Offshore Wind Foundations Alliance (OWFA) position paper – Ecodesign for Sustainable Products Regulation

The European Commission's proposal for a Regulation on Ecodesign for Sustainable Products is an important step for the EU's green transition. Strict sustainability requirements are necessary for all product groups, and offshore wind foundations are no exception. The production of offshore wind foundations will need to scale up considerably in the coming years to achieve energy independence and the EU's climate neutrality goals. Therefore their regulation under the Sustainable Products Regulation must be prioritised to ensure that the rapid progress does not come with a sustainability cost.

OWFA is pleased to see the proposal's focus on products' entire life cycle to cover environmental impacts at all stages. Equally important is the inclusion of green public procurement to incentivise sustainable production. Yet, OWFA believes the Regulation should also address private procurement and extend its scope to cover social sustainability to maintain a level playing field and promote responsible global value chains.

Make offshore wind foundations a priority

Offshore wind foundations should be covered by ecodesign requirements as a priority. The EU will need to dramatically increase the number of offshore wind farms starting immediately if it wants to achieve its goal of 300 GW of installed capacity by 2050, 12 times the amount of capacity currently installed[1]. This exponential increase requires an unprecedented ramp up of offshore wind foundations to carry the weight of the increased capacity load. With a foundation typically consisting of more than 2,000 tonnes of steel, the raw material requirements of such an increase are significant. Without ecodesign requirements, we risk that the market will be flooded with less durable, less sustainable foundations.

A delegated act regulating offshore wind foundations should be prioritised, given the dependence on steel and intensity of the scale-up required in this product group.

Durability requirements must be robust

Offshore wind foundations have an approximate lifespan of more than 25 years. The longer they last, the later they will have to be decommissioned and substituted by new foundations. Durability requirements therefore avoid waste, delay the need for energy-intensive steel production and recycling, and maximise the environmental friendliness of offshore wind farms as a whole. However, some corrosion protection products that extend durability do so at an environmental cost. OWFA believes that **durability requirements for offshore wind foundations should be holistic and based on strict standards** developed by CEN-CENELEC in close coordination with European fabricators. In particular, the EN1090 standard for steel structures – when applied

[1] https://windeurope.org/intelligence-platform/product/offshore-wind-in-europe-key-trends-and-statistics-2020/

to offshore wind structures,[2] will guarantee that foundations used for European wind farms abide by the highest fabrication and testing criteria. Objective testing of the quality of the products through automatic testing systems is key. The process for setting this standard should be sped up, and compliance with a harmonised standard adhering to the EN1090's offshore chapter should be mandatory for offshore wind foundations placed on the EU market.

Environmental and carbon footprint requirements must be based on a life cycle assessment, for heavy structures transport of the goods is a crucial factor

Because foundations are so large and use a large amount of steel (a valuable raw material), it is particularly important to **consider everything from the acquisition of raw materials to their end-of-life management**, including distribution, i.e. road and maritime transport of the goods. Emissions from steel production has a high impact, which means that supporting the supply chain for steel production should be a natural EU priority.

Transport emissions represent a very important share of foundations' total lifecycle emissions, especially when they are shipped across long distances, given that they are approximately 100 meters long and can weigh up to 2,000 tonnes, with diameters of 10 meters. To put this into context, shipping one monopile from China to the EU would emit at least 138 tonnes of CO2 equivalent – the same as driving 30 gasoline-powered cars for one year.[3]

Life-cycle based requirements would therefore discourage the unnecessary additional environmental burden of shipping foundations across oceans. In addition, a life-cycle assessment would account for the emissions from the electricity used in production, hence encouraging renewable sources.

Performance requirements should include worker health and wellbeing

While transport of complete foundations poses an unnecessary and avoidable emissions burden, it is unavoidable that some offshore wind components will need to be produced outside of the EU. As EU imports of key components increase, the EU must continue its commitment to

[2] The EN1090 is currently being revised to include a chapter specifically for offshore wind foundations

[3] This assumes CO2 emissions of 3.54 g CO2eq per mt per km over a sea distance of 19,535 km (the distance from Shanghai to Rotterdam) https://classic.searoutes.com/portdistance?fromName=Rotterdam&fromLocode=NLRTM&toName=Shanghai&toLocode=CNSHA and https://www.statista.com/statistics/1233482/carbon-footprint-of-cargo-ships-by-type-uk/#:~:text=Carbon%20footprint%20of%20cargo%20ship%20types%20in%20the%20UK%202021&text=This%20was%20a%20larger%20carbon,tons%20of%20CO2%20in%202020.

champion decent work conditions. In recent years, renewable energy projects have been suspected of using components made by forced labour[4], which has no place on the EU market.

Sectors working with steel are likely to suffer from work-related accidents[5]. If the Commission wants to prioritise the regulation of steel products, it needs to ensure that adequate health and safety standards are met, in line with other EU product legislations such as the Construction Products Regulation. A **performance requirement on occupational health and safety** throughout the foundation's life cycle would enable delegated acts to make harmonised standards that ensure safe working conditions.

Private procurement contracts must be included in the legislative scope

OWFA supports the inclusion of **green public procurement in the scope**, following examples such as the EU's battery regulation[6]. EU public sector organisations (from the EU or its member states) tend to take their decision based on the price tag of each competing offer. Without robust and mandatory green public procurement criteria, this practice may lead to decisions that put economic cost above environmental cost. As a result, companies are not encouraged to invest in sustainability. Green public procurement could allow companies to go even beyond the minimum performance requirements of the Regulation (e.g. through award criteria), hence explicitly incentivising further efforts.

In addition, OWFA believes that the Regulation should introduce green award criteria for private tenders. Encouraging the inclusion of sustainability requirements in both public and private procurement contracts will allow a level playing field between both categories and encourage the supply of more sustainable products, particularly considering the increasing demand for those goods on the consumers' and investors 'side[7].

A digital product passport will help end users understand what they are buying prevented it doesn't add red tape

OWFA **welcomes the introduction of a digital production passport** as this will facilitate access to product-related information. This will allow companies and national competent authorities to verify that suppliers' products abide by the required performance requirements and that the Regulation is properly enforced. However, OWFA believes it shouldn't create an excessive administrative burden for EU companies.

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[4] https://scandasia.com/norwegian-renewable-energy-fund-invests-millions-in-chinese-companies-suspected-of-forced-labor/, https://www.energymonitor.ai/policy/just-transition/why-wind-and-solar-companies-need-to-address-human-rights

[5] https://www.gplusoffshorewind.com/__data/assets/pdf_file/0010/853246/G-Plus-Global-Offshors-Wind-Health-and-Safety-Organisationjk.pdf

[6] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0798

[7] https://www.aflac.com/docs/about-aflac/csr-survey-assets/2019-aflac-csr-infographic-and-survey.pdf

In sum, OWFA asks that:

- Offshore wind foundations should be prioritised as an ecodesign product group;
- Offshore wind foundation standards should be comprehensive, uniform, and enforced across all EU member states;
- Products from outside the EU should be assessed against the same criteria;
- Those criteria should consider durability, worker well-being, transport emissions and energy used in their production;
- Procurement tenders (public and private) must apply ecodesign criteria as an integral part of the awards process.