



How marine energy test sites can drive the sector in the Atlantic Area







Smart Specialisation for Sustainable Blue Economy

Atlantic Strategy National Events of Pillar III & IV

Santander 9th May 2022

INTRODUCTION

Test Sites are a key step for technology development...

STAGE	DESCRIPTION	TRL
 STAGE 0	Concept creation	1
 STAGE 1	Concept development	2 3
 STAGE 2	Design optimisation	4
 STAGE 3	Scaled demonstration	5 6
 STAGE 4	Commercial-scale single device demonstration	7 8
 STAGE 5	Commercial-scale array demonstration	9

EARLY (1-3)
Analytical and
numerical models

MID (3-6)
Experimental tests in
controlled environment

LATE (6-9)
Experimental tests in
representative
environment



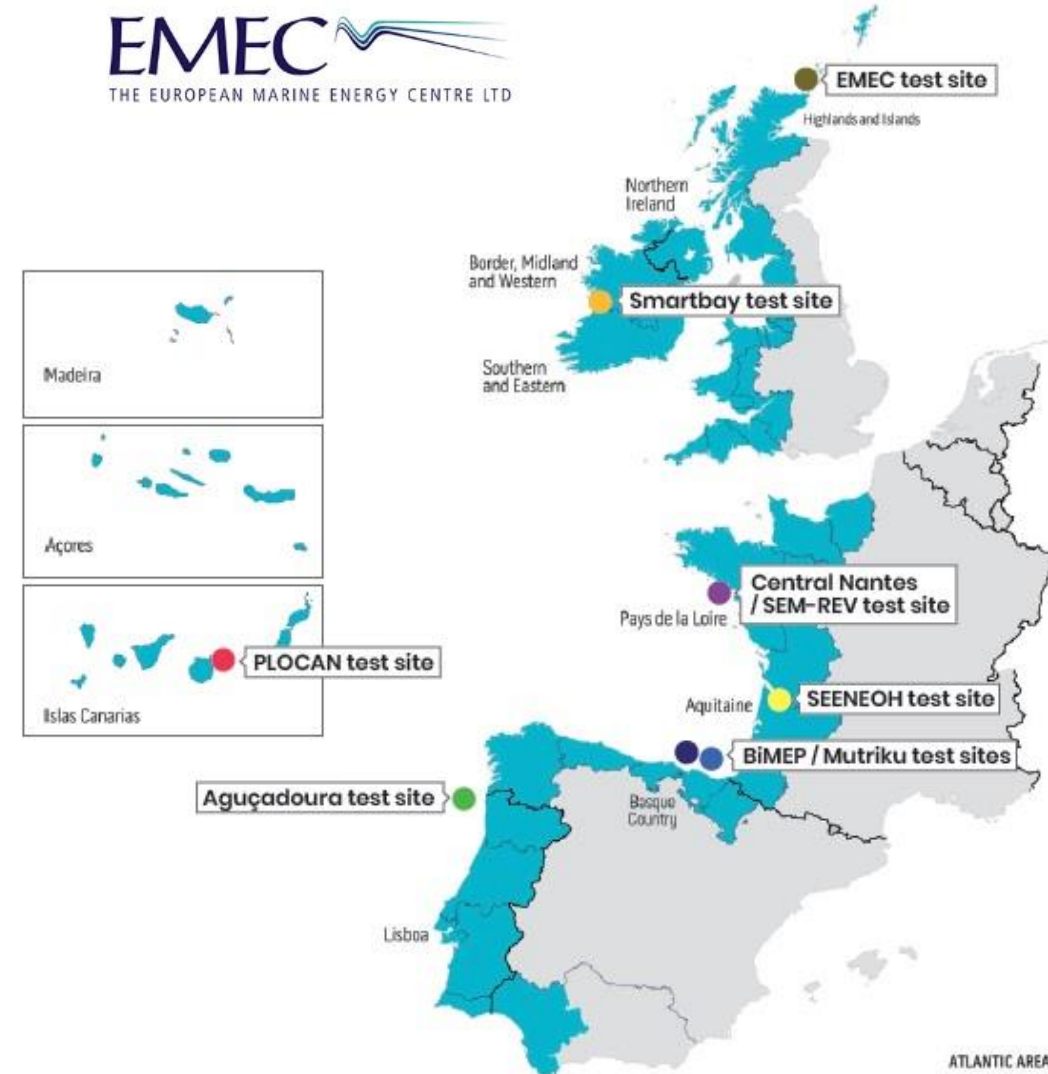
... Ocean energies have not yet reached the commercial stage

This is where Blue-GIFT comes in

PROJECT OVERVIEW

Blue-GIFT, a consortium of 7 marine energy test sites across the Atlantic Area

- Budget: €2.5M European Regional Development Fund
- Duration: 2019-2022
- Objective: Help Atlantic Area companies test the Marine Renewable Energy technology in real sea environments
- Method: Test site access vouchers were offered to successful applicants.



Blue-GIFT support

→ Deployed at Blue-GIFT test sites:

- Arrecife
- Design Pro Renewables
- RW Power AS
- Wavepiston (phase 1)
- Wello

→ Upcoming technology developments

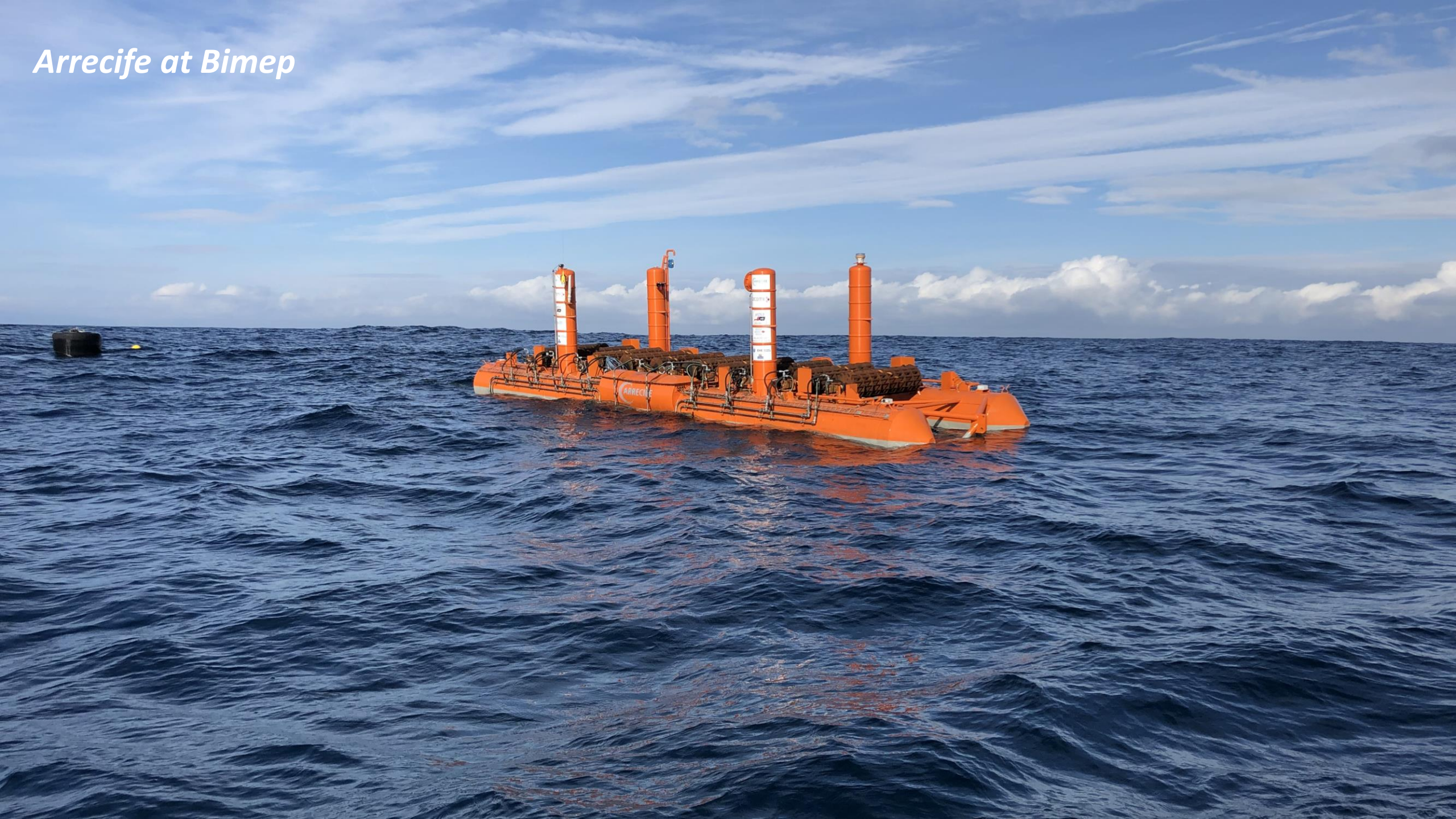
- EnerOcean S.L
- Tension Technology International
- Exponential Renewables S.L (X1-Wind)
- Wavepiston (phase 2)
- CorPower Ocean
- Wello redeployment
- Hydrokinetic Power Generation (HPGS)

A few pictures to illustrate...

WavePiston at PLOCAN



Arrecife at Bimep



DesignPro Renewables at SEENEOH



Scientific collaboration across test sites: key areas of interest

- Test sites are the receptacle of a number of activities around the demonstration of technology
- These knowledge and competencies can be shared across the sites for the benefit of the sector
- Blue-GIFT partners have identified 4 key areas of collaboration
- A collaborative R&D programme is being designed under the project



Acoustic monitoring



Operation & Maintenance



Licensing and consenting processes



Biofouling monitoring

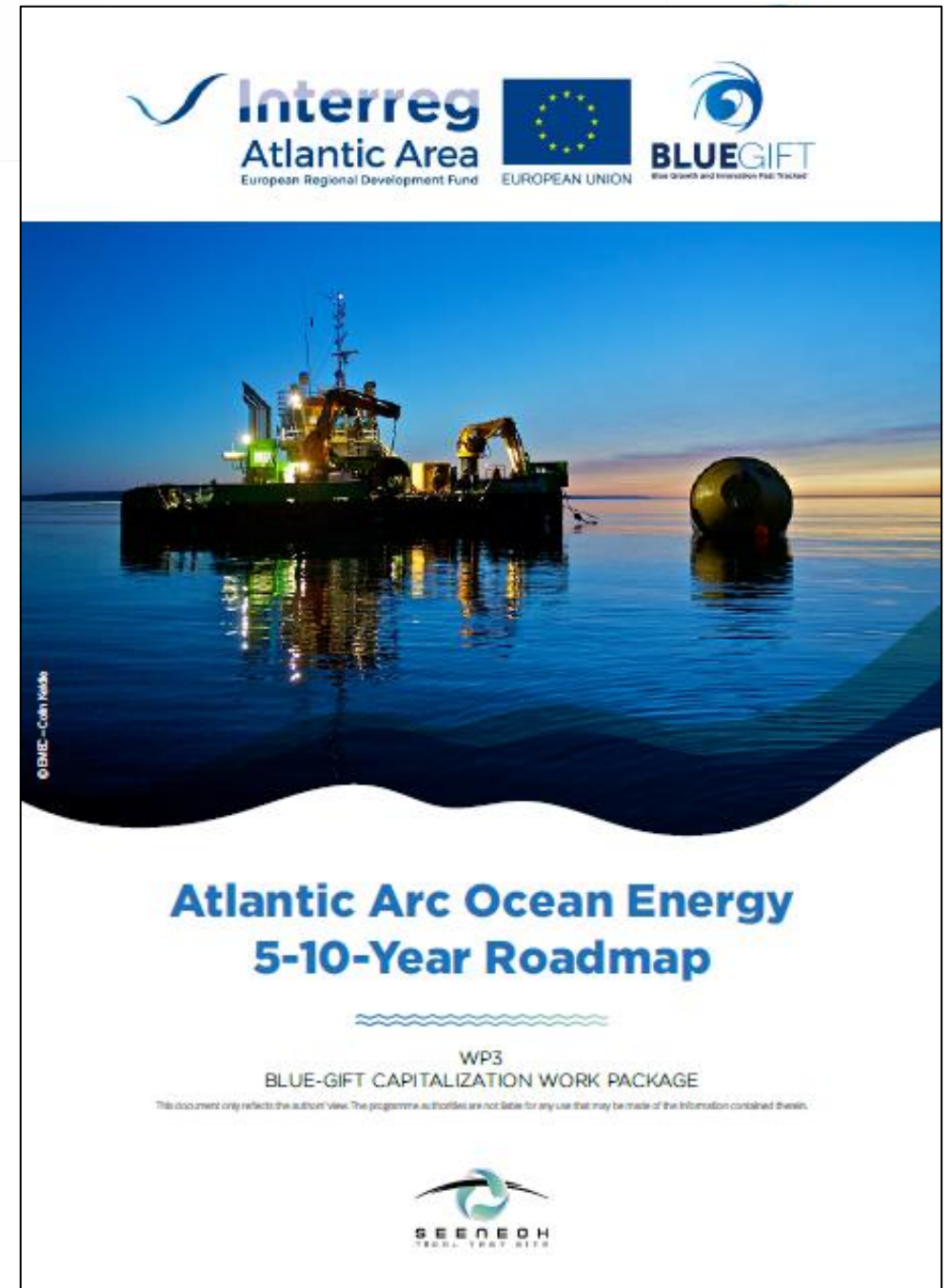
AN ATLANTIC ROADMAP

An Atlantic Arc Ocean Energy Roadmap to boost the sector

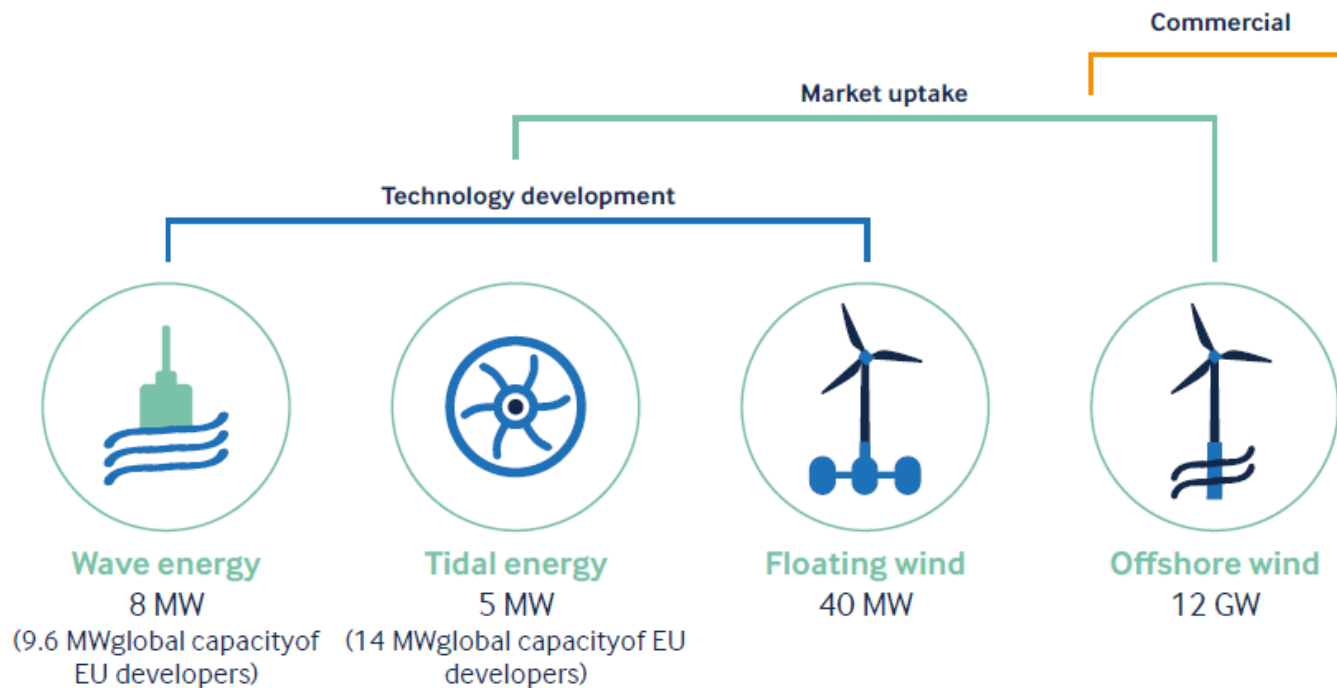
→ The roadmap provides an overview in each AA regions for:

- Policy
- Market support
- Marine energy potential
- Consenting process
- Regional Policies and supportive schemes
- R&D funding support

→ And identifies best practices.



An Atlantic Arc Ocean Energy Roadmap to boost the sector



→ The potential of Offshore renewable energies is huge in the Atlantic Regions and the EU has acknowledged the importance of MRE to reach the net-zero by 2050

→ The next steps are:

- To specify objectives for each technology and sea basins
- To support regions in the implementation of the strategy

OUR RECOMMENDATIONS

An Atlantic Arc Ocean Energy Roadmap to boost the sector

→ A set of five recommendations where the EU Commission and the Atlantic Action Plan can bring support

1

SUPPORT THE DEVELOPMENT OF OCEAN ENERGY TECHNOLOGIES and their application in the Atlantic Arc by establishing a carbon-neutral zone in the Atlantic Area that includes the contribution of ocean energy

Considering the potential of the region, the Atlantic Area must be a huge contributor to the Offshore Energy Strategy.

OFFSHORE WIND
60 GW by 2030
300 GW by 2050



OCEAN ENERGY
100 MW by 2025
1 GW by 2030
40 GW by 2050



2

DEVELOP ENVIRONMENTAL MONITORING around test sites and generate shared data for the benefit of the sector

Test site R&D collaborative plan



3

UPGRADE OPEN SEA TEST SITES to respond to the need of the sector

Test Sites 5 years Investment Plan



4

FOSTER AND SUPPORT DEMONSTRATION PROJECTS in real sea conditions

Blue-GIFT has led to the attribution of 18 vouchers showing the strong interest from technology developer to get an access to the test sites



5

STRENGTHEN THE NETWORK OF TEST SITES and their collaboration across the Atlantic Arc and beyond

Projects as Blue-GIFT, OceanDemo, FORESEA are of great importance to reinforce the roles of test sites, help them to strengthen and increase their support to the sector by sharing knowledge and good practices.





Thank you for your attention

Any question, please contact:

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