

LETTER OF INTENT
BETWEEN
THE GERMAN FEDERAL MINISTER OF ECONOMIC AFFAIRS AND ENERGY
AND
THE MINISTER OF CLIMATE, ENERGY AND UTILITIES OF
THE KINGDOM OF DENMARK
ON
COOPERATION ON JOINTLY ANALYZING JOINT AND HYBRID OFFSHORE
RENEWABLE ENERGY PROJECTS BETWEEN THE COUNTRIES

The German Federal Minister of Economic Affairs and Energy and the Minister of Climate, Energy and Utilities of the Kingdom of Denmark (hereinafter referred to individually as a “Participant” and collectively as the “Participants”);

The Participants highlight the importance of stepping up the 2030 climate ambition of the European Union to at least 55% in order to achieve climate neutrality by 2050;

They welcome the ambition of the *European Green Deal* and the *European Offshore Renewable Energy Strategy* and emphasise that sustainable deployment of offshore wind is needed to achieve the European Union climate targets;

The Participants note that further efforts by Member States, including next steps towards a cooperation on joint and hybrid projects, will be important to achieve the targets and contribute to the integration of the internal energy market, and note in this respect, the decision in the *Danish Climate Agreement for Energy and Industry 2020* to establish two offshore energy hubs by 2030;

The Participants recognize the importance of regional cooperation in the *Baltic Energy Market Interconnection Plan* (BEMIP) and *North Seas Energy Cooperation* (NSEC) in supporting cross-border renewable energy generation and transmission infrastructure;

They respond to the shared intentions and aspirations outlined in the *Baltic Sea Offshore Wind Joint Declaration of Intent* and the *Joint Declaration of the North Seas Energy Cooperation* in 2020;

The Participants emphasize the need for the European Union to play a leading role in the transition towards a low carbon economy, and take into account the need to ensure a sustainable, competitive and secure supply of energy to consumers and the integration of the internal energy market;

The Participants consider the importance of cost-efficient technologies for Power-to-X and hydrogen production, application and transmission in the context of future cooperation;

They bear in mind that this Letter of Intent (LOI) provides a general framework for cooperation and expresses the cooperative intent of the Participants;

Therefore, the Participants have come to the following understanding:

Section 1 – Objective

The objective of this LOI is to assess the option of a cooperation on joint and hybrid offshore renewable energy projects in the North Sea and/or the Baltic Sea, including the option for offshore energy hubs for mutual benefit of both countries. This assessment will include the analysis of the option of cooperation on the Danish offshore energy hubs. Joint and hybrid projects could contribute to the achievement of the European and national climate and energy targets, improve security of supply, bring diversification of energy sources, and facilitate energy system integration and development of hydrogen and Power-to-X technologies.

Section 2 – Guiding principles for the cooperation

This cooperation will take into account a set of principles, which help to implement the objectives set out in this LOI. In this regard, the participants:

- Recognize that joint and hybrid projects combining generation, transmission and interconnection elements are essential for the large-scale offshore renewable energy deployment as well as the facilitation of electricity trade in the region.
- Share the view that ensuring mutual benefits for both participants and a fair allocation of costs and benefits is key for the implementation of joint and hybrid projects.
- Emphasise that efficient system integration is important to ensure the full benefits of such projects; they acknowledge that electricity grid integration is challenging with regards to planning and building new offshore and onshore grids, public acceptance and costs.
- Recognise that hydrogen can contribute to the transformation towards a decarbonised economy as well as to system integration of renewable power and may offer new possibilities to address some of the challenges of electricity grid integration.
- Emphasize that market arrangements for hybrid projects need to reflect a proper balance between renewable electricity integration and trade, so that generation from offshore wind in hybrid projects can compete on equal terms with other renewable energy generation in order to replace conventional generation.
- Stress that it could be a challenge to project implementation if a future offshore wind project, which is later on connected to a hybrid project developed under this cooperation, would get less effective market and grid access than in case of a radial connection, and that this challenge needs to be addressed.

Section 3 – Cooperation

The cooperation between the Participants under this LOI will be operational through a Joint Working Group of both ministries to assess the options for a possible cooperation on hybrid offshore projects in the Baltic Sea and in the North Sea, including the offshore energy hubs, which Denmark envisages by 2030. The possible establishment of projects under this cooperation may be later than 2030 with the view to the national grid procedures.

The Joint Working Group could in particular consider the following topics with the view to the possible cooperation on hybrid offshore projects, including the proposed Danish offshore energy hubs:

- Opportunities for new hybrid projects combining generation, transmission and interconnection elements, taking into account existing and planned infrastructure.
- Possible incorporation of hybrid offshore projects into maritime spatial planning taking into account environment and wildlife, and into the national grid planning processes; the possible

inclusion of offshore wind projects in the German exclusive economic zone.

- Electricity market arrangements for a project reflecting a proper balance between renewable electricity integration and trade.
- Allocation of costs and benefits, including the distribution of renewable energy target amounts (statistical transfer) to be accounted for the national contributions to the EU 2030 Renewable Energy target under the *Renewable Energy Directive* (EU) 2018/2001.
- Potential for use of Power-to-X technologies and hydrogen production, transmission infrastructure as part of projects developed under this cooperation.
- Options for co-financing from relevant European Union funding schemes (e.g. the Connecting Europe Facility for Energy, the Union Renewable Energy Financing Mechanism, the Recovery and Resilience Facility) and joint approaches to multilateral cooperation and partners.

The Joint Working Group may invite relevant stakeholders such as planning and regulatory authorities and experts including the German and Danish TSOs to collaborate and support the analysis. To this end, relevant TSOs are invited to conduct analyses of technical and economic aspects of a possible cooperation on hybrid offshore projects between Germany and Denmark, including but not limited to:

- Technical aspects and possible configurations.
- Dimensioning of generation, transmission, interconnection and onshore grid connection.
- Internal grid reinforcements.
- Additional redispatch needs due to electricity grid bottlenecks.
- Possibilities to include additional offshore wind farms and energy hubs at a later stage.
- Overall and project specific socio-economic implications.

The Joint Working Group should provide a preliminary progress report to the ministers by Q3 -2021, including a first assessment of possible options and their potential timelines and conditions, for the possible realization of joint and hybrid projects in the Baltic Sea and/or the North Sea.

The Joint Working Group will prepare as soon as possible thereafter, given the complexity of the topic, a joint recommendation on whether or not to continue with the next phase towards realization of a project. This recommendation will be based on the analysis mentioned above and will describe which configuration would be most suited for the cooperation and can act as basis for further design and development of the joint project.

The ministers will then exchange on whether and how to bring the cooperation forward, while respecting the national grid planning and approval procedures as well as the parliamentary decision processes.

If needed, by mutual decision the Joint Working Group may add additional sub-working groups under the Joint Working Group, for instance to conduct technical and spatial analyses on individual project assessments.

Section 4 – Commitments of the Participants

This LOI is a political statement expressing the joint interest in cooperation. It does not create any rights and obligations regulated by international law and does not impose any financial obligations to the parties.

Section 5 – Outreach to other countries

This cooperation could become a step towards multilateral cooperation with further North and Baltic Sea countries. The signatories will jointly consider how to approach other potential partners and neighbouring countries in due time.

This LOI will come into effect on the day of signature.