



Denmark/Netherlands: Partners in Green Transition

Ambitious green goals on renewable energy and the heating sector

Denmark and the Netherlands have strong trade relations and a shared interest in a green energy transition. Both countries have an ambitious green agenda. To combat climate change, the Netherlands is striving to reduce greenhouse gas emissions by 49 % in 2030 and 95 % by 2050 compared to 1990-levels.

The Dutch green transition is well underway, as large wind farms are built offshore and solar energy is installed to meet the rising demand for a green power. Furthermore, the Netherlands aims to make their heating systems sustainable by phasing out natural gas in households by 2050.

Partnership agreement broadens the scope of collaboration

With the partnership agreement, Denmark and the Netherlands have strengthened the collaboration in several areas of the energy sectors. Knowledge sharing on sustainable heating systems is a cornerstone of the partnership, while the agreement broadens the scope by including offshore wind energy, energy efficiency and Power-to-X.

The Netherlands is one of the biggest export markets for Danish energy technology

The Netherlands is one of the most important export markets for Danish energy technology. In 2020, export of Danish energy technologies peaked with a total of 13,3 bill. DKK (1,8 bill. EUR). Over the past five years, the Netherlands ranks as the fourth biggest export market with an average annual export of 6,3 bill. DKK (850 mill. EUR).

Ambitious climate goals

Strong Dutch-Danish energy relations

The Netherlands and Denmark both have ambitious climate goals and aspiration of reaching their 2030-target. Based on these common goals, the two countries have partnered for the green transition.

Collaboration in heating and energy efficiency

In 2018, the Danish Energy Governance Partnership (EGP) was expanded to include a collaboration with the Netherlands mainly focusing on regulatory frameworks for district heating and energy efficiency in buildings. Hence, a longstanding collaboration between The Danish Energy Agency and the Dutch Ministry of Energy, agencies, and interest organizations on green heating systems have paved the way for a close partnership.

Formal agreement broadens the scope of the energy partnership

The collaboration between governments and authorities has shaped the outlines of a formal partnership agreement signed in 2020. The agreement expands the scope from focusing on district heating to include cooperation on offshore wind energy, energy efficiency, decarbonization of gas infrastructure and Power-to-X. With mutual knowledge sharing, the objective is to achieve both countries' 2030 emission reduction targets.

COBRACable connecting Denmark and the Netherlands

In September 2019, the interconnector COBRACable started operating, connecting Denmark and the Netherlands through a 300 km offshore cable with a capacity to transfer electricity corresponding to the consumption of 700,000 households. The purpose of the COBRACable is to improve the cohesion of the European transmission grids by increasing the exchange of excess wind power to neighboring countries and strengthening the electrical infrastructure, the security of supply and the European electricity market.

Dutch investment in Danish Power-to-X plants

In June 2020, the climate ministers of the Netherlands and Denmark also signed a Memorandum of Understanding on the transfer of 8-16 TWh of renewable energy from Denmark to the Netherlands. The Netherlands will invest 1 bill. DKK (134 mill. EUR) in large-scale Power-to-X plants of 100 MW in Denmark. The investment will be used to establish a large-scale Power-to-X plant and develop storage and renewable energy technologies for trucks, ships, and aircraft. The collaboration combines Denmark's wind resources with Dutch expertise in hydrogen production.

A joint declaration on offshore wind

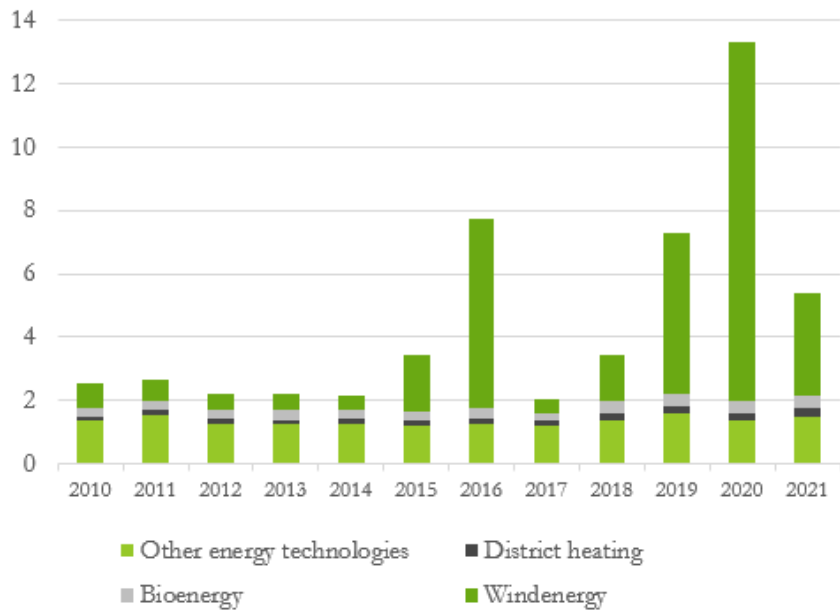
In May 2022, the prime ministers of Denmark, Netherlands, Belgium, and Germany jointly signed the Esbjerg Declaration setting the ambitious combined targets for offshore wind of at least 65 GW by 2030. Based on the North Sea as a Green Power Plant of Europe, they further aim to more than double the total capacity of offshore wind to at least 150 GW by 2050, delivering more than half of capacity needed to reach EU climate neutrality.

Exports of energy technology peaked in 2020 at 13,3 bill. DKK

Exports of energy technology

Annual exports of Danish energy technology to the Netherlands have risen from 2 bill. DKK (270 mill. EUR) to a record high export in 2020 of 13,3 bill. DKK (1,8 bill. EUR), which made the Netherlands the biggest export market for Danish energy technology that year. The exports fluctuate from year to year and fell to 5,4 bill. DKK (726 mill. EUR) in 2021.

Figure 1: DK Energy Technology Exports to Netherlands
Bill. DKK



Note: Other energy technologies denotes technologies for energy production, energy storage, energy savings and various components.
Source: Eurostat and calculations by The Danish Energy Industries Federation.

Technology for energy production is the biggest export article

Exports of energy technology to the Netherlands are mainly driven by technology for energy production, which accounted for 10,8 bill. DKK in 2020 and 2,6 bill. DKK in 2021. Energy saving products are the second largest category with an export of 1,5 bill. DKK in 2020 and 1,6 bill. DKK in 2021.

High share of green energy technology export

In 2020, 91 % of the exported energy technology was green technology. In 2021, the share of green energy technology exported was 77 %.

Table 2: The largest product groups in Danish energy technology exports to the Netherlands in 2021 and 2020

Rank	Product	2020	2021
1	Energy saving products	1,5	1,6
2	Various components	0,8	1,0
3	Technology for energy production	10,8	2,6
4	Distribution of energy	0,2	0,2
5	Energy storage	0,1	0,1

Source: Eurostat and calculations by The Danish Energy Industries Federation.

Binding targets for the green transition

Dutch’s climate ambitions and policies

The 2019 Climate Act sets out the Netherlands’ climate goals and defines a broad framework of supporting policies and measures focused on achieving these objectives. The Climate Act sets legally binding targets to reduce greenhouse gas emissions by 49 % in 2030 and by 95 % in 2050 compared to the 1990 level. Furthermore, the Netherlands aims at 100% of electricity to come from renewables by 2050.

Ambitions of a green heating sector

The Netherlands also has great ambitions for a green heating sector. The goal is to converge the heating supply in up to 1.5 mill. households by 2030 from individual gas furnace to more sustainable heating such as district heating. By 2050, all households are expected to have phased out natural gas as the main source of heat supply.

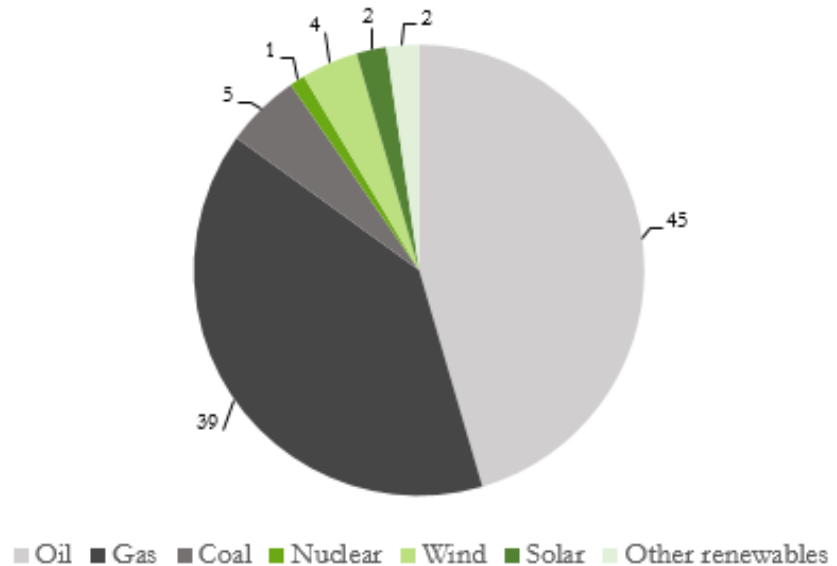
Towards 11,5 GW of offshore wind capacity by 2030

In addition to the support schemes for renewable energy projects, the Netherlands has several other policy measures aiming to reduce emissions in the electricity sector. The government has developed a highly effective offshore wind policy framework that is driving accelerated deployment and falling project costs. Under this framework, the Netherlands is aiming for 4.7 GW of offshore wind capacity in 2023, and 11.5 GW of capacity by 2030.

Dutch’s energy sector

While the Netherlands have succeeded in decoupling economic growth from CO2 emissions, the Dutch economy is still highly depended on fossil fuels.

Figure 2: Dutch energy mix, 2020



Source: Our World in Data

An increasing share of renewable energy in electricity production

In 2021, electricity generated by renewable energy sources amounted to 33 % of electricity production. The share of green electricity is increasing from 27 % in 2020. Wind energy accounts for the biggest share with 46%, while solar energy and biomass respectively produces 29% and 25% of green electricity. This share of renewable energy ranks the Netherlands in the middle of the EU-members.

Networks in pursuit of business opportunities in the wind industry

DI assists companies

DI Energy undertakes a range of export promotion activities aiming at the Netherlands’ investment in energy and green transition in general. The activities include trade delegations travelling both ways highlighting business opportunities and bringing companies and decision makers from both sides together. Current activities include focus on wind energy, Power-to-X, biogas, district energy and energy efficiency.

DI Energy works closely with the authorities to ensure that this partnership takes into account the commercial and technological collaboration perspectives.

Would you like to learn more and take part?

If your company is interested in hearing more about the opportunities in the energy sector in the Netherlands, link up to our market network, contact DI Energy and follow our relevant events at www.energi.di.dk.