

The North Seas as Europe's Green Energy Hub

Danish co-Presidency of the North Seas
Energy Cooperation (NSEC) 2024



Danish Ministry of Climate,
Energy and Utilities

 **North Seas**
Energy Cooperation

Preface

The recent energy crisis and geopolitical situation has demonstrated not only the need to accelerate the deployment of renewable energy, but also the importance of regional cooperation. It is essential in order to ensure security of supply in Europe and make us more energy independent from third countries. Renewable energy will also be key to Europe's industrial competitiveness and achieving climate neutrality. Europe will best achieve these aims together.

Since its start in 2016, the North Seas Energy Cooperation (NSEC) has proved the value of regional cooperation, developed close coordination and a shared ambition. I am proud that Denmark will lead the work in 2024 as the co-presidency alongside the European Commission. With the Danish co-presidency, we will redouble our efforts to achieve the ambitions through implementation. Implementation is, however, not always easy and it does come with its own challenges. Challenges, that we must address collectively.

The implementation of our joint offshore ambitions relies on establishing a financially viable, predictable, and robust framework. Throughout our co-presidency, our overarching goal is to identify the central building blocks for such a framework that will facilitate a coordinated large-scale deployment of renewable energy in the North Seas. We have to look at how risks, costs and investments can be shared. We need to develop the benefits of security of supply that is of broader European interest. And we need to take planning from the bilateral to the regional and even European level.

Unlocking the potential cannot be done without the industry. We need to address the challenges faced by the European industrial supply chain by increasing investor certainty, addressing incentive mismatches among market actors, and simultaneously provide more clarity and transparency about future deployment. In addition, we can look into whether industry can have a more proactive role in unlocking the resources of the North Seas.

We will also look towards the next phase of the development of the North Seas. The North Seas can supply Europe with green hydrogen that can bring value to the offshore wind and Europe's industry. But it requires that we develop planning, infrastructure and coordination.

2024 is a pivotal year in setting the EU's strategic agenda for the coming years. Therefore, it will be a central priority for the Danish co-presidency to ensure that NSEC develops recommendations for a new Commission.

With the Danish work programme for 2024, we aim to move further with the implementation of the North Seas as Europe's energy hub. I look forward to continuing the close cooperation in NSEC this year.



Lars Aagaard
Minister for Climate, Energy and Utilities

Introduction

Offshore renewable energy is crucial for the European energy system. The energy crisis and the aggravating geopolitical situation have demonstrated that Europe needs to strive for energy independence. Offshore renewable energy can play a huge part in this. Cost-effective renewable energy can also be the basis for securing future European competitiveness. Utilising our collective renewable energy potential in the North Seas will be essential in this regard.

With the signing of the Esbjerg Declaration at the North Sea Summit in 2022, Denmark together with Germany, Belgium, and the Netherlands laid the foundation for the North Seas as the future Green Power Plant of Europe. The declaration sets ambitious combined targets for the development of offshore renewable energy in the region. The ambitions from Esbjerg have since then evolved and grown even further, resulting in the second North Sea Summit in Belgium in 2023 and the Ostend Declaration with participation from additional North Sea countries, including France, the United Kingdom, Ireland, Norway and Luxembourg, resulting in a joint ambition of minimum 300 GW installed offshore wind capacity in 2050. The vision is clear: The North Seas as Europe's Green Energy Hub.

Building on the progress of the previous co-presidencies, the Danish NSEC co-presidency in 2024 will focus on the implementation and realisation of the joint ambitions, including through the promotion of hybrid and joint projects, further development of radial offshore wind, offshore energy hubs, grids, and enhanced cross-border connectivity through integrated infrastructure planning, and hydrogen with the establishment of a new support group. Additionally, we will steer the preparation of a new three-year work programme, which will lay the tracks for the work in NSEC in the coming years.

It is a central priority for the Danish co-presidency that the cooperation in NSEC becomes instrumental in forming the future strategic agenda of the EU by providing concrete recommendations and guidance. The goal is to ensure that offshore renewable energy development remains a central priority in the years to come – and it will require close collaboration and coordination with the Belgian EU Presidency.

Priorities

The Danish co-presidency's priorities are centered around three pillars, which aim to tackle the challenges and find possible solutions for the deployment of offshore wind energy and the wind industry. In addition, a central priority will be a joint NSEC input for the future EU Strategic Agenda.

Danish co-presidency Priorities

1. Realising the renewable energy potentials in the North Seas
2. Strengthening European supply chains and industry
3. Offshore Green Hydrogen
4. Joint NSEC input for the future EU Strategic Agenda

1. Realising the renewable energy potentials in the North Seas

Clearing the Path for the Deployment of Offshore Renewable Energy Infrastructure and Production

Developing the offshore potential of the North Seas is a truly European project that can deliver widespread benefits of greater energy independence and affordable renewable energy for households and industry in Europe. To reap the potential, however, there is a need to create a long-term framework that provides a conducive investment framework and addresses barriers.

A European approach to fully reaping the renewable resources of the North Seas requires broad coordination and commitment to ensure benefits are widely shared and investments are jointly undertaken. This shall provide assurance to all relevant importing Member States that they will benefit from the renewable energy while providing an enabling environment for exporters that put their sea territory to the common benefit. The single market shall play a central role in providing both energy security and incentives. The Danish co-presidency will seek to identify the key building blocks in an EU approach – a regulatory road map that will facilitate the gradual establishment of the North Seas as a green power hub of Europe.

Realising this vision will also require long-term infrastructure planning and significant investments. As highlighted by the Commission in the EU Action Plan for Grids, energy infrastructure is the missing link in the green energy transition. The Action Plan is an important step toward addressing the challenges of the deployment of offshore wind. But there is still a way to go. The Danish co-presidency will work towards ensuring a central role for NSEC as the voice for the future of energy investments, tenders, and EU financing instruments, offering coordinated input on cross-border challenges.

Finally, offshore renewable infrastructure projects will need to be realised swiftly and without unnecessary delays. Permitting procedures can often result in barriers due to complex or unclear processes. The Danish co-presidency will focus on analysing permitting barriers and national practices to identify common ground and best practices. The ultimate goal is to identify the challenges and risks and craft smart solutions to foster an environment for viable business cases for supplying green electricity in the North Seas.

The Danish co-presidency will:

- Seek to identify central building blocks in a regulatory road map for coordinated deployment in the North Seas, including sharing costs and benefits of offshore infrastructure projects.
- Follow up on the Grid Action Plan and how to integrate infrastructure considerations with the development of joint and hybrid projects.
- Analyse barriers and best practices related to permitting procedures for offshore infrastructure projects

2. Strengthening European supply chains and industry

Overcoming supply chain challenges in the energy sector and fostering a green market-based industrial policy

The European industry is facing a series of challenges. This is partly due to challenges related to ambitions of massive build-out in parallel with high inflation and increasing prices. Another challenge is the pace at which demand is changing. The build-out across the North Seas risks creating bottlenecks in the supply chain and uncertainty for both industry and decision-makers. Urgent action is needed, as our renewable energy ambitions are highly dependent on a robust and competitive wind supply chain and a steady flow of clear and secure projects, capable of attracting essential financing and competing on a global stage. The Danish co-presidency aims to continue the focus on challenges in the supply chain in the North Seas.

To address these issues, a deepened contact between NSEC decision-makers and stakeholders from the European wind supply chain is needed. Therefore, the Danish co-presidency will facilitate a series of thematic stakeholder sessions with the European industry throughout 2024. The initiative will bring together key stakeholders from government and industry to discuss insights on the challenges at hand, propose collective solutions, and provide valuable input for the work going forward. The overall aim of these sessions is to identify concrete initiatives for Member States and industry that help ensure more and secure investment.

A key initiative will be to increase transparency and predictability across the renewable energy value chain. The joint NSEC tender plan is an example of a transparent pipeline of projects that help provide security for investments. As the co-presidency, we propose to look into the opportunity of expanding this work in NSEC to create an investor transparency framework that aims to provide a clear pipeline towards 2030, 2040, and 2050 regarding not only tenders but also production capacity, port capacity, expected hydrogen consumption, etc. This initiative could serve as a first step in NSEC towards creating security of investment and transparency across the value chain.

Recent year's focus on green industrial policy has been aimed towards addressing immediate challenges. However, we see a need to lay the groundwork for a long-term approach that supports the development of the energy union through market-based initiatives. The approach requires also active engagement from the industry in formulating initiatives to strengthen supply chains and boost competitiveness.

One of such initiative is well-designed auction criteria. These criterias have the potential to support and promote a competitive industry. Therefore, the co-presidency will continue to focus on the use of auction criteria among NSEC members and how this can be used to ensure European resilience and a strengthened supply chain.

Finally, there is a need to examine new and simple models for financing that efficiently navigate risks from pipeline to final investment decision. It is necessary to develop new tools to facilitate access to investments and funding for stakeholders across the supply chain and tackle the current barriers in place. The European Investment Bank plays an important role in this regard, alongside other financing instruments.

The Danish co-presidency will:

- Facilitate a series of stakeholder sessions in 2024 structured around specific supply chain challenges and involving key industry players. The sessions will include discussions on financing and long-term investment security, transparency in the value chain, regulatory enablers for the supply chain, and tackling bottlenecks.
- Translate inputs from the stakeholder sessions to action points for the NSEC members to discuss and address moving forward.
- Take steps towards a possible investor transparency framework in NSEC.

3. Offshore Green Hydrogen

Harnessing offshore green hydrogen and unlocking the full potential of the North Seas

Offshore green hydrogen is projected to become a fundamental part of the energy system beyond 2030. Its widespread adoption can play a significant role in mitigating climate change by reducing greenhouse gas emissions in sectors that are challenging to electrify directly. Furthermore, integrating green hydrogen with offshore wind development bears the potential to enhance the overall impact of renewable energy initiatives. It addresses challenges related to intermittency, provides a clean energy carrier for multiple sectors, supports grid stability, and creates economic opportunities in the global shift toward sustainable energy systems.

With its vast wind resources, the North Seas holds great collective potential for becoming a green hydrogen model region. Discussions on this development are already ongoing within NSEC to some degree. However, the discussions need to be anchored, structured and steered to secure a comprehensive approach. Therefore, the Danish co-presidency proposes to strengthen the cooperation on green hydrogen in NSEC to address and resolve hydrogen-related issues comprehensively. This could include establishing a dedicated support group on hydrogen. Among several topics, the co-presidency proposes that the support group could focus on the following:

- Bringing down the overall complexity of integrated infrastructure planning, among other things by mapping pipeline projects and estimated maturity hereof.
- Aligning discussions on the deployment of offshore infrastructure and dedicated port/onshore infrastructure connecting supply and demand.
- Regulatory alignment and knowledge-sharing, including discussions on the due and adequate implementation of the hydrogen and decarbonised gas market package.
- Stakeholder engagement, including discussions on supply chain bottlenecks.

The specific organisation of the support group, the corresponding determination of the scope and primary topics of interest, and the synergies between the new support group and existing support group activities on hydrogen infrastructure would be subject to prior discussions within NSEC.

The Danish co-presidency will:

- Assess and review current work streams on green hydrogen in the support groups
- Establish a consolidated, and dedicated support group on hydrogen with a comprehensive approach to market ramp-up and development, if deemed appropriate in the review of current work streams.

Additional NSEC tasks in 2024

NSEC Work Programme 2025-2027

In 2024, NSEC needs to prepare a new work programme for the coming years 2025-2027. The Danish co-presidency is placing a high priority on this task to guarantee the right focus and direction for NSEC's ongoing efforts.

As the preparations for the new work programme start, the Danish co-presidency suggests reviewing the current structure, subjects, and objectives of all support groups. This review aims to ensure that NSEC is fit for purpose: enabling the realisation of the joint ambitions of NSEC.

NECP and TEN-E obligations

The NECPs and the joint regional chapter are discussed and coordinated in NSEC. In addition, the NSEC countries must update their non-binding agreement on offshore renewable generation in the basin in accordance with the TEN-E regulation (EU) 2022/869.



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