

Preface

The average-term energy strategies show the ocean as one of the main sources of renewable energy. Therefore, reaching new solutions to exploit the ocean energy has become one of the main objectives of research and development in the field of renewable energies. Nowadays, offshore wind farms have come true and shallow water regions with high wind resources have already been assigned. Thus, the next step in this field is to go into deep water regions. It is in these regions where floating offshore wind platforms should be taken into consideration.

The main objective of this book is to provide an overview about floating offshore wind farms, whose study is still being developed. In this sense, ten chapters have been developed. They talk about present and future perspectives of floating offshore wind farms ([Present and Future of Floating Offshore Wind](#)), their life cycle ([Life-Cycle Cost of a Floating Offshore Wind Farm](#)) and economic aspects of their feasibility ([Economic Feasibility of Floating Offshore Wind Farms](#)), the types of floating offshore wind platforms ([Floating Offshore Wind Platforms](#)), the CFD applied to this type of energy ([CFD Applied to Floating Offshore Wind Energy](#)), their mooring and anchoring systems ([Mooring and Anchoring](#)), their offshore wind resource assessment ([A Review of Resource Assessment Methods in the Offshore Wind Energy Sector](#) and [A Spatiotemporal Methodology for Deep Offshore Resource Assessment](#)), the tools taken into account for the ocean energy maritime spatial planning ([Tools for Ocean Energy Maritime Spatial Planning](#)) and, finally, their operation and maintenance ([Operation and Maintenance of Floating Offshore Wind Turbines](#)).

All this information can be useful for professionals, enterprises and students who want to improve their knowledge in floating offshore wind, whose development in the years to come will be high.

The contributors have different professional profiles, from academic professors who are working at different universities to international scientists who are developing their research at technological centers or national laboratories. Some of them are experts in wind resource (offshore and onshore), others are focused on marine structures (platforms, mooring and anchoring), others study maritime and

ocean aspects such as economic issues or spatial planning. But all of them made a great contribution to this book, which is considered as interdisciplinary in the floating offshore wind field.

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