reverse the recent lack of progress in improving the water sector in the member states. Such rules should focus on goals and reporting obligations. Member states should remain flexible to some degree, in accordance with the subsidiarity principle, in how to reach the goals. Member states should set out national action plans, while the role of the Commission should be to ensure responsible monitoring.

Case

A case story from Denmark shows the incredible potential of the European water sector: Since 2010, the city of Aarhus has implemented energy-saving measures in the whole water cycle and optimized the energy production from the wastewater facility. Today, the city has succeeded to make the whole water cycle completely energy-neutral, and, as a side effect, water losses could be reduced to only around 6 per cent, and, in 2016, the price of water dropped by 9 per cent for consumers.

Our proposals for the EU

To lift the European water sector to a new level, the EU should take up the following initiatives:

- ④ Benchmark water sector service in Europe. This can be done as a follow up to the water framework directive and to support a sustainable water sector financing.
- ④ Promote full cost-recovering water prices throughout Europe to support a sound behaviour of water consumers.
- ④ Promote use of management data and metering data in water supplies. Enhance the use of data and digitalisation in monitoring, reporting of water resources, consumption and losses as well as quality according to the requirements of the water framework directive.
- ④ Set goals for energy efficiency in water sector operations in Europe.
- ④ Work towards an energy- and climate-neutral water sector by 2030 with new initiatives under the urban waste water treatment directive and the water framework directive.
- ④ Set goals and action plans for the recovery of resources from wastewater streams in connection with the Commission's initiatives on circular economy.
- ④ Set up innovation programmes in the EU to promote innovation into new recovery techniques. The focus on pharmaceuticals should be both at the source and at the wastewater treatment plants.



Circular economy

The world's resources are being spent at an ever-increasing pace. This puts a massive strain on our planet. With only limited natural resources available, circular economy presents a new way forward. A way in which we can still meet the demand for production and consumption without depleting the world's resources.

The key idea in circular economy and bioeconomy is that materials are kept in circulation for as long as possible to retain or even increase their value and reduce the impact on the environment.

NATIONAL LEVEL

In Denmark, companies in various sectors have embraced the circular way, using different strategies to increase their resource efficiency. For example, use of side streams schemes or take-back schemes and use of secondary materials.

Better use of side streams and industrial symbiosis

Denmark has a long tradition as a food producing country with sustainability as a core value. The Danish food sector is a major export industry. It prides itself of contributing to better resource utilisation of foods, both in high-income countries and in developing countries.

The ingredients industry has many of the skills and technologies, such as fermentation and purification, required to



spearhead a European circular bioeconomy, in which side streams from feed and food production are utilised. Waste materials from one production line can be used to produce other more valuable products, thereby contributing to value creation, innovation and mitigation of wastage of raw materials and food. The Danish company Arla Foods Ingredients is a great case example. Arla has a full range of high-value products based on whey – formerly a waste stream from the production of cheese.

Recycled materials in everyday products

Recycled materials are part of everyday products in a circular economy. This reduces the demand for virgin materials. For example, Danish plastics producer Plastix relies solely on ocean plastics coming from fishing gear, and the Danish deposit system delivers high quality recycled materials in a closed loop system. There is, however, still some way to reach full circularity. Danish companies struggle to source recycled materials in the right quality, and the waste sector is challenged by a lack of common criteria for sorting waste.

Take-back schemes and common market for waste

Take-back schemes are a way for businesses to make use of their discarded products and reuse parts or recycle materials. Furthermore, businesses can use take-back schemes to gain valuable insights about future product designs. Danish pump producer Grundfos is among the companies which take back used products, disassemble them and recycle the materials. While ease of disassembly has not previously been a priority in the design process, the ambition is now to include disassembly to enhance circularity in future products.

THE EUROPEAN LEVEL

Waste is a resource and should legally be treated as such. The international market for trade with natural resources should include waste. As a minimum, this should be the case internally in the EU. The EU waste shipment directive currently hinders or makes transport of waste across borders unnecessarily expensive. This is especially a problem in smaller countries

such as the Nordics. For small countries it is not always economically profitable to build national recycling facilities, hence a lot of waste is transported to other EU countries for recycling. The existing EU legislation on shipment of waste makes it very expensive and difficult to ship waste between member states for reutilisation. Moreover, companies experience large variations in waste administration between member states. Especially regarding waste characterisation and definition, assessment of impurities etc.

Use of different terminology or – even worse – national rules create barriers to trade with waste between EU member states. In sum, a coherent legal framework for waste in the EU should make it easier for European companies to reuse waste. This would unlock the huge potential within the circular economy, ultimately resulting in more green jobs and more investments that facilitate technological developments.

Case

The Danish city of Kalundborg is another great example of large local industries creating value out of side streams that would otherwise be considered as waste. The Kalundborg Symbiosis, a partnership between nine public and private companies, has since 1972 developed the world's first industrial symbiosis with a circular approach to production. The main principle is that a residue from one company becomes a resource at another, benefiting both the environment and the economy. These industries have established a complex green resource symbiosis. Residual water streams and resource streams from various industries can be utilised in neighbour industries or at the local wastewater treatment plant. Resources and energy are recovered and the water is widely reused in the industry.



Our proposals for the EU

- ④ Revise the regulation on transboundary shipment of waste to make it less costly and burdensome for businesses to establish take-back schemes across boundaries.
- ④ Make it easier to obtain approval of Novel Food application. Currently, the EU Novel Food Regulation presents an investment and temporal barrier to the development of ingredients from side streams of existing food production. Typically, sufficient documentation will amount to some EUR 1-2 million, and it will take 3-5 years to obtain final approval.
- ④ Ensure uniform implementation and practice of the European criteria for by-products and end-of-waste to strengthen the market for secondary materials in Europe.
- ④ Ensure that waste facilities which upgrade waste to secondary raw materials back into the circular economy are able to receive input material from other EU countries in a fast track handling.
- ④ Revise regulation on recycled content in food contact materials to allow for non-food packaging in the plastic waste streams to be recycled. Other products, such as personal care products, have strict requirements for the quality of their packaging. These could potentially be included in the food packaging part of the waste stream to a larger extent than today.
- ④ Ensure that good quality criteria for secondary materials are available in sufficient quantities at competitive prices. Some sectors, such as metals and paper, are already functioning well, but in other areas, such as plastics, there are still challenges. This can be helped by establishing defined standard quality criteria for secondary materials.
- ④ Consider wastewater streams in a resource perspective by recovering nutrients, especially phosphor. Further, develop and scale up the use of techniques for widespread reuse of the resources in wastewater.
- ④ Prohibit deposition of waste that otherwise could have been reused, recycled or energy-recovered.



Transport

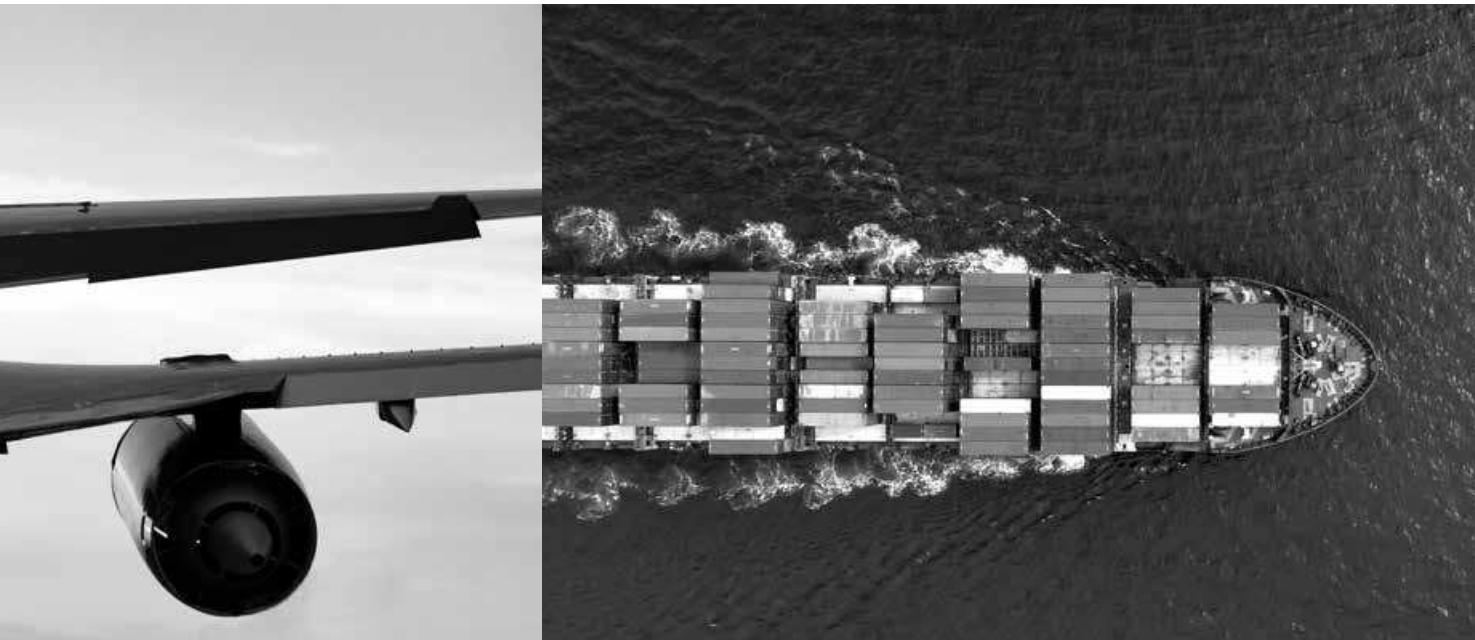
Transport is responsible for around a quarter of greenhouse gas emissions in the EU. Climate neutrality by 2050 can therefore not be achieved without significant CO₂ reductions from the transport sector. There are no quick fixes. All transport modes must contribute to the decarbonisation of the mobility system. To succeed, a varied and system-based approach is needed.

NATIONAL LEVEL

Denmark aims to reduce its greenhouse gas emissions by 70 per cent in 2030. Almost a quarter of emissions in Denmark comes from the transport of people and goods. Although many Danes cycle or use public transport in their everyday life, Denmark faces a situation with still more private cars, vans and trucks on the roads.

To reduce the emissions of the transport sector, the Danish government has established climate partnerships with relevant businesses and the trade and industry organisations. Based on a sector approach, these partnerships aim to find ways to reduce carbon footprint, while also ensuring Denmark's competitiveness and prosperity, and without creating increased inequality. These partnerships also focus on how to decarbonize the transport sector.

Moreover, the Confederation of Danish Industry has embarked on an ambitious 2030 economic plan for Denmark. As outlined below, this includes several initiatives pointing in the same direction



as the EU Commission's proposal for the "European Green Deal".

EUROPEAN LEVEL

Private cars

It should be cheaper to buy cars that do not emit greenhouse gases, or cars that emit very little such as electric cars, hydrogen cars and plug-in hybrid cars. In lieu of the current Danish registration fee, car owners should pay a recurring fee depending on the car's climate footprint. Likewise, companies should be encouraged to choose green vehicles. In the intervening years, before all our vehicles are replaced with CO₂-neutral vehicles, we must mix more sustainable fuel types e.g. electro fuels and biofuels in the gasoline and diesel.

Road freight

More trucks should run on biogas, electricity and other climate-friendly alternatives to diesel. This might be achieved by restructuring the energy taxes, so biogas and diesel alternatives become cheaper, while also providing subsidies for carriers

to buy new and more climate-friendly trucks.

The heavy goods road transport must change into a more sustainable and green reality. Alternative fuels will quite possibly be the most important way forward. In addition, hydrogen-based technologies (such as electric vehicles and vessels based on fuel cells) may become competitive in the medium to long-term. Liquefied natural gas with high blends of bio-methane could also be a short-term alternative for long-distance haul.

Aviation

Aviation is international. It is therefore crucial for the competitiveness of the sector that taxes on aviation are handled in an international framework, preferably globally, but at least at common EU level. Aviation has been subject to the quota system since 2013. The quota system is in fact also a tax system. This should be clearly reflected in any future revision of the Energy Taxation Directive.

In the aviation sector Denmark is promoting the establishment of a climate fund

FACTS & FIGURES

Transport plays an important role in today's economy and has a large impact on growth and employment. The transport industry directly employs around 10 million people and accounts for about 5 per cent of gross domestic product. Effective transport systems are fundamental for the European companies' ability to compete in the world economy.

Logistics, such as transport and storage, account for 10–15 per cent of the cost of a finished product for European companies. The quality of transport services has a major impact on people's quality of life. On average 13.2 per cent of every household's budget is spent on transport goods and services.

based on contributions from passengers flying from Denmark, dedicated to ensure the off-take of alternative fuels especially e-fuels.

Rail transport

Rail transport remains one of the most energy-efficient solutions for carrying freight over medium to long distances. Therefore, rail freight should become more competitive by removing operational and technical barriers between national networks and by fostering all around innovation and efficiency.

Future investments need to focus on the least polluting transport modes,

promote synergies between transport, digital and electricity networks to enable innovations, such as vehicle-to-grid services and smart features such as the European Railway Traffic Management System (ERTMS). This would enable, for instance, high-speed train connections to become the obvious alternative to flying for short- and medium distance passenger travel within the EU.

Public Transport

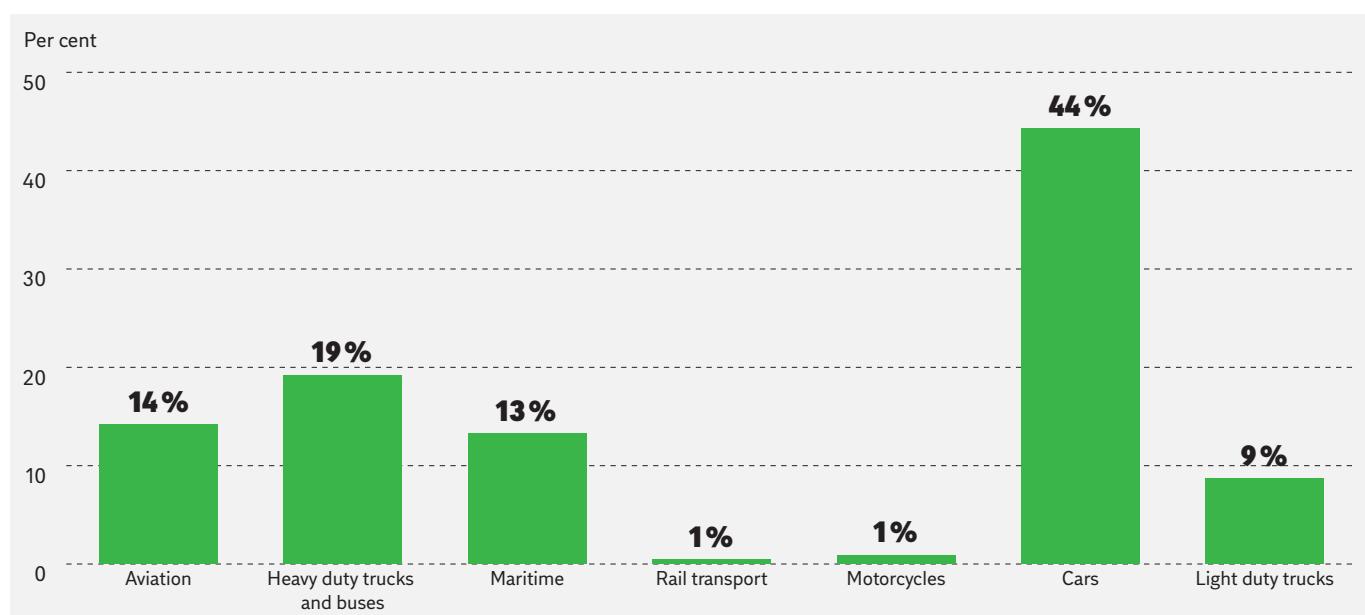
Especially in cities and other urban areas the use of public transport should be promoted as a cleaner mode of transport and the solution to the growing problem of congestion. The use of alternative fuels in

the bus and coach sector will contribute in a positive way to the transition towards the all around greening of transport.

Digitalisation

We need a more efficient organisation of the entire mobility system based on digitalisation, data sharing and interoperable standards. Digital solutions are key to make mobility cleaner. Digitalisation will enable smart traffic management and increasingly automated mobility in all modes, thereby reducing congestion and increasing occupancy rates.

Share of transport greenhouse gas emissions



Source: European Environmental Agency (EEA)

Our proposals for the EU

- ④ Ensure that all EU member states participate in a pan-European effort to phase out fossil fuels in the transport sector.
- ④ Increase the share of sustainable fuels in the transport sector.
Revision of the fuel quality directive could be a means to achieve this goal
- ④ Revise the Energy Taxation Directive. This should pave the way for a harmonisation of fuel pricing across the EU and reduce tank tourism, while also accelerating the uptake of lower CO₂ fuels through the introduction of a tax system that primarily focuses on the CO₂ emissions rather than the energy level.
- ④ Ensure that public procurement of vehicles and transport services are CO₂ neutral by 2030.
- ④ Revise the weights and dimensions directive to promote further use of the modular concept for heavy duty vehicles in the EU.
- ④ Promote electrification of the European railway system. For side lines and local network, alternative fuels could contribute significantly to the greening of rail transport.
- ④ Promote European solutions for climate action in aviation. Encourage solution-oriented partnership between businesses, legislators, researchers and green organisations.
- ④ Expand the infrastructure for new zero and low-emission technologies. Harmonisation for loading and fueling facilities as well as technical requirements throughout the EU should be considered.
- ④ Promote digitalisation in the transport sector, not least the establishment of intelligent traffic management systems and an upgrade of new sustainable mobility services to reduce congestion and pollution in urban areas.
- ④ Promote connected and automated mobility, including solutions such as Mobility-as-a-Service (MaaS).

Financing the green transition

Access to finance is key if the EU is to successfully transition to a climate-neutral society by 2050. The European Commission estimates that reaching the current EU climate targets for 2030 will require EUR 260 billion annually in additional investments in the green transition. It will therefore be pivotal to mobilise further funding for climate action at both the EU and member state levels.

NATIONAL LEVEL

Denmark has for years had a multilayered strategy for incentivising financing of the green transition. Long-term political commitment to tackle climate change is needed to mobilise capital for sustainable investments. Ambitious climate goals, adopted with broad political support, serves as an important signal for the financial markets. Ambitious climate targets will inject long-term confidence into the market and mobilise private capital for sustainable projects.

While market forces are key to raising private capital for sustainable investments, the public finances are also needed to support technological research and innovation as well as deployment of projects to overcome market failure and to up-scale technologies. Denmark spends roughly 3 per cent of GDP on research and development, equivalent to almost EUR 9 billion. This is compared to an EU average of roughly 2 per cent of GDP. In 2019, the Danish government announced that it will further increase funds for climate research.



In symbiosis with political targets and ambitions, public R&D spending has contributed greatly to achieving the Danish reduction targets and creating markets for the green transition into which private investments flow.

Admittedly, we do not yet have all the answers to mobilise the investments needed to achieve EU's 2030 goals or climate neutrality by 2050. We must therefore continue to pursue new avenues to raise investments in the green transition. Public private investment partnerships is an example of such avenues.

Denmark has several public and private funds, which allow both public and private money to be pooled together in sustainable projects. For example, the Danish Green Investment Fund provides loans to researchers and entrepreneurs, who seek to develop innovative solutions for climate-related goals. 60 per cent of total project costs and up to EUR 13 million can be borrowed through the fund. Several of such funds exist, some are broadly defined and some more narrowly defined towards environmentally related projects etc.

Public and private funds are also used for investments in developing countries. Considerable investments have been made in developing countries with the help of blended finance models. Blended finance refers to the strategic use of development finance and philanthropic funds to mobilise private capital flows to emerging and frontier markets. For example, the Danish Climate and Investment Fund provides risk capital as a minority investor in a project to offset climate-related technology or create jobs. This fund has made more than 60 investments worth EUR 200 million in renewable energy and energy efficiency projects in developing countries.

Today, the market for renewable energy, in Europe and abroad has matured to an extent where private investors are actively looking for sustainable investments. Already in 2014, the amount of pension funds that went to renewable energy investments was three times higher than the amount that went to fossil fuels. Much of this money went to infrastructure projects like offshore wind farms and other renewables, which are generally seen by

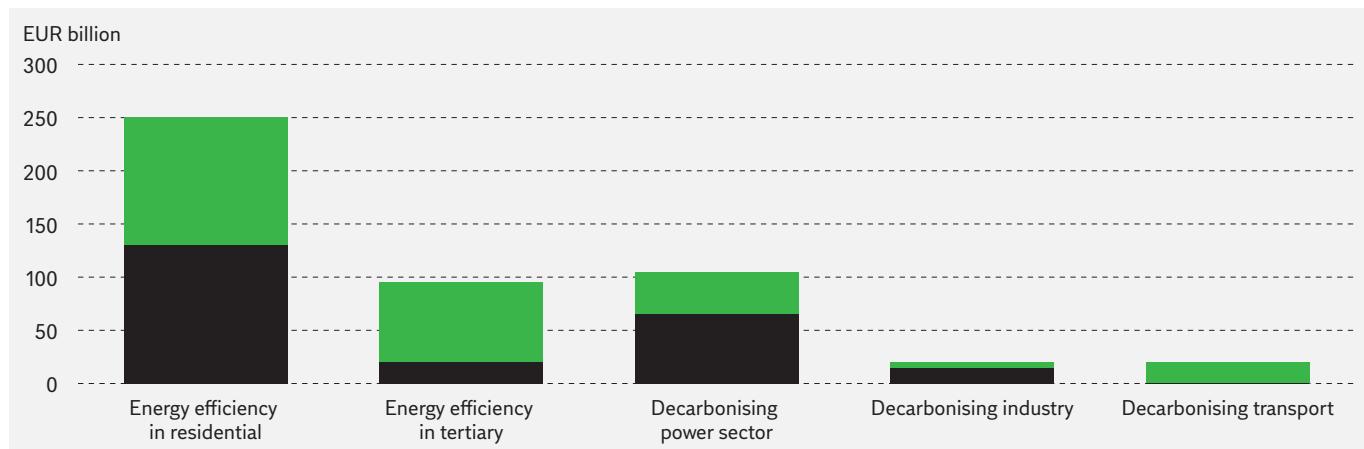
pension funds as attractive investments compared to other assets. In 2019, the Danish pension sector announced a further commitment to spend 10 per cent of their total pension assets in renewables by 2030. This means that by 2030 almost EUR 50 billion will be spent on the green transition.

THE EU LEVEL

Reaching climate neutrality by 2050 will be a monumental challenge for Europe. The EU must be at the forefront of a concerted effort to deliver on our climate ambition. Considering the significant current gap in sustainable investments in Europe, the EU must solve the puzzle of how to increase access to sustainable finance. The Commission estimates that additional investments of EUR 260 billion a year are needed, compared to a baseline scenario, to reach our 2030 goals of cutting EU-wide CO₂ emissions by 40 per cent, including the sub-targets on renewable energy production and energy efficiency.

Yearly average investments needed in Europe to reach our current 2030 climate goals

- Additional investments needed
- Baseline scenario



Source: European Commission

The Sustainable Investment Plan, as presented by the Commission in January 2020, aims – through the EU budget – at mobilising at least EUR 1 trillion of sustainable investments over the next decade. While this is not enough to close the investment gap, it is an important step to mobilise sustainable investments at the EU level. The EU Multiannual Financial Framework (MFF) will be key to increase the investment levels as foreseen in the investment plan. Therefore, at least 30 per cent of the MFF should be directed towards the green transition. This will require coordination across budgetary headlines and sharp prioritisation.

The EU unfortunately still lags behind other regions in R&D funding, for example the US and China. The HorizonEurope programme will therefore be more important than ever in scaling up Europe's research funding, especially in relation to climate research, development and innovation.

While climate-proofing the MFF will help to reduce the current investment gap, more still needs to be done. The EU should make full use of the InvestEU programme. The announcement of the European Investment Bank's (EIB) efforts to become Europe's climate bank is similarly important.

To avoid "green washing", Europe needs a common framework to classify "green" financial products. The taxonomy for sustainable finance holds great promise. The taxonomy will not only create a level playing field for sustainable financing, increased transparency of sustainability in the financial sector will hopefully also incentivise investments in Europe's green transition.

Case: Private financing for RE in Africa

In 2011, DI was a key part of a private initiative that launched a fund with the purpose of developing renewable energy projects in Africa. Today, Frontier Energy is a leading investor in the African renewable energy market. Frontier Energy has a hands-on and integrated approach to investing in the development, construction and operation of renewable energy projects and develops, constructs and operates more than 45 renewable energy projects in Africa within hydro, geothermal, wind and solar PV with a total capacity of more than 750 MW and total project costs of more than USD 1.8 billion.

Our proposals for the EU

- ④ Commit to mobilise at least EUR 1 trillion of sustainable investments over the next decade as laid out in the Sustainable Investment Plan by the European Commission.
- ④ Ensure proper climate-proofing of the EU's multi-financial framework. At least 30 per cent of the EU funds should be aimed at climate action.
- ④ Boost funding in the HorizonEurope programme, particularly funding for climate research, development and innovation.
- ④ Maximum use of InvestEU to leverage private investments in the green transition, for example sustainable energy and transport.
- ④ Support European Investment Bank's efforts as a climate bank.
- ④ Ensure a fair and just transition. A public sector loan facility with the European Investment Bank backed by the EU budget under the Just Transition Mechanism to ensure national co-financing.
- ④ Finalise the taxonomy on sustainable finance to create a level playing field for sustainable finance.



Sustainable Development Goals

Denmark is strongly committed to achieving the Sustainable Development Goals (SDGs) in both national and global arenas. While the climate and the environment are important aspects of this agenda, we can only achieve sustainable development by acting on all 17 goals.

Denmark possesses unique conditions for fulfilling the SDGs at the national level. The Danish economy is predominantly based on sustainable economic growth, high employment rates, a high level of prosperity, gender equality, a high level of social welfare, effective environmental protections, high energy efficiency and use of renewable energy, a large degree of freedom, a high level of public trust, and an open democracy with respect for human rights. This has helped integrate the SDGs into the Danish society and attain a range of significant results when it comes to their realisation, including that:

- Of all the countries in the world, Denmark comes closest to fulfilling the goals, according to Bertelsmann Stiftung's SDG Index. Denmark tops the 2019 index ahead of Sweden, Finland and France.
- The Danish government has introduced a national plan of action for the SDGs. The plan includes an ambition to assess new Danish legislation against the backdrop of the SDGs when relevant.



- The Danish Parliament has established a Network 2030 comprising members from all political parties. The network seeks to facilitate an inclusive dialogue on sustainable initiatives, ambitions, and priorities between politicians, businesses, civil society, and other central stakeholders.
- To enhance its efficacy, Network 2030 has introduced a 2030 panel consisting of individually appointed SDG experts from private businesses, civil society organisations and academia. The 2030 panel supports the Network 2030 through analyses, advice, and continuous counselling.
- A coalition covering public and private partners has invited all interested citizens, businesses, organisations and think tanks to discuss how to transform the SDGs into tangible indicators adjusted to the Danish society and way of life through the ‘Our Goals’ campaign. The indicators will be tailor-made to Denmark and will supplement the official UN indicators.

- The data and statistics of the ‘Our Goals’ campaign will be collected and presented by the central authority on Danish statistics, Statistics Denmark. Statistics Denmark is considered a world leader in this arena and provides comprehensive and reliable data on sustainable trends and progress indicators at both the national and global levels.

UN Sustainable Development Goals

The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace and justice. The 17 Goals are all interconnected, and in order to leave no one behind it is important that we achieve them all by 2030.

The 17 Goals were adopted by all UN Member States in 2015 as part of the 2030 Agenda for Sustainable Development which set out a 15-year plan to achieve the Goals.

Private sector commitment has been a critical enabler for Denmark’s world-leading position on sustainability. Danish businesses are increasingly integrating the SDGs into their mindset and business models. A 2019 analysis conducted among the members of the Confederation of Danish Industry showcased a remarkable growth in the amount of Danish businesses familiar with and working strategically with the SDGs. This reflects a sincere aspiration to help mitigate global challenges such as climate change and social injustice as well as a strategic ambition to pursue the commercial potential that follows from fulfilling the SDGs at the global level.



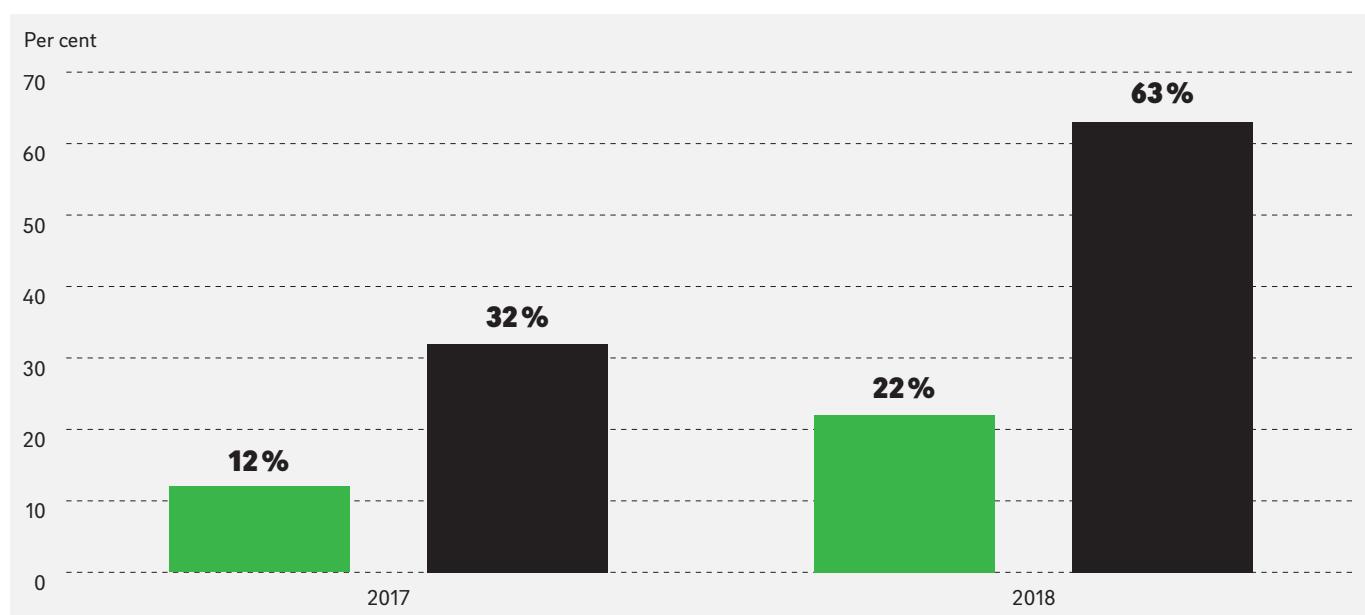
The SGDs match key strengths of Danish businesses. Danish companies have many years of experience in providing sustainable solutions that contribute to solving global challenges. For instance in the areas of water, food and renewable energy Danish companies are particularly well positioned to deliver the requested sustainable solutions. According to the 2018 IMD World Competitive Business Rankings, Denmark ranks first on companies' prioritisation of sustainable development. Danish companies are placed in the top three in relation to CSR, accounting practices and ethical standards, and

Denmark is among the top ten regarding public service partnerships supporting technological developments. This reiterates that sustainability is an integral part of the mindset of Danish businesses.

The Danish example can help inspire politicians, civil society actors and companies in Europe and beyond to promote the SGD agenda through unique partnerships between public and private actors. The following initiatives could help the European Commission fulfil the ambitions of the European Green Deal based on the Danish experience.

Danish companies are integrating the SDGs into their business strategies

- Companies that are familiar with the UN Sustainable Development Goals
- Companies that have integrated the UN Sustainable Development Goals into their strategy



Source: DI's Company Panel.

Our proposals for the EU

- ④ Take on a leading role in promoting the SDG agenda in the European community.
- ④ Invite all interested citizens, businesses, organisations, and think tanks to discuss how to integrate the SDGs further into the European community and everyday life through a joint European campaign and/or individual campaigns in each member state.
- ④ Encourage all member states to formulate a national action plan for SDG fulfilment.
- ④ Encourage the European Parliament to establish a broad 2030 network to discuss sustainable ambitions and solutions among politicians, businesses and civil society organisations.



Confederation of Danish Industry