



Keeping the lights on: Technical solutions

ØRSTED

A CORPORATE MODEL FOR TRANSITION

A Danish oil and gas company's inspiring transformation into a green energy pioneer shows how to achieve both climate sustainability and financial success.

Around 15 years ago, Ørsted was a domestic Danish energy firm called Dong Energy (Danish Oil and Natural Gas) that made most of its money from fossil fuels. As one of Europe's most coal-intensive companies, with 85% of its power and heat production coming from fossil fuels, it was responsible for one-third of Denmark's CO₂ emissions.

Several factors forced the company to confront a changing landscape. Senior leadership saw that growing societal focus on climate change would fundamentally challenge and eventually erode its fossil-based business. For example, despite substantial investment, the company failed to develop a new 1.6GW coal-fired power station in north-eastern Germany following strong local opposition.

At the same time, the economic potential of the renewable energy sector was growing, the science on climate change was gaining clarity and visibility, and countries were beginning to set emissions reduction targets. Meanwhile, the firm's fossil-based earnings were under pressure due to several external events, including the financial crisis of the late 2000s.

In 2008, the company set out a vision to transition away from fossil fuels and become a green energy business. This included a strategic goal of flipping the ratio of power and heat production from fossil fuel to renewable sources so that, by 2040, 85% would be green and only 15% would be from fossil fuels.

To make this happen, the company took several actions to develop a global renewable energy business:

- **Closed its coal-fired heat and power plants, or converted them to sustainable biomass.**
- **Set a coal phase-out target date of 2023.**
- **Divested its upstream oil and gas business.**
- **Increased investment in offshore wind, making it a core business.**
- **Diversified further into onshore wind, solar, green hydrogen and energy storage.**

In 2019, Ørsted met its goal of green transformation a full 21 years ahead of schedule, having achieved a 90% share of its generation from renewable sources. The company has reduced the emissions intensity in its energy generation and operations by more than 87% and is on track to become a carbon-neutral business by 2025. In 2023, it will retire its last remaining coal plant.

Ørsted's decarbonisation journey does not end there: it is also the first energy company in the world with a science-based net-zero target covering its full value chain (so-called scope 1-3 under the Greenhouse Gas Protocol). It aims to reduce its emissions intensity by 99% by 2040.

As well as being the global leader in offshore wind, Ørsted now has an expanding set of renewable hydrogen and green fuel projects under development and is ranked as the world's most sustainable energy company in the Corporate Knights Global 100 Index. Its story shows that a strategic shift away from coal can be both financially viable and technically feasible.

Throughout its transformation, Ørsted learned valuable lessons, including the need to confront the reality of a shifting long-term commercial and political landscape, the key role of decarbonisation targets in driving tangible action, and the importance of expecting exponential change.



Ørsted's offshore wind farms | Source: Ørsted