



Wind Farm Cooperative

Copenhagen, Denmark – 583 525 inhabitants

Wind – Offshore - Cooperative

Because of the lack of space in Denmark, offshore sites are important for to reach its energy policy objectives. The city of Copenhagen developed the Middelgrunden, a jointly owned offshore wind farm with the local community.



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Project in a Nutshell

The project was initiated in 1996 by the Copenhagen Environment and Energy Office (CEEO) and completed in 2000. Middelgrunden consists of 20 windmills placed in a concave line with an interval of 180 meters and a total length of 3,4 km, for a total acreage of 1 hectare. Of the 20 wind turbines, 10 are owned by the Cooperative and the rest are owned by Copenhagen Energy, the public utility.

All Danish people can buy shares, and under certain conditions, foreigners are also allowed to be part of the cooperative. The cooperative owns 40 500 shares. One share represents a production of 1 000 kWh/year, and is sold for around EUR 567. All shares were paid up front in order to follow the constitution of the cooperative. CEEO provide the organisational structure and technical capacity, while the wind cooperative provides the knowledge from the private wind sector, the enthusiasm and commitment of its members and better contacts with the public and the press.

Impact & Next steps

More than 8 500 people, mostly locals, have joined the cooperative. At the time of its construction, the project was the largest wind farm worldwide based on dual ownership and the largest offshore wind farm in the world. According to the Copenhagen Climate Plan, the city-owned utility company plans to build more than 100 new wind turbines by 2025, always in cooperation with local cooperatives that will be able to invest in the turbines.

Replicability: Challenges & Success Factors

Like many cities, Copenhagen faced the following challenges when it comes to wind power installation: limited space to build within an urban environment; the high cost of wind turbines; and public resistance to the perceived visual and noise impact in the landscape. Thanks to the creation of community-owned facilities and by using local labour force, they solved these issues and encouraged public support for offshore wind power.



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