

Newsletter

September 2024

Important agendas await political action

We are about to embark on a new political season. When the Danish Parliament opens on the first Tuesday in October, it will open with a historically large government of 25 ministries, and an extensive and difficult political agenda including reform of the healthcare and employment systems, as well as implementation of the important defence agreement and the green tripartite agreement.

In the EU, the European Parliament has to approve the new Commission before it resumes its legislative work. A difficult political agenda also awaits in the European context. During her election as the incoming President of the European Commission, Ursula von der Leyen announced changes in important and difficult areas such as the green agenda and security of supply, as well as defence and security.

These wide-ranging agendas are the focal point of this edition of our newsletter. We have invited our four Senior Fellows at the CIP

Foundation. Not as traditional portraits, but by inviting them to discuss some of the urgent and pressing challenges demanding attention both in the EU and in Denmark.

Today's challenges are polycrisis (climate, supply and security). This means isolated solutions are not enough; instead we need to think holistically and in partnerships. Everything is being overarched by the re-emergence of industrial policy.

At the heart of this is the green transition and Europe's place in the global economy. On the one hand, state-backed Chinese companies are challenging European production and sales in fierce price competition. On the other hand, the US government is using attractive tax subsidies to entice European companies to set up production in the US. Although the EU has relaxed its rules for national state aid schemes, and although they remain relatively effective in ensuring a competitive market, there is a risk of Europe losing momentum and European companies losing ground. Read the article [here](#).

The importance of a strong Europe in the green transition is partly about passing on a sustainable and prosperous society to future generations. This entails expanding renewable energy, electrifying corporate production processes and establishing a market for green hydrogen. Otherwise, we'll never get carbon emissions under control.

To ensure a next-generation perspective in work by the CIP Foundation, we have established a Youth Advisory Board. In relation to our new project, this edition of the newsletter features an interview with one of the board members, Yasemin Yavari, who works on energy efficiency improvement at Schneider Electric. Read the article [here](#).

Both in Denmark and in the EU, there are high expectations to the political systems in the coming season. Not least in relation to the green transition and security of supply. We have yet to see political declarations translated into concrete action. This applies in particular to implementation of the ambitious targets for offshore wind power.

In the North Sea, which is set to become the European green hub, the world's largest infrastructure project is still awaiting specific political decisions. This is of great importance for Denmark's position in the green transition, and political action can secure Denmark important first-mover advantages and a potentially strong market position. Read the article [here](#).

We hope you enjoy reading the newsletter!



Torben Möger Pedersen
Chair of the CIP Foundation



Charlotte Jepsen
Managing partner of the CIP Foundation

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Climate policy, security policy and industrial policy have become more entwined than ever

The CIP Foundation's Chairman, Torben Möger Pedersen met with the foundation's four Senior Fellows for a debate that touched on a wide variety of issues. From security policy to needs for innovation and technology development.

Climate policy dropped a couple of places down the agenda when the playing field for international politics dramatically changed in February 2022. With Russia's invasion of Ukraine, security policy topped the agenda in all European countries.

However, there is no need for green tears. From a European perspective, independence from Russian gas is a key element in current security policy, and it also means expanding renewable energy. Similarly, increasing investment in defence can also drive new green technologies as a co-benefit.

These were among the points of consensus when the CIP Foundation's Chairman, Torben Möger Pedersen invited the foundation's four senior fellows, Jesper Berg, Jens Lundsgaard, Brian Vad Mathiesen and Helge Sigurd Næss-

Senior Fellows at the CIP Foundation

The CIP Foundation has four Senior Fellows attached, who advise the foundation on project selection, analysis and project development.

Schmidt, to discuss the big picture and the challenges facing the green transition.

The discussion covered a lot of ground. The initiatives in the EU Green Deal were touched upon and compared with approaches in the US and China. Innovation and technology development were also discussed, and the pace - or rather the lack of it - of the Danish PtX initiative received a few critical comments. Climate challenges cannot be solved in a vacuum, so everything was discussed, from the security of supply of critical raw materials to labour shortages.

ALMOST THERE

Climate policy is about more than just the green transition. Security policy, industrial policy and trade policy are all closely entwined with climate policy. The market for green technologies is growing fast. Therefore, the global economic slowdown is also very much a race to be first with commercial-scale green technologies.



Jesper Berg

Senior Fellow at the CIP Foundation

- Cand.polit from University of Copenhagen
- Senior advisor at Rud Pedersen and external lecturer at CBS
- Former CEO at The Danish Financial Supervisory Authority
- Previous employment at Nykredit, Danmarks Nationalbank, The European Central bank and the IMF



Jens Lundsgaard

Senior Fellow at the CIP Foundation

- Cand.oceon from Aarhus University
- Deputy director of the OECD with responsibility for science, technology and innovation.
- Director at the Ministry of Industry, Business and Financial Affairs 2011-17
- Worked at OECD 2001-11



Brian Vad Mathiesen

Senior Fellow at the CIP Foundation

- Civil engineer and Ph.D. from Aalborg University
- Professor in energy planning and renewable energy systems at Aalborg University
- Visiting scholar at e.g. Stanford University
- Board positions in Radius Elnet, EU DP and Gate 21, member of the Danish Academy of Technical Sciences, etc.



Helge Sigurd Næss-Schmidt

Senior Fellow at the CIP Foundation

- Cand.polit from University of Copenhagen
- Currently working as an independent economist and senior advisor at Kaya Partners
- Previously partner at Copenhagen Economics
- Previous employment at the Ministry of Finance and the EU Commission.

Looking at the green transition from a narrow perspective, the challenges have already been reduced dramatically, partly thanks to the market economy, argued Helge Sigurd Næss-Schmidt, a former partner at Copenhagen Economics with a career that includes positions at the OECD and the Danish Ministry of Finance.

“In many countries around the world, especially developing countries, the green road is cheaper than the black road. This applies especially to energy for heating and transportation, as well as to the majority of energy consumption by businesses. So, unless a government tries to put the brakes on the green transition, it will become a reality. But at European level, we must consider who we want to work with in a future where Europe will be a smaller part of the global economy. We need to secure access to raw materials such as critical minerals, and both the US and Europe are short of skilled labour,” Helge Sigurd Næss-Schmidt said.

If you compare the three major players in the world economy, then Europe has tackled the challenges well, according to Brian Vad Mathiesen, professor of energy planning at Aalborg University, and he continued:

“For years, China has had insanely large and irrational subsidies. Moreover, there’s actually a lot of planned economy in the American Inflation Reduction Act, which grants big tax breaks for investments in the green transition,” he said.

But even if government subsidies are not always economically rational, they are something that Europe has to deal with, he pointed out.

“I think the EU has struck the right balance for the time being. Competitiveness has been maintained, even though member states have been allowed to set up subsidy schemes in some areas. On top of this, companies are required to drive the green transition, which seems to be working. However, the EU must keep an eye on the development and continuously make adjustments to ensure that competition between member states continues to create better and more innovative solutions,” Brian Vad Mathiesen argued.

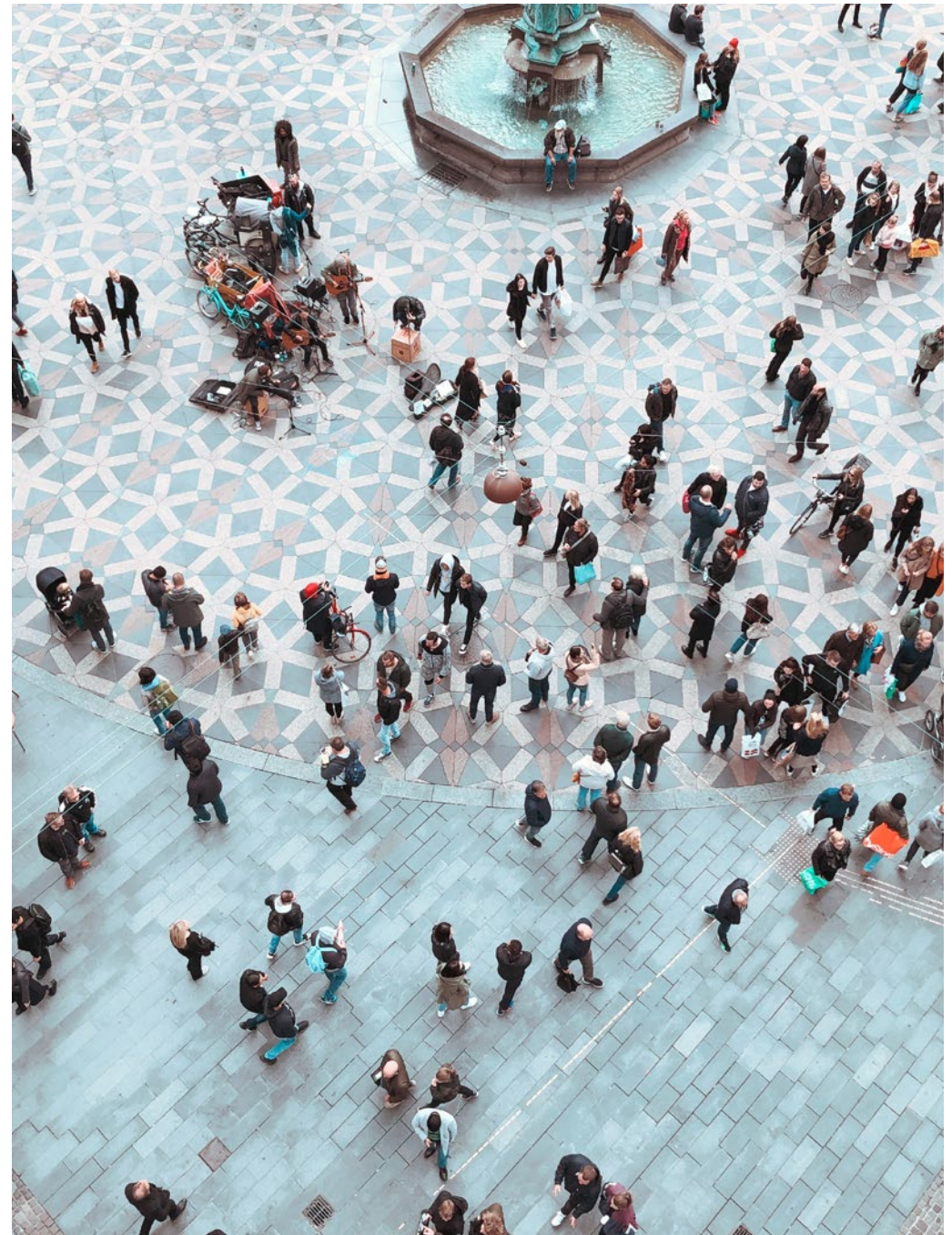
REPORTING REQUIREMENTS CAN NEGATIVELY IMPACT SMES

At EU’s corporate level, one of the big changes is the Corporate Sustainability Reporting Directive (CSRD), which recently came into force for the largest listed companies. Once fully implemented, the Directive will require all listed companies and all large non-listed companies to prepare sustainability reports in accordance with the European Sustainability Reporting Standards (ESRS).

However, the new rules will also have a big impact on a number of smaller businesses. Many small and medium-sized companies are subcontractors to larger corporations and they will be asked to provide data and documentation on their climate and environmental impact.

Former CEO of the Danish Financial Supervisory Authority, Jesper Berg, questioned the EU rules. He particularly feared that the new requirements will become a burden on smaller businesses (Small and medium-sized enterprises, SMEs).

“I’m a little concerned that many EU programmes, including the CSRD and the



taxonomy, are all stop-gap solutions because the EU can't agree on the first and best instrument: tariffs," he said.

"Relying on investors to push things in the right direction might not be the best path forward. And I'm concerned about the burden being placed on small and medium-sized companies. I'm not sure that the benefits of these very extensive reporting rules match the costs," Jesper Berg elaborated.

TALENT REQUIRES PURPOSE

With almost thirty years as the CEO of Pension Danmark, Torben Möger Pedersen has been one of the first and leading large-scale green investors. He believes that the reporting requirements are an important step in bringing about change.

"You get what you measure! Requiring companies to report on climate and other sustainability parameters changes the focus of companies. Work on climate and the environment will move up the decision-making chain to executive level instead of remaining at marketing level. This makes a big difference," he argued.

Companies are also interested in attracting talent, Torben Möger Pedersen stressed.

"The first thing young people ask in a job interview these days is not about pay, it's about what the company's doing to make the world a better place. You'll be in a weak position in the battle for talent if you can't explain your company's objectives in this context. And for this reason, a company must be able to document its efforts within the green transition.

Companies are meeting demands for a green transition from customers, employees, investors and the authorities," he said.

AN EFFICIENT GREEN TRANSITION

The remaining participant in the debate, Jens Lundsgaard, also had a relatively favourable opinion of the EU initiatives.

He is the deputy director of the OECD Directorate for Science, Technology and Innovation. Jens Lundsgaard stressed that we should compare benefits and costs. In his opinion, we are pretty good at this, but it is imperative we do so because of the competition we are up against.

"In Denmark, we've been good at ensuring the efficiency of the green transition. We've brought the markets into play so we're not just developing green solutions, we're also making them as cheap as possible," he said.

From his vantage point at the OECD headquarters in Paris, he has looked into conditions in the burgeoning Chinese electric car industry. The competition is daunting from a European perspective, Jens Lundsgaard confirmed and continued:

"The Chinese have mastered the market economy and are extremely competitive. In the electric vehicle industry, people work from 8 am to 8 pm, six days a week. When we asked Chinese representatives how this harmonises with the balance between welfare and development, the answer was that it's just the way it is. So China is charging ahead with green technology thanks to government subsidies and an unparalleled working culture. How do we respond to that?"

THE ROAD FROM RESEARCH TO PRODUCTION MUST BE SHORTER

Jens Lundsgaard points to research and innovation as one area where the EU has raised the bar. Twenty years ago, research and innovation were concentrated in national programmes. These days, the Horizon Europe programmes have set a shared course and ensured increased collaboration across member states.

However, we need to be even better, according to Jens Lundsgaard. When it comes to research and innovation, Europe still has something to learn from the US. Within IT and biotech, Americans have been preeminent at moving knowledge from research labs into industrial applications. Europe may be strong within a number of green technologies, but we need to be better at shortening the road from research to mass production.

"Furthermore, we in Europe could be better at delving into technologies to see which areas

will dominate in ten or fifteen years' time. The US and China also outdo us in terms of having a very targeted approach," Jens Lundsgaard said.

A key element here can be the courage and willingness to experiment, Jesper Berg added. "The economy works by experimentation. Someone tries something, sometimes it works, sometimes it doesn't.

CLIMATE SOLUTIONS MAKE NEW DEMANDS ON DIPLOMACY

The solutions of tomorrow also depend on correctly defining the issues. Jens Lundsgaard provided an example.

"When increasing the number of solar panels, we must ensure that they are placed on the worst farmland rather than on good soil that we still need for food production. This is an issue that requires knowledge, and it is something we can't expect the EU to do for us - it has to be done at national level," he said.





It is also important to keep an eye on the world around us, emphasised Helge Sigurd Næss-Schmidt. When you look at the critical raw materials so essential for green technology such as electric cars, solar cells and wind turbines, the supply chain often ends in China.

“We must ask ourselves who we want to work with in the long term. A number of critical minerals and other materials can also be found in Africa. I think both Denmark and Europe could benefit from the fact that we’ve had a presence in Africa for several decades, thanks to our development programmes. It’s crucial that we think of supply chains as an integral part of our climate policy and our diplomacy,” he pointed out.

THREATS: RUSSIA AND PARALYSIS

The panellists generally agreed that the green transition and climate policy are closely tied to security policy. Just as NASA’s space programme in the 1960s provided manifold civilian technological spin-offs and laid the foundation for Silicon Valley, increased defence spending can also help promote green technology, Torben Möger Pedersen said.

“We’re facing a threat from Russia and less engagement from the US. So we in Europe have to fend for ourselves. This requires increased defence spending, which will mean developing new dual-use technologies that can also be used outside the military,” he said.

The atmosphere remained calm and peaceful, even though the security situation often came up during the discussion. Many topics were discussed from an explorative perspective rather than a polemic one.

However, one topic did elicit some harsh comments - largely with consensus around the table: The focus on hydrogen production and the development of an infrastructure to bring hydrogen to large areas of heavy industry in Northern Germany and the Benelux countries.

The large establishment costs make the first-mover advantages very significant, Brian Vad Mathiesen stressed.

To that, Torben Möger Pedersen added that hydrogen production in the North Sea would only cover part of the overall need.

“I was standing by the German ambassador at one of the CIP Foundation’s meetings at this year’s Folkemødet, and I heard him clearly state that Germany can and will buy all the green hydrogen that Denmark can produce.

In the spring of 2022, the Danish prime minister and other heads of state from countries that border the North Sea signed a declaration in Esbjerg on turning the North Sea into Europe’s green powerhouse through a massive deployment of offshore wind capacity in the North Sea. Since then, almost nothing has happened. It’s a real shame,” he said.

No one opposed that statement.

Pragmatic climate activism kick-started by student job

During her summer vacation in Turkey, Yasemin Yavari saw the consequences of climate change first hand.

Today Yasemin is on the CIP Foundation Youth Advisory Board and she previously sat on the Youth Climate Council. In her job at Schneider Electric, she helps supply energy efficiency improvements.

It is by coincidence that Yasemin Yavari has become a strong young voice in today's sustainability debate. Through her student job at her current workplace, Schneider Electric, Yasemin became aware of the pivotal role of energy consumption for the green transition.

About five years after walking through the door at the Danish branch of the global French group, she is now one of the company's voices to explain smart factories and buildings and how data can be used for energy optimization.

She does not only talk about how aspects of the green transition can be tackled. She also explains why it is necessary. Besides her full-time job at Schneider, Yasemin had a seat on

the Youth Climate Council from 2022 to 2024, and since spring 2023 she has been part of the CIP Foundation's Youth Advisory Board.

However, Yasemin can point to several reasons why she has ended up in this particular job and has been on the council and advisory board.

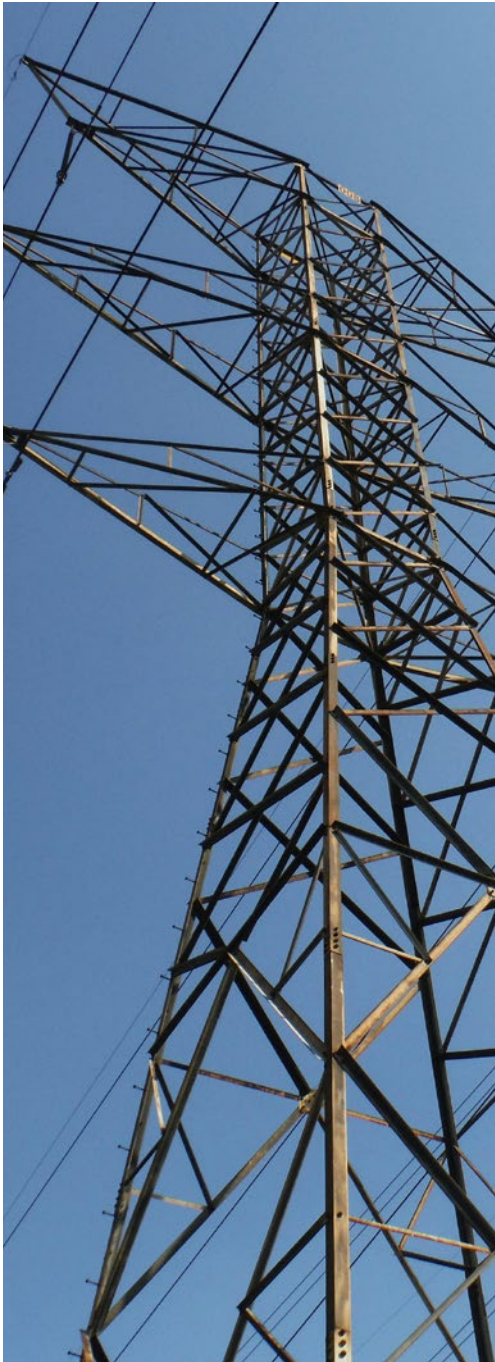
"Climate change came into my life because I have a Turkish mother and my family have had a holiday home in Turkey. When we were down there, it just got hotter and hotter every summer, and forest fires became increasingly frequent during droughts. This made climate change become very real for me. I've also been a vegetarian and then a vegan for many years. Initially, it was mostly a reaction to seeing how intensively farmed livestock were treated", Yasemin says.

EUREKA MOMENT WITH DATA

As a student assistant at Schneider Electric, her job was to get smart buildings on the agenda in everything from the news media and trade press to the social media and events. She was hired for what communications jargon calls "thought leadership". This means that the company profiles itself through professional, specialist knowledge.

"For me, it was a Eureka moment. During my studies, I worked a lot with data. Among other things, we looked into how weather data can be used in traffic planning, so that more buses can be deployed when it's raining. But





I remember the exercise as very academic. When I joined Schneider, I realised that what I had learned could also be put into practice, and that you can use data to save energy in buildings," Yasemin explains.

Yasemin Yavari's influence, and the knowledge she has accumulated during her work have left a solid imprint on a new project at the CIP Foundation. The Youth Advisory Board has contributed with ideas and suggestions to identify opportunities and barriers for more flexible electricity consumption.

You can turn production up and down at traditional power plants, but this is more difficult with renewable and climate-friendly energy sources such as solar and wind, so we have to be able to adjust the consumption side.

The project will analyse both opportunities and barriers. And this is very close to Yasemin's home turf. She may not have a technical background, but after more than five years working for a company with energy efficiency as a mantra, she has some very sharp arguments.

"We can use data for energy efficiency in our buildings and in various production facilities, and this can also help make consumption more flexible. So far, we're a long way from exploiting the full potential, and there is a number of barriers in the current regulations," she says.

A QUOTA FOR ELECTRICITY CONSUMPTION

There is also enormous potential for flexible consumption in ordinary households. Household electricity consumption peaks between 5 pm and 8 pm, when people are cooking and doing their laundry.

A crucial part of the new project is to look at how we can reduce electricity consumption during these hours. "Peak shaving", as it is also called, is very interesting. Lower consumption at peak times results in savings on both production and investment in grids and other infrastructure. Even if the consumption is simply moved to other times.

Besides objective analysis, we also need to think outside the box.

"You could consider a system in which each household has a quota for electricity consumption. The household can then decide for itself whether it wants to cook, do laundry or charge the electric car during hours when there is most pressure on the grid," Yasemin says.

She is quick to emphasise that it is just an idea. She is acutely aware that you have to be very careful when it comes to regulating what happens behind families' front doors.

DIFFERENCES MAKE US STRONGER

But it's important that there is room for thinking aloud and to air outlandish ideas. This has always been a core purpose for both

What is a Youth Advisory Board?

The CIP Foundation has set up a permanent Youth Advisory Board, which will advise the board in, among other things, which projects the CIP Foundation will work with. The Youth Advisory Board must ensure that there is a clear next-generation perspective in all the CIP Foundation's activities. Therefore, members are also offered participation in the CIP Foundation's Advisory Boards, in order to provide ongoing feedback to ongoing projects.

the CIP Foundation's Youth Advisory Board and the Youth Climate Council.

"Our different backgrounds make a lot of sense. For example, I don't know much about agriculture. But I've learned a lot from listening to Niels, who is the chair of the Youth Advisory Board and comes from an agricultural background. Others who come from a different political or professional background can contribute something different. One area that I think is important is the whole field of education. If we're going to transform society over the next 50 years, we'll need people from a wide range of disciplines," says Yasemin.

There is already a relatively wide range in both the Youth Climate Council and among the young people who advise the CIP Foundation. Some come with a background from prominent companies, others have been part of youth politics in organizations or parties with very diverse manifestos.

Yasemin describes herself as a pragmatic type. She prefers to be where solutions are explored. She brings objectivity and professionalism to the table whether she works at Schneider, in the Youth Climate Council or in the Youth Advisory Board.

"My main task at Schneider is to profile the solutions we have as a company. It was different in the Youth Climate Council and it is also different at the CIP Foundation. At the CIP Foundation it has been about how we can strengthen the necessary transition at societal level," she says and elaborates.

"I think we need to draw on differences, and we need to involve large parts of society. I have friends who are strong climate activists. I'm not myself, I have nothing against companies making money. The important

thing is that we change the way we do things. And in this context it's crucial that companies also contribute. In the Youth Climate Council there was also a balance. We might well challenge government policy, but we didn't stand up and say it was all bad."

STOOD OUT IN THE PUBLIC DEBATE

Another factor is that Yasemin works for a company that is considered by outsiders as one of the greenest in the world. Schneider Electric has been ranked among the world's most sustainable companies for several years. The Canadian media Corporate Knights is behind a sustainability award in which they look into data from annual financial statements and sustainability reports.

Yasemin Yavari stands out especially in one respect. With a Turkish mother and Iranian father, she is one of the few young Danes with a minority background who is making her mark in the sustainability field, which is otherwise dominated by white Danes. She made an interesting observation herself when she attended the public gathering "Folkemødet".

"There was a lot of talk about climate and sustainability, but pretty much everyone else I met with brown skin was more interested in issues related to racism. That was actually very revealing," she says.

DANISH CAN BE IN SHORT SUPPLY

She still experiences prejudice and racism from time to time, but working in a large global corporation has been an advantage. The high position in the Corporate Knights ranking certainly lives up to a reality check in terms of diversity, Yasemin says.

At the Danish head office in Ballerup, the plethora of different nationalities, religions

and skin colours is not something they really think about. Or perhaps they do, but in a sort of inverted way.

"The day-to-day working language is English, and I'm in contact with people from many different countries. Sometimes we even talk about how difficult it is to recruit Danes. We need Danes because we have Danish customers who prefer to speak Danish," Yasemin says.

THE GLOBAL SOUTH PAYS THE PRICE

Her own Turkish-Danish background has given her an understanding of why climate and sustainability are not always at the top of the agenda.

"When I told my family in Turkey that I had joined the Youth Climate Council, they were a little puzzled about what it was all about. Although the effects of climate change are very visible, other issues in Turkey are much more urgent. Inflation is skyrocketing and there is still a lot of poverty. Politically, there is much uncertainty about everything from religious freedom to women's rights," Yasemin says, and she adds:

"The focus on climate and sustainability in Denmark also says something about the strength of the country. All the basics are in place. We can go to the doctor for free and we can get help if we lose our jobs," she says. Her experiences of the effects of climate change during her summer vacations in Turkey were put into perspective when she attended an international conference in the US a few years ago as a member of the Youth Climate Council.

In some countries, where there is more focus on basic living conditions, the consequences of climate change are much more severe than

here in Denmark. They gave her some take-away stories that also stress the importance of the green transition.

"I spoke to many young people from the Global South, and they told me how climate change is affecting their countries with heat waves, floods and droughts. Ultimately, our

way of living in the northern hemisphere is the reason why people in the Global South can no longer farm, feed themselves and earn a living," Yasemin Yavari says.



Invitation to Youth Summit in November

How would you shape society of the future? Join our Youth Summit with the CIP Foundation's Youth Advisory Board, where we gather young voices to discuss and develop solutions to the most pressing challenges of our time.

The Youth Summit is a unique opportunity to share your thoughts and help explore which themes and issues are most relevant if we are to ensure a sustainable society for future generations.

The conference will take place on November 19th, 2024, from 16:00 to 20:00 at Station on Howitzvej 30, 2000 Frederiksberg, and is for people below the age of 30. Coffee, tea, and snacks will be offered upon arrival, along with light food during the event.

Your input will help shape the Youth Advisory Board's recommendations for the CIP Foundation's future projects and ensure a strong and broad next-generation perspective in the CIP Foundation's work.

Sign up [here](#) (In Danish). Spaces are limited, but we will create a waiting list in case of cancellations.

We look forward to meeting you!

Program (Event is in Danish)

a bit before 16

Coffee, tea, and snacks

16.00-16.15

Welcome and introduction

16.15-16.30

External presentation to set the framework for the day

16.30-18.00

Interactive exercises and workshop part 1 – Identification of key challenges in smaller groups

18.00-18.30

Light food and for informal conversation

18.30-19.30

Workshop part 2 – Further development and refinement of issues, exploring potential approaches

19.30-20.00

Exchange of ideas and conclusion of the summit



No offshore wind power without ports

A new report from the CIP Foundation shows that Danish ports do not have the necessary capacity to meet the Danish targets for offshore wind development.

The combination of under-dimensioned ports, uncertain and un-coordinated planning of Danish offshore wind energy deployment, and relatively few port areas lead to considerable bottlenecks. This could jeopardise the realisation of the climate targets.

On the other hand, strategic investments in selected Danish ports will enable Denmark to reach its targets for offshore wind deployment while maintaining the country's strong position in the offshore wind installation market.

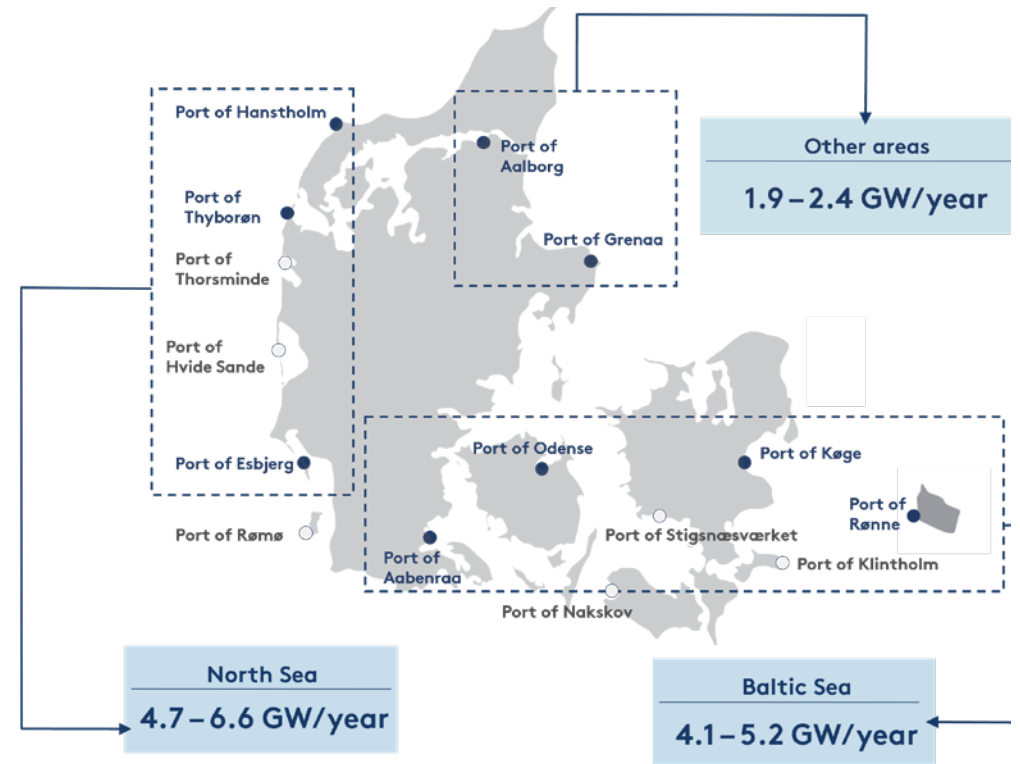
The green transition requires massive deployment of renewable energy. By 2030, Denmark is to complete a five-fold expansion of current wind capacity. A capacity that has taken more than 20 years to establish. And up to 2050, Denmark is expected to deploy a total of 52 GW of offshore wind power, compared to the 2.3 GW installed today.

Ports will be a lot busier when this historically large number of turbines have to be shipped out. And what's more, the turbines will be bigger and heavier. From 2025, 15 MW offshore wind turbines are likely to be the industry standard. A weight increase of 50 per cent will put new demands on the bearing capacity of quays and the depth of channels. This will put unprecedented pressure on the ports from which the turbines are to be manufactured and installed.

In the report, the CIP Foundation states that only very few ports today can meet this demand, and even with an upgrade of all Danish installation ports, Denmark will



Figure 1.1. Danish port capacity for offshore wind installations, GW/year



Source: The CIP Foundation based on KPMG (2023)

Note: KPMG's calculation includes both blue and grey ports, and the total port capacity is indicated by the highest number of GW/year in the ranges. In the conservative scenario, only the blue ports are included, so there is lower total port capacity in terms of GW/year in this scenario, which is indicated by the lowest number in the ranges.

not be able to realise deployment goals, as bottlenecks will arise in the peak years around 2030.

“The green transition risks being stranded on the quayside because we simply can’t deploy the turbines needed to meet the expansion targets Denmark has committed to through international agreements. This is because projects are growing in number and turbines are getting bigger and heavier. Therefore, we need significant investment in Danish ports,” says Charlotte B. Jepsen, senior partner in the CIP Foundation

This has led the CIP Foundation to call for clear development plans for offshore wind so that investment decisions are made on a solid basis.

“The challenge lies in the fact that, although the political objectives are very ambitious, very little is known about the offshore wind projects. Uncertainty about where specific projects are to be completed, when they are to be completed and who is to be responsible for development, causes uncertainty throughout the entire value chain. This uncertainty and the absence of an investment signal from politicians means that it is not possible to make decisions about these large, irreversible infrastructure investments in Danish port capacity,” says Charlotte B. Jepsen.

This uncertainty in the value chain is an important concern. Because ports are not only important for the individual project, they are also of consequence for the entire value chain. It must be possible to ship wind turbines from Danish ports if we are to continue to have a large and strong wind turbine production and ancillary industry around the country.

DANISH PORTS CAN PLAY A KEY ROLE IN EUROPE’S GREEN TRANSITION

Despite the challenges, Danish installation ports are well positioned in the international competition in northern Europe, which is facing even larger shortages of port capacity. Both the capacity of Danish installation ports and their many years of experience with installing offshore wind turbines make Danish ports significant players in the North Sea and the Baltic Sea.

“The good news and the bad news is that the problem is the same in the rest of Europe, so at this point there is limited outside help. On the other hand, if we tackle the challenge correctly, we can create a new export success for Danish ports that can become a vital element in Europe’s green transition. But we must act now. Otherwise, foreign competitors will overtake us,” says Charlotte B. Jepsen.

In total, the CIP Foundation has identified 91 GW of offshore wind power that is likely to be installed from Danish ports up to 2050. This covers about 52 GW of Danish offshore wind power as well as nearby foreign offshore wind farms, where Danish ports are closest.

By investing in upgrading Danish installation ports, reducing time spent on processing by authorities, and bringing forward tendering procedures for offshore wind power, according to the CIP Foundation Denmark could meet its expansion goals, while also generating thousands of jobs and growth worth DKK 80 billion over the period.

Read the report [here](#).



Information and facts

based on the CIP Foundation's three project categories

Agriculture and food production

Facts on agriculture and food production

Food exports

21 % constituted the food cluster of Denmark's total exports of goods in 2022. ¹

Greenhouse gases

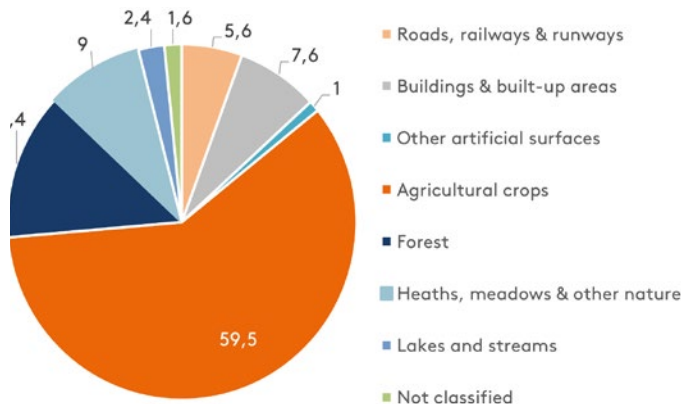
35 % constituted agriculture and land-use of the total greenhouse gas emissions in 2020. ²

Ecology

approx. 1/3 of the production of vegetables and eggs were organic compared to the total production in 2022. ³

Source: 1) Danish Agriculture & Food Council: Facts about the food cluster (2023), 2) Danish Council on Climate Change (2024), 3) Danish Agriculture & Food Council and Statistics of Denmark (2023)

More than half of the Danish territory in 2021 is used for agricultural crops (in %)



Source: Statistic of Denmark (AREALDK) (2023)

Relevant publications

June 2024 Agreement on a Green Denmark (Green tripartite) →

Upcoming events

8th of October 2024 Conference: Denmark's land areas (CONCITO) →

24th-25th of October 2024 Water environment conference 2024 (SEGES) →

8th of January 2025 Plant congress 2024 (SEGES) →



The CIP Foundation's projects in this category

How to establish a market for CCS with biochar in Denmark →

The ambition of this project is to prepare a prospectus for carbon storage in agriculture with biochar to promote the market and increase the interest of investors and possible participants in the value chain.

In addition, the ambition is to create a basis for market-driven negative emissions from agriculture.



Project status:



What else is happening on this topic?

- Ongoing political negotiations of the agreement from The Green Tripartite
- The government publishes a pyrolysis strategy (fall 2024)
- 30th of October 2024: Danish Pyrolysis and Biochar Forum 2024 (RUC, Energy Cluster Denmark, Food & Bio Cluster, and Clean) →

Energy and infrastructure

Facts about energy and infrastructure

Renewable energy

73 %

54% constitutes renewable energy of the total electricity production in Denmark in 2022. In comparison, RE accounted for just 29.5% globally in 2022.¹

Degree of self-sufficiency

59 %

was Denmark's degree of self-sufficiency for energy in 2023.²

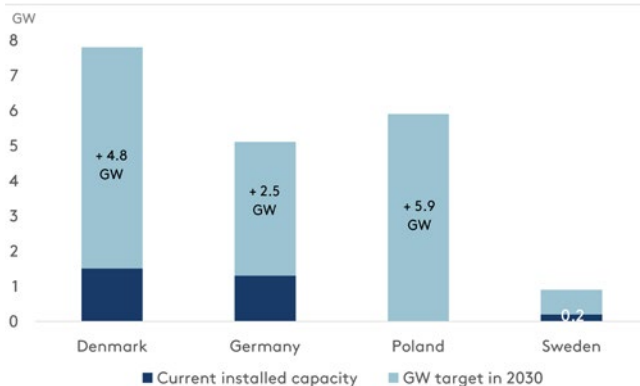
Solar cells

53 %

increased production of Danish solar installations in 2023 compared to the previous year.³

Source: 1) IEA (2024) and European Parliament, 2) The Danish Energy Agency, 3) Climate Change Adaptation (2023)

Denmark has the most installed offshore wind turbine capacity today in the Baltic Sea and the largest targets until 2030



Source: CIP Foundation, memorandum on international competition between Danish and foreign installation ports for offshore wind turbines

Relevant publications

June 2024 World Energy Investment 2024 (IEA) →

9th of October 2024 Energy transition outlook 2024 (DNV)

Fall 2024 Recommendations from the Partnership on the development of Danish commercial ports

Upcoming events

2th of October 2024 Green competitiveness (DI) →

30th of September 2024 World Hydrogen Week (Green Power Denmark) →

28th of November 2024 Wind Energy Denmark 2024 (Green Power Denmark) →



The CIP Foundation's projects in this category

Denmark's port capacity in the light of expansion plans and objectives for offshore wind →

The purpose of the project is to map the need for port capacity in the light of Denmark's expansion plans and political objectives for offshore wind.



Project status:



What is the next step?

- The CIP Foundation visits selected Danish ports to present our port report and hear about the ports' strategies and plans

Roadmap for a Danish hydrogen infrastructure for the future →

The purpose is to map out the road to market access, green investments and hydrogen production on a large scale. The development plan supports the political declarations by encouraging the utilization of all Danish RE resources.



Project status:



Data and digitalisation

Facts about data and digitalisation

Consumption flexibility

0,3 %

of households actively participate in the market for consumption flexibility.¹

71 bio. euro/year

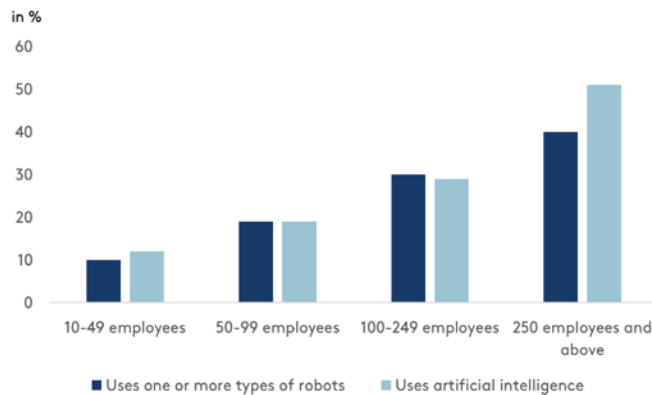
can be saved by European consumers per year by fully activating consumption flexibility in buildings, electric cars and industry.²

x6

greater is the electricity consumption of the data centers in Denmark expected to be in 2035 compared to 2023.³

Source: 1) Implement, 2) SmartEN, 3) Danish Ministry of Climate, Energy and Utilities. Note: Consumption flexibility means that you turn up the energy consumption when the renewable energy is available, and you turn it down when it is not.

Half of all danish companies with +250 employees use artificial intelligence in 2023



Source: Statistic of Denmark, ITAV19 (2024)

Note: The vast majority of the companies in Denmark has less than 250 employees.

Relevant publications

14th of May 2024

OECD Digital Economy Outlook 2024 (OECD) →

September 2022

Demand-side flexibility: Quantification of benefits in the EU (DNV) →

Upcoming events

25th of October 2024

No sustainability without digitization (DI) →

29th of October 2024

Retail Market Forum (Energinet) →



The CIP Foundation's projects in this category

Consumption flexibility in the electricity system →

This project concerns the data and regulatory challenges in relation to scaling flexibility solutions.

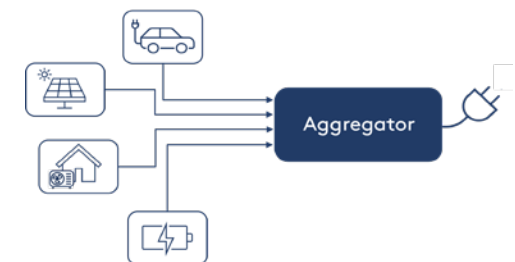
It is partly about what data is needed and what data is available, as well as how data can be organized in order to be able to scale solutions, promote a market and create innovation.

Project status:



What is the next step?

- The CIP Foundation is hosting a Kick off seminar for the project on the 2th of October 2024
- The first phase is about the potential and benefits of consumption flexibility
- The second phase is about regulation
- The third phase is about data needs



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CIP foundation

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