Feedback from European Marine Board to European Commission's EU renewable energy rules review (14 September2020)

We support the revision of Directive 2018/2001 on the promotion of the use of energy from renewable sources and the proposed increase in GHG reduction targets. 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 which underpins the EU Green Deal is truly respected. We as an organization are particularly concerned with aspects that are related to offshore renewable energy, but our points would also hold for terrestrial renewable energy activities.

We are concerned that in the likely environmental impacts outlined in the inception impact assessment, only pollution is considered. We are also concerned that the majority of the section on social impacts speaks only about economic factors such as jobs and revenue.

Regardless of the type of renewable energy installation, a "cradle-to-grave" viewpoint should be applied to ensure that the 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 renewable energy project.

Scientific communities are working to better understand the impacts of renewable installations, especially at ecosystem level and over the long term. It is imperative that these communities are included in developments from initiation, to ensure the latest knowledge is used to understand and mitigate impact, especially on biodiversity, which is already in decline. This could help to identify win-win scenarios. This is also a concrete way to ensure that the 'do no harm' principle is respected in practice.

To continue developing scientific knowledge in these areas, and to ensure the adaptive management of ecosystems in relation to renewable energy projects, sustained monitoring through observations will be vital. These will support not only research, but also resource identification and quantification, support logistical activities, monitor area 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 an accelerated move towards the use of renewable energy systems should also be considered. Without co-design of these projects with local communities, and appropriate co-designed plans 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 believe that you have undertaken good stakeholder engagement only to find out that you have missed a very vocal stakeholder group later.

In addition to considering impact, training and skills is also a key area for the future development of 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. The identified growth and increase in available jobs will require an equal growth in the numbers of people with the appropriate skills and knowledge to support this sector. Dedicated training for graduates should be developed that focuses not only on technical details of renewable energy systems, but also provides background on the wider context including regulation, financing, and environmental and social impact to produce graduates who can address ever-changing industry needs. Attention should be paid to making careers in renewable energy attractive, and towards increasing diversity of all kinds within this sector.