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COMMISSION STAFF WORKING DOCUMENT
EXECUTIVE SUMMARY OF THE EVALUATION

Support instruments for the development of the ocean energy policy 2014-2020

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Building on the well-developed policy framework supporting renewable energy, the European Commission adopted the Blue Energy Communication in 2014 to show its support and set an agenda of action to help the ocean energy sector with its specificities to move forward. “Ocean energy” has to be understood as six different potential energy resources deriving from seawater: tidal currents, ocean currents, tidal range (rise & fall), waves, ocean thermal energy and salinity gradient. Offshore wind energy and floating solar power are not a form of ocean energy, since they rely on wind and solar energy, albeit in a marine setting. The general objective of the Communication was to increase the uptake of ocean energy by addressing the main bottlenecks that hampered the development of the sector at the time, namely technology costs, transmission grid infrastructure, licensing/consenting procedures (including environmental impact assessment) and revenue support.

Between 2014 and 2016, the Commission supported the stakeholders’ Ocean Energy Forum, which delivered the ocean strategic roadmap “Building Ocean Energy for Europe” in 2016 (Phase 1). This Roadmap identified four key action plans to support ocean energy development:

- Establish a European phase-gate scheme to validate sub-systems and early prototypes in less mature ocean energy technologies;
- Set-up a EUR 250m Investment Support Fund;
- Set-up a EUR 50m – EUR 70m Insurance and Guarantee Fund for ocean energy demonstrations and pre-commercial projects; and
- De-risk environmental consenting through an integrated programme of measures that will develop guidance on planning, consenting, research socioeconomics and demonstration.

The second phase of action (Phase 2: 2017-2020) included the development of a European Industrial Initiative, based on the outcomes of the Ocean Energy Forum, and the development of sector-specific guidelines for the implementation of relevant legislation.

The European Commission committed to evaluate the Blue Energy Communication by 2020. This evaluation is based on literature review, in-depth interviews (including at EU, national and regional level), private sector actors, research institutions and a Public Consultation. To evaluate the effects of the Blue Energy Communication and the Roadmap, a counterfactual scenario assuming that these policy tools had never existed was developed.

From the present analysis, it appears that the EU successfully implemented the actions included under Phase 1 of the Communication, by setting up the Ocean Energy Forum and supporting the adoption of the Ocean Energy Strategic Roadmap. For what concerns the actions under Phase 2, some progress has been made in the development of sector-specific guidelines for the implementation of relevant legislation, in relations to the EU Nature legislation and to the MSP Directive, but no European Industrial Initiative was set up by 2020. The Ocean SET-Plan adopted in 2018, however addresses, at least partially, the needs identified in the impact assessment. In addition, while outside of the scope of this evaluation, it must be noted that the Clean Energy Industrial Forum announced for 2021 in the EU

offshore renewable energy strategy will also cover the ocean energy sector and therefore partially addresses the need for a European Industrial Initiative.

The effectiveness of the EU intervention in support of the development of ocean energy has been affected negatively by several external factors: high profile failures in the ocean energy industry, the increased competitiveness of other forms of renewable energy technologies, as well as the somewhat poor understanding/awareness of ocean energy have had a negative impact on Member States' and private investors' willingness to support the sector.

In terms of efficiency, the financial support provided by the European Commission for the setup of the Ocean Energy Forum and for the related development of the Roadmap proved to be useful and such actions would have been unlikely to develop without EU intervention. Moreover, funding through calls under Horizon 2020 and the EMFF helped to realise the objectives of two out of four action plans outlined in the Roadmap.

It can be concluded that the Blue Energy Communication and Roadmap were overall appropriate tools to address the needs and challenges faced by the sector in 2014. These documents also created a momentum and provided common direction and priorities for the further development of the sector. This notwithstanding, it appears that the documents were overoptimistic on the speed of development of the technology and in the expectations of additional support to be provided by Member States and the private sector.

Overall, the Communication and Roadmap appear to be internally coherent, as no evidence has been found demonstrating incoherence: the actions build logically on each other and do not overlap or contradict each other. Nevertheless, a posteriori, certain elements could have been better considered or been expanded on at the time, for instance the link with Member States strategies and approaches to ensure their future interventions, the different business cases for ocean energy, the needs of certain technologies and the connection to specific funding instruments for the implementation of the actions described. The recent adoption of the offshore renewable energy strategy by the European Commission will address remaining issues that are transversal for all offshore renewable technologies, as well as some specific remaining issues for the ocean energy sector, which were identified during this evaluation.