

Feedback from European Marine Board to European Commission's Strategy on Offshore Renewable Energy (28 July 2020)

We support the aims of the EU Green Deal, and by extension the planned offshore renewable energy strategy, to prioritize the decarbonization of EU and move towards carbon neutrality by 2050. However, we would like to highlight a number of areas that we feel merit additional attention to ensure that the stated 'do no harm' principle is truly respected.

While end-of-life for offshore installations is already considered, we feel that this should be extended to consider full-life of installations, to ensure principles of circular economy, re-use and mitigation of impact are respected throughout. As an example, the methods for obtaining certain components (e.g. have they been obtained from deep-sea mining) should be taken into account, as should the transportation and installation processes throughout the value-chain and life-time for any offshore renewable energy project.

The marine science community is working to better understand the impacts of offshore renewable installations, especially at ecosystem level and over the long term. It is imperative that this community is included in developments from initiation, to ensure the latest knowledge is used to understand and mitigate impact, and as proposed, help to identify win-win scenarios. This is a concrete way to ensure that the 'do no harm' principle is respected in practice. To continue developing marine science knowledge in this area, and to ensure the adaptive management of the ecosystems where these renewable offshore installations will be placed, sustained monitoring through ocean observations will be vital. These will support not only research, but also resource identification and quantification, support logistical activities, monitor ocean usage and check for compliance. Structural long-term funding and support will be required for research and observation/monitoring activities. The assessment of impact should further be supported by European-level standardization of requirements and methods.

The social license for placement of these devices in coastal areas should also be considered. Without co-design of these projects with local coastal communities, and appropriate co-designed marine spatial planning with all users, the social license for these developments will be much harder to achieve. Online webinars and questionnaires might not get to the populations most affected by these devices, and therefore you might perceive to have done good stakeholder engagement only to find out that you have missed a very vocal stakeholder group later. Local site visits might be difficult at present, but should still be considered with visual displays etc. and a good explanation of all the ecosystem services that these devices might bring to get buy-in at a local level.

In addition to considering impact, training and skills is also a key area for the future development of offshore renewable energy. Training and (re)skilling should not only be focused on the current workforce, but also on developing a future workforce that has the necessary knowledge and experience to support a growing industry. Dedicated training for marine graduates should be developed that focuses not only on technical details of offshore renewable energy, but also provides background on the wider context including regulation, financing, and environmental impact to produce graduates who can address ever-changing industry needs. Attention should be paid to

making careers in offshore renewable energy attractive, and towards increasing diversity of all kinds within this sector. More recommendations for marine graduate training can be found in our publication on this topic (<https://www.marineboard.eu/publication/training-21st-century-marine-professional>).