EXECUTIVE SUMMARY

PART 1: INNOVATIVE OFFSHORE RENEWABLE ENERGY TECHNOLOGIES

OFFSHORE SOLAR

TIDAL

WAVE

FLOATING WIND

OCEAN THERMAL ENERGY CONVERSION

SALINITY GRADIENT ENERGY

How do we mitigate climate change through offshore renewable energy?

Bottom-fixed offshore wind has become an important player in mitigating climate change by providing a significant amount of green electricity to households and factories across Europe and Asia. Even under the current pressure of high cost of capital, uncertainty of revenues and supply chain issues the sector stands strong.

The question in 2025 remains, which other renewable energy sources could duplicate or even surpass this success story. The sources in the race include offshore floating wind, tidal energy, wave energy, offshore solar and to a lesser degree touched upon this report salinity gradient and ocean thermal energy conversion (OTEC). All of which can help to balance the grid and provide additional clean energy.

Floating wind and offshore solar will considerably enlarge the areas where wind and solar energy are accessible and the size in which they can be deployed. Tidal & wave energy will generate security of supply through their predictability and consistency reducing the need for large-scale storage. OTEC and salinity gradient technologies can at specific locations around the world provide uninterrupted base-load power ensuring security of supply for essential industries or services.

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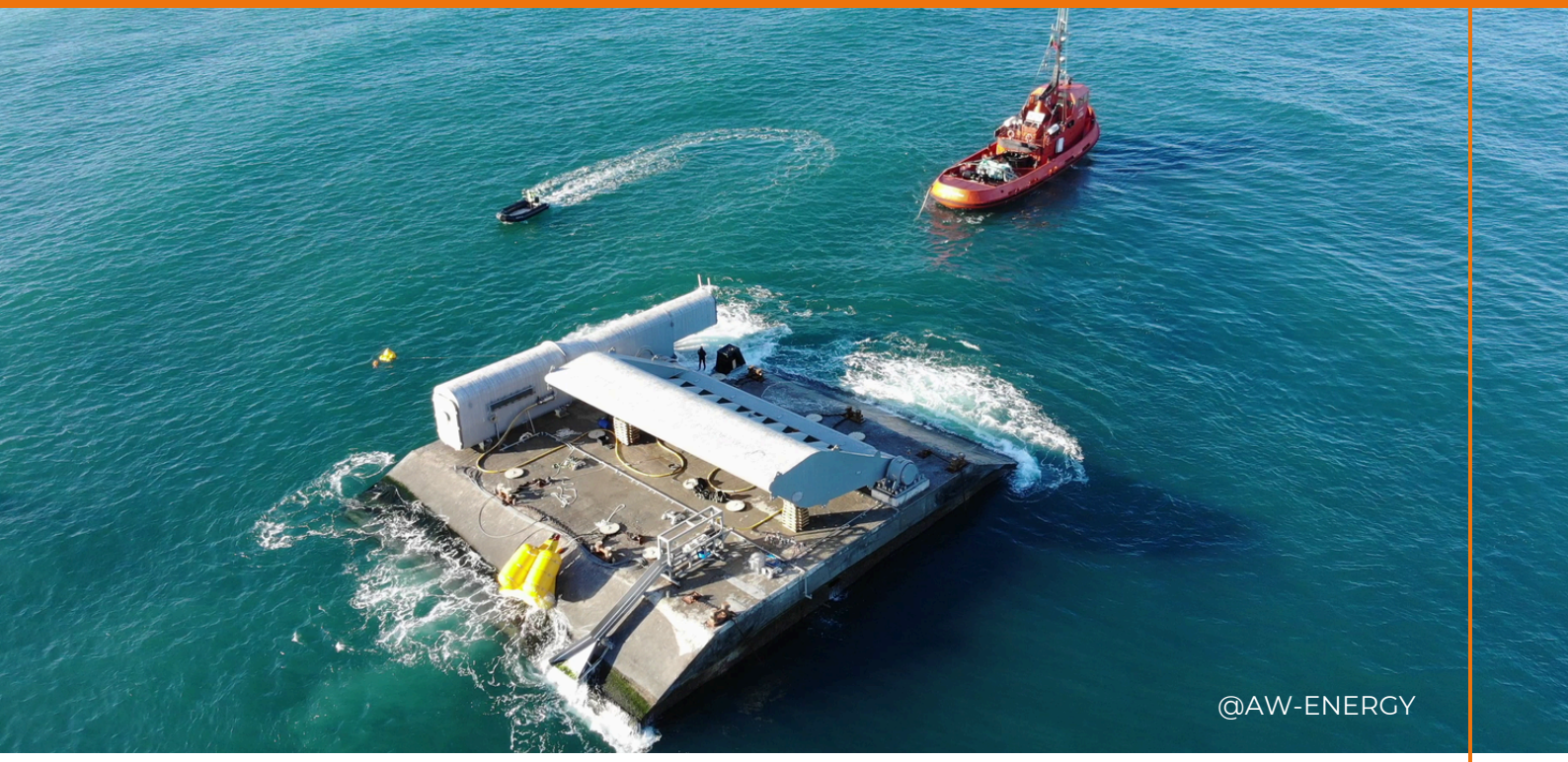

The chapters for offshore floating wind, tidal, wave and offshore solar of DMEC's 2024/2025 market follow the same structure. Firstly, they give key insights on the status of the global markets on those technologies. Secondly, they highlight 8-10 innovators with outstanding news between Q1 2024 and Q1 2025. Thirdly, they provide scenarios on how those technology deployments and costs could develop until 2050. Fourthly, DMEC provides an opinion column adding thoughts of the various innovations and reflecting on recent developments caused by geopolitical uncertainty. In addition, pro's and con's, resource maps, geographical distribution of innovators and information on the technologies are added on all chapters. The salinity gradient and OTEC chapters are providing the same but less detailed information.

DMEC's 2024/2025 market report is built to support various stakeholders from investors, to industry to policy makers in their strategic decision making on those offshore renewable energy sources. For financiers, the insights given are essential for project or equity investment decisions into these innovations given their track-record and expected market size. For project developers and utility companies this report provides guidance on how to find the right moment to plan projects for a bankable business case. For supply chain companies it helps to forecast the growth of potential customers and the business which could materialize from it. For the innovators themselves the report gives insights into the latest developments of their competitors and the global market developments. For policy makers, the report gives guidance on the support those technologies would require to achieve market maturity and the value they could bring to certain countries

The first chapter of DMEC 2024/2025 Market Report will be available for purchase via DMEC website on May 14. For more information about the Market Report, or on how to join DMEC Partnership Program, please contact Claudia Stolk via claudia@dutchmarineenergy.com