

Nordic Offshore Wind Conference: Connecting the Baltic Sea with the North Sea

31 October-1 November 2024
University of Southern Denmark
Degnevej 14, 6705 Esbjerg Ø, Denmark



SDU 

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**Nordic Energy
Research**

Offshore wind power is an important part of the energy transition for Nordic countries. According to the Esbjerg Accord, offshore wind power in the North Sea is targeted to be at least 65 GW by 2030. The Swedish Energy Agency reported a potential to enable 30 GW of offshore wind in the North Sea, Baltic Sea, and Gulf of Bothnia. While the North Sea and the Baltic Sea are both crucial locations for offshore wind, connecting them has strategic significance for the Nordic countries. It enables sharing and optimizing renewable energy resources, facilitating the integration of the energy market. Additionally, it provides a more resilient and robust energy system, reducing the impact of intermittent energy production. This connection promotes cost efficiency, increases competitiveness, and encourages the exchange of technological expertise. Furthermore, the connection leads to more strategic planning and reduces the environmental impact.

The Nordic countries have different focuses on offshore wind technology. Denmark is leading in fixed offshore wind, while Norway focuses on floating offshore wind. Given the significant ambition for offshore wind power, Nordic countries face several common challenges, such as application processes, technical barriers, and safety and environmental concerns. Furthermore, the integration of a large amount of wind power into the grid can significantly influence the grid's resilience due to geopolitical conflicts. Sabotaging a single cable could not only disrupt the power grid in Denmark but also affect neighboring countries. Therefore, the Nordic Countries must coordinate research and authority processes in order to secure a leading position in offshore wind power.

The Nordic Offshore Wind Conference will bring together various stakeholders, including researchers, practitioners, industrial associations, and policymakers from the Nordic region's offshore wind industry. The goal is to share expertise in offshore wind, discuss how Nordic countries can benefit from each other's experience and knowledge in connection with the rapid development of offshore wind power, and eventually contribute to developing an integrated Nordic model for sustainable offshore wind to contribute to the net zero goal.

We have invited colleagues from public institutions, industrial associations, research institutions, private organizations, and NGOs in the Nordic region.

Department of Law and Department of Business and Sustainability at the University of Southern Denmark are the conference organizers. The organizing committee for the conference is Professor Bent Ole Gram Mortensen (conference chairman), Associate Professor Jette Thygesen from Department of Law, and Associate Professor Yingkui Yang from the Department of Business and Sustainability.

31 October	
1st conference day University of Southern Denmark Degnevej 14, 6705 Esbjerg Ø	
09:30-10:00	Conference registration (includes coffee and bread)
10:00-10:10	Conference opening
Session 1: <i>Harmonize technical standards and regulatory frameworks: the legal and regulatory challenges for off-shore wind power farms</i>	
10:10-10:30	Experience from Denmark – challenges and solutions Speaker: Total Energies
10:30-10:50	Experience from Norway – challenges and solutions Speaker: Bergen Offshore Wind Center at University of Bergen
10:50-11:10	Experience from Sweden – challenges and solutions Speaker: Svensk Vindenergi
11:10-11:40	Panel discussion about building offshore wind parks in the Nordic region Moderator: Bent Ole Gram Mortensen <i>Panel participants: the speakers from Session 1</i>
11:40-12:00	Coffee break
Session 2: <i>Integration of multiple offshore wind farms into the national grids: challenges and opportunities</i>	
12:00-12:20	Experience from Denmark Speaker: Energinet
12:20-12:40	Experience from Norway Speaker: SINTEF Offshore Wind
12:40-13:00	Experience from Sweden Speaker: Svensk Vindenergi
13:00-13:30	Panel discussion Moderator: Jette Thygesen <i>Panel participants: the speakers from Session 2</i>
13:30-14:30	Lunch

Session 3: <i>An efficient adaptation and utilization of large-scale offshore wind</i>	
14:30-14:50	“The interplay between offshore wind and the hydrogen and P2X industry” Speaker: David Dupont-Mouritzen, Copenhagen Infrastructure (CIP), Denmark
14:50-15:10	“Efficient operation of offshore wind” Speaker: Peter J.H. Esmann, Siemens Gamesa
15:10-15:40	Coffee break
15:40-16:00	“Demand side flexibility: lessons from the Nordic countries” Speaker: University of Southern Denmark
16:00-16:20	“Danish experiences from offshore wind development: experience from Broholm Energy Island” Speaker: Helle M. Ravnborg, Energiø Bornholm
16:20-16:40	“The hydrogen ecosystem in the Nordic region” Speaker: Andreas K. Lauridsen, European Energy
16:40-17:10	Panel discussion: “How can we optimize the use of offshore wind power in the Nordic region?” Moderator: Yingkui Yang <i>Panel participants: the speakers from Session 3</i>
17:10-17:30	Closing remarks for day 1
18:30-	Conference dinner Restaurant Madklubben Skolegade 44, 6700 Esbjerg

1 November	
2nd conference day University of Southern Denmark Degnevej 14, 6705 Esbjerg Ø	
Session 1: <i>Sustainable energy policy for offshore wind</i>	
9:30-9:50	“The need for a market-oriented model for expanding offshore wind” Speaker: Green Power Denmark
9:50-10:10	“New policy for offshore wind in Denmark” Speaker: Energistyrelsen
10:10-10:30	“The Danish ambition for offshore wind – Esbjerg Accord” Speaker: Nicolaj Aarøe, the vice-mayor of Esbjerg
10:30-10:50	“Port Esbjerg – starting point for the Danish offshore wind industry” Speaker: Dennis Jul Pedersen, Port Esbjerg
10:50-11:10	Coffee break
11:10-11:40	Panel discussion on the construction of offshore wind power farms in the Nordic Region Moderator: Bent Ole Gram Mortensen <i>Panel participants: the speakers from Session 1</i>
11:40-12:00	Conference closing
12:00-13:00	Lunch
13:00-15:00	Trip to Port Esbjerg Duration: 2 hours Meeting point: University of Southern Denmark, Degnevej 14, 6705 Esbjerg Ø