REPower North Sea Supply Chains, Skills and Grids



MESSAGES FROM THE ROUNDTABLE FOR EUROPE'S ENERGY FUTURE (REEF) TO THE NORTH SEA SUMMIT OOSTENDE, 24 APRIL 2023

European leaders are gathered in Oostende, Belgium, to prepare the North Sea for large scale implementation of the green energy transition and scale up the necessary manufacturing industries. The Roundtable for Europe's Energy Future (REEF) is a cross-sector alliance representing 12 leading energy companies from the system operation, utility and technology sectors. REEF welcomes the European Commission's recently published Net-Zero Industry Act (NZIA) and highlights the following crucial points in this respect:

1. INCENTIVISING MANUFACTURING

The proposal for a NZIA places the right topics on the agenda: Europe's strategic competitiveness requires strengthening the domestic production of strategic energy technologies in Europe in order to meet decarbonisation targets in a swift and secure way. In parallel, Europe-based technology providers must also continue to leverage their global supply chains to sustain the momentum of Europe's energy transition. The production of very large components and elements, such as offshore converter platforms, requires the availability of production sites with sea access. **REEF asks that such needs are effectively considered in defining industrial sites, permitting procedures and possibly financing support.**

2. INCREASE THE TALENT BASE

The most complex and enduring emerging supply chain disruptor could be the skills challenge. Both the skills needed to accelerate the energy transition and employee expectations are changing. The Net Zero Skills Academy is a good start for upskilling and reskilling initiatives while ensuring diversity of gender, nationality and age across technologies and management of the Net-Zero Industry transition. **REEF proposes to establish a broad collaboration platform to support the Net Zero Skills Academies, including the private sector, public institutions, schools and universities.**

3. PREDICTABILITY OF DEMAND

The manufacturers of large-scale high-tech grid equipment need predictability regarding demand for their products towards 2030 and beyond, in order to justify investing in additional manufacturing capacity in Europe. Member States should provide reliable and forward looking roll out plans for offshore renewable generation and offshore grids, and TSO's can provide forward-looking grid planning. **REEF asks regulators to provide the necessary flexibility to order equipment using forward-looking frameworks and advises against a piecemeal approach. This is necessary to enable anticipatory investments.**

4. BIODIVERSITY

Unleashing the full potential of offshore wind requires allocating adequate space in the ocean for offshore wind and the underlying offshore grid supporting it, while also ensuring that offshore energy infrastructure can co-exist harmoniously with other marine activities. **REEF members are committed to taking into account nature, enhancing biodiversity and enriching the marine environment.** We must achieve the right balance between environmental regulation for single substances and realising the energy transition.

5. STANDARDISATION & REPLICABILITY

Standardisation of technologies is necessary to achieve economies of scale and establish serial production. Replicability between projects enables the transfer of best practice, reduces design time, and enables more efficient manufacturing and construction which ultimately reduces project costs and timescales. **REEF calls on manufacturers, Member States, NRAs, TSOs and operators of offshore wind farms to agree on technical and conceptual standards like voltage levels and reduction of design variants. The EU could consider setting – in partnership with industry - some adequate level of standardisation as a prerequisite for public support / other incentives, while ensuring to avoid negative effects such as delays, increased complexity and increased costs for society overall.**

6. CYBERSECURITY

Given the plethora of cyber security related regulatory requirements, in the electricity industry, companies risk expending significant resources on compliance, without achieving the real aim - increased security. **REEF asks that cybersecurity regulations in the EU and Member States are comparable and translatable between countries.**



7. INTEROPERABILITY

The EU-funded InterOPERA-project aims is to make future HVDC systems mutually compatible and interoperable by design. Several REEF companies participate in this project. The realisation of a full-scale cross-border offshore grid project which would demonstrate the High Voltage Direct Current (HVDC) technology's viability, showcase international collaboration models, and deliver the socio-economic benefit of multi-terminal HVDC transmission systems, is an essential next step. **REEF will support the deployment of this project and calls on Member States, NRAs, TSOs, manufacturers, and operators of offshore wind farms to collaborate on the development of governance models, technical frameworks, de-risking approaches and public-private financing opportunities to make this fullscale offshore grid project a reality.**

8. PROCUREMENT

The procedures of the current public procurement process were tailor-made for a market where buyers can select their suppliers based on tough competition. In some markets, the situation is reversed: buyers can be content if they find a supplier. The thinking needs to shift from cost to value. Tenders and auctions should not only be based on price, but also take into account value across the economy, nature and climate, society, the energy system as well as the domestic manufacturing targets of the Net-Zero-Industry Act. New indexlinked and other innovative compensation models should be considered to reduce sub- supplier and raw material risk for the supply chain. **The more manufacturers will be able to share risks with others and to partner with specialised contractors for e.g. offshore construction or civil works, the more they will be able to concentrate on delivering their core technologies.**

9. GRID TECHNOLOGIES

Most of the technologies needed for Europe's 2030 goals already exist but the share of renewables in the electricity system can only be increased significantly if the necessary grid infrastructure is available. Digitalisation and optimised solutions will become increasingly important to ensure sustainability, manage complexities and ensure grid flexibility. **REEF calls for more emphasis on the crucial role of electricity grids and a direct mention of High-Voltage Direct Current (HVDC) technologies, transformers, high voltage switchgear and cables in the NZIA. Rapid deployment to reach the required scale is now essential.**

10. ROLE OF MARKETS AND BUSINESS MODELS

The development of renewable electricity generation and adequate infrastructure in the North Sea must be accelerated. **REEF asks that** the NZIA maintains the balance between necessary regulation and fundamental market parameters to find cost-efficient solutions while avoiding hidden subsidies. This market must facilitate commercial risk mitigation measures including forward markets, so that developers can use all tools available to manage their risk. The regulatory framework should also ensure that offshore wind parks can deliver to multiple markets. New business models, like awarding framework agreements will help technology providers to plan ahead with supply chains and bring shared efficiency benefits to all stakeholders. Several EU-programmes can provide funding to grids (e.g. Connecting Europe Facility, the European Investment Bank, etc.) but they are not consolidated, and additional resources are needed. REEF asks the EU to create a "European Grid Facility" to reinforce investments in European grids, especially focused on those investments that are most needed and where a broader pan-European argument for investment is strongest. The upcoming revision of the Multiannual Financial Framework will provide an opportunity to address the totality of the financial arrangements for grid investments.

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