

**Promoting innovative nEtworks and  
cLusters for mArine renewable energy  
synerGies in mediterranean cOasts and  
iSlands**

## **Marine Renewable Energy**

Fast Advancing Technologies and Promising Opportunities

Webinar

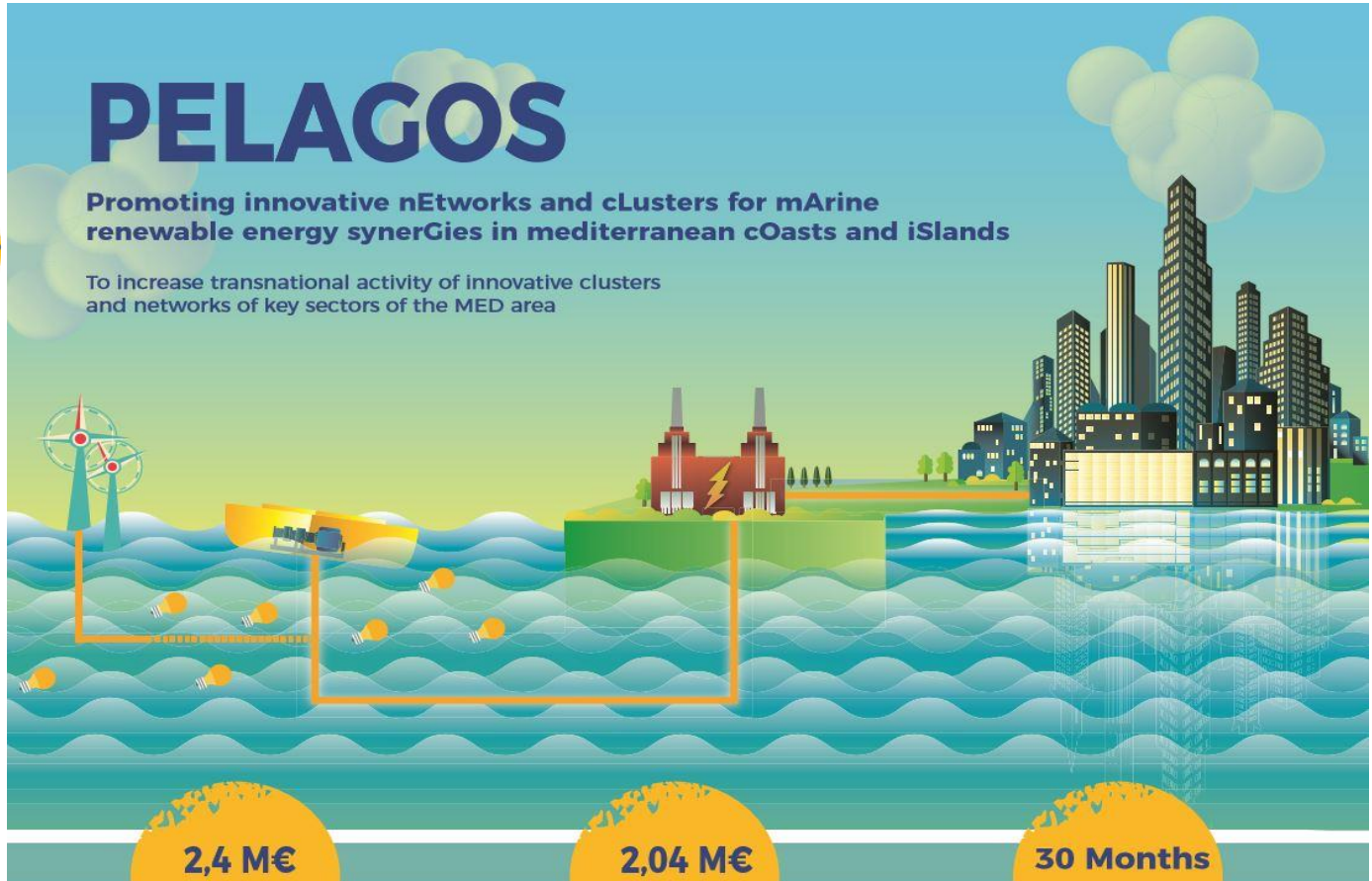
17/11/2021

9 Regular &  
8 Associated Partners

# PELAGOS

Promoting innovative nEtworks and cLusters for mArine renewable energy synerGies in mediterranean cOasts and iSlands

To increase transnational activity of innovative clusters and networks of key sectors of the MED area



**2,4 M€**

Project budget

**2,04 M€**

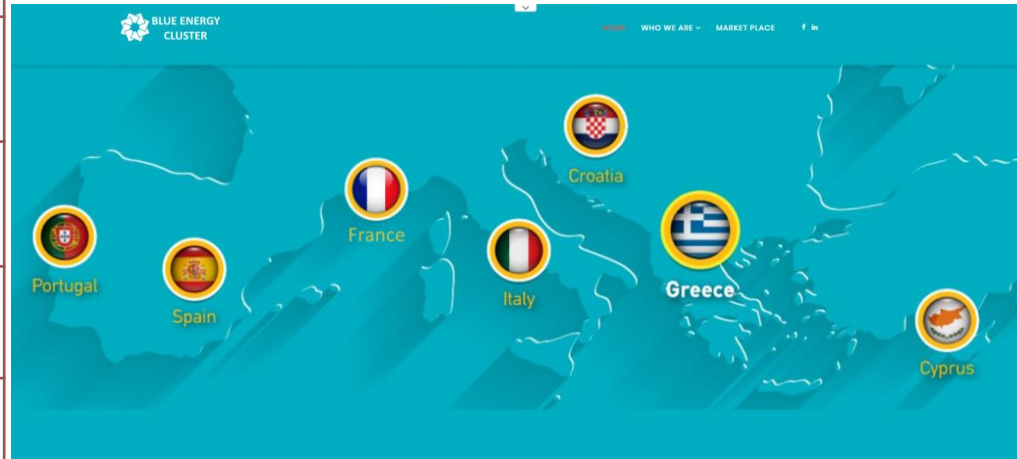
ERDF / IPA

**30 Months**

Project duration

## Partnership [1/2]

No	Partner
<i>LP – WPL1</i>	<b>Centre for Renewable Energy Sources and Saving GR</b>
<i>PP1- WPL2</i>	<b>Italian National Agency for New Technologies, Energy and Sustainable Economic Development IT</b>
<i>PP2</i>	<b>University of Algarve PT</b>
<i>PP3 – WPL3</i>	<b>CTN Marine Technology Centre ES</b>
<i>PP4</i>	<b>Association of Chambers of Commerce of Veneto Region IT</b>
<i>PP5</i>	<b>Hellenic Centre for Marine Research GR</b>
<i>PP6</i>	<b>Maritime Institute of Eastern Mediterranean CY</b>
<i>PP7</i>	<b>Toulon Var Technologies – Pôle Mer Méditerranée FR</b>
<i>PP8</i>	<b>University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture HR</b>



## Associated Partners

No	Partner	Acronym	Nature	Type
PP9	French Maritime Cluster FR	CMF	Private	Business support organisation
PP10	Marine South East Limited UK		Private	Business support organisation
PP11	NYM Association (Murcia Maritime Cluster) ES		Public	Higher education and research
PP12	University College Cork – MaREI Centre IE		Private	Higher education and research
PP13	AZTI Foundation ES	AZTI	Public	Regional Public authority
PP14	Murcia Region Development Agency ES	INFO Murcia	Public	Regional Public authority
PP15	Region of North Aegean GR		Public	Sectoral agency
PP16	Cyprus Energy Agency CY	CEA	Private	Business support organization

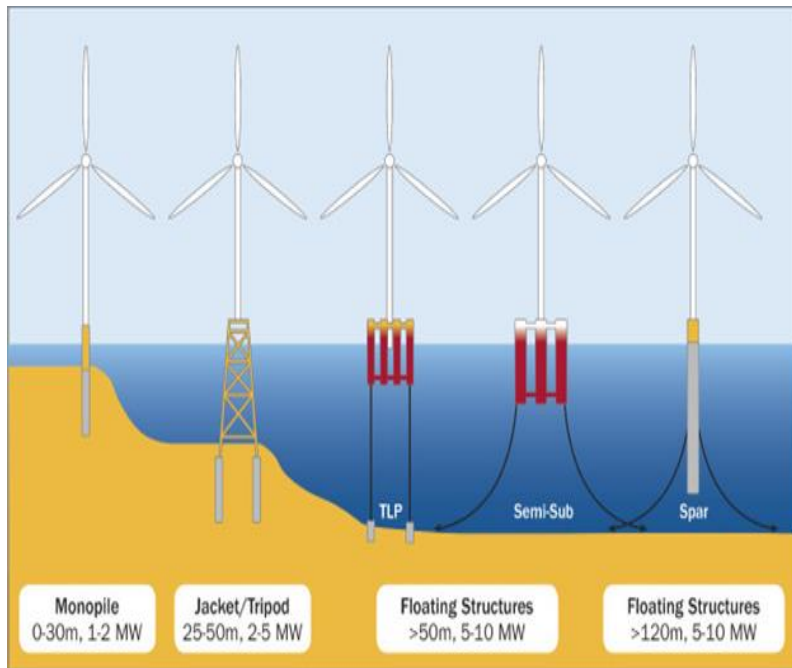
## TRL of Marine Renewable Energy Technologies

- New blue energy technologies still at a low Technology Readiness Level (TRL) - such as wave energy technologies

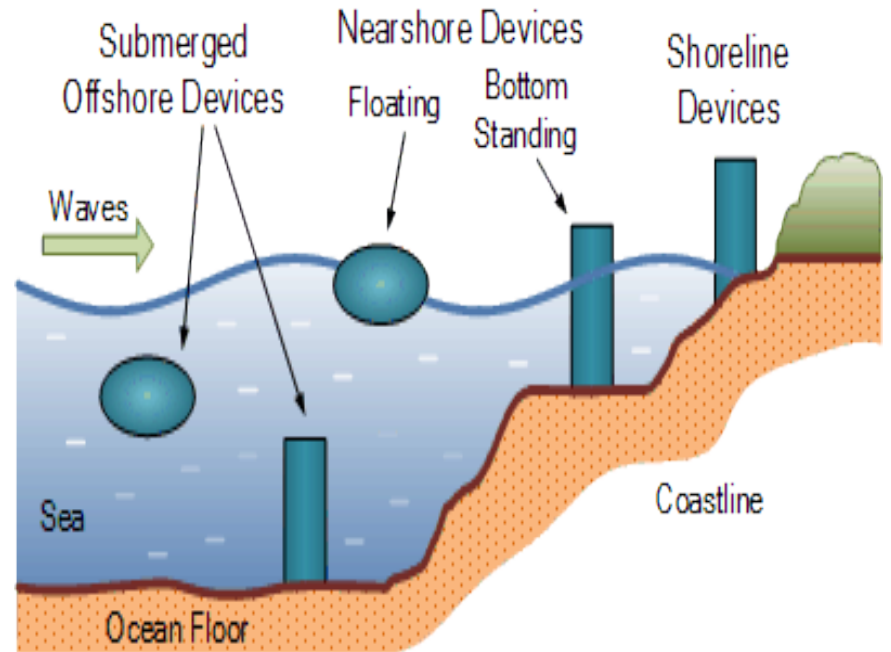
Technology	Sector	Demonstration	Commercialisation		
			Inception	Take-off	Consolidation
Biomass	Electricity and Heat	Thermal Gasification		Anerobic digestion	Cofiring Modern boilers and stoves
	Transport	Advanced biofuels			Conventional biofuels
Geothermal		Enhanced geothermal			Conventional geothermal
Hydro					Hydro
Marine		Wave Tidal and streams			
Solar	Heat	Solar cooling	CSP Tower	CSP trough	Solar water heaters
	Electricity	PV – 3rd generation			PV crystalline and thin films
Wind			Offshore wind		Onshore wind

The two most advanced MRE adapted and developed in the Mediterranean:

### Offshore Wind Energy



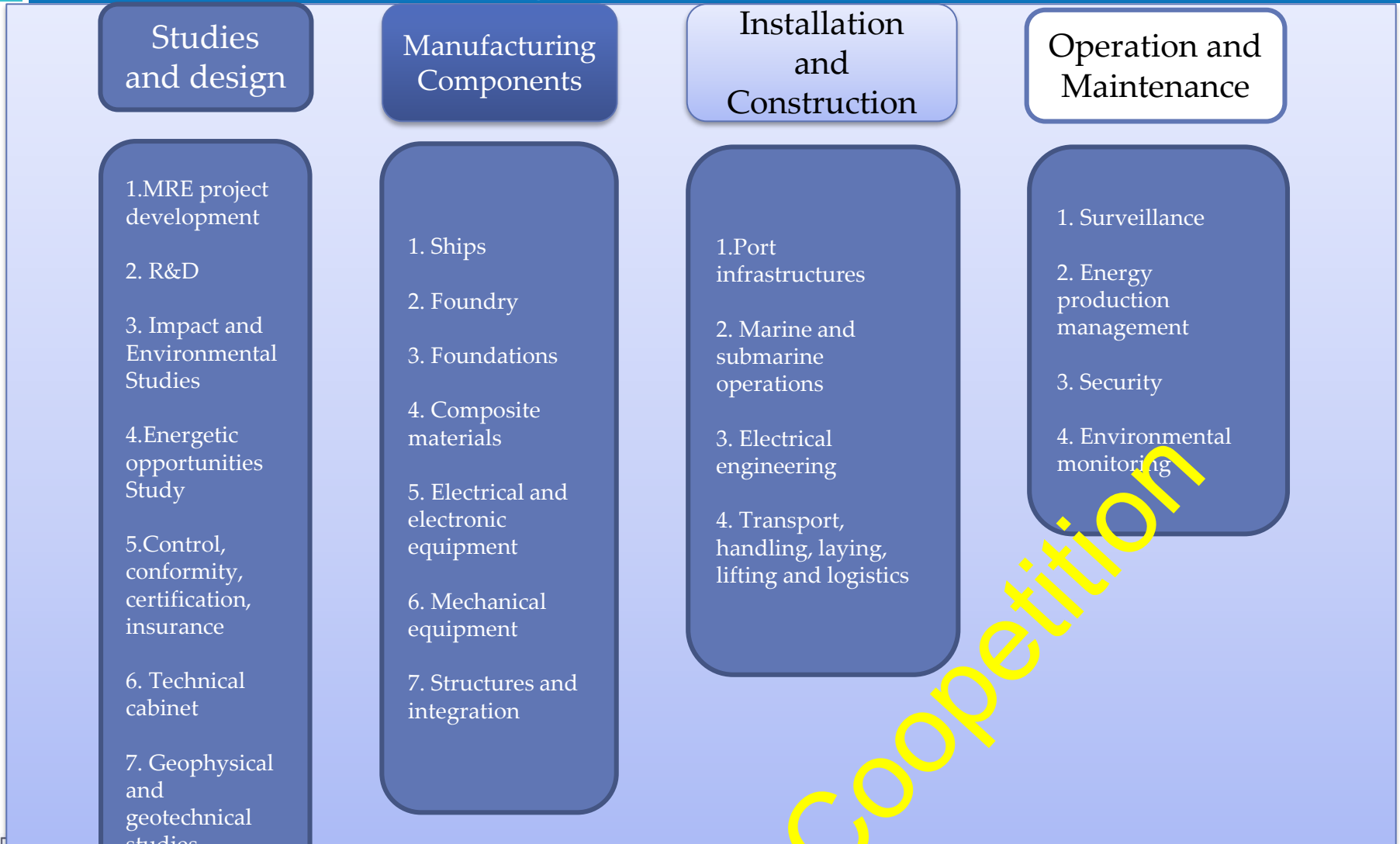
### Wave Energy



## Blue Energy: The challenge for Europe and Mediterranean

- It is the fastest growing activity in the blue economy in Europe with a total installed capacity of 15.8 GW in 2017 and an estimation of 25 GW installed in 2020. The target for 2030 is 60GW and for 2050 300 GW among them 40 GW of ocean energy installations (wave, tidal). In order to achieve the targets until 2050 the investment needed are estimated to 800 billion Euros (taking into consideration today's costs).
- Regarding the Mediterranean region in the latest years, notable progress has been made mainly regarding floating offshore wind farms and wave energy installations .
- Although there are important constraints (financial, social and legislative), that combined with constraints related to topography described above, setting up to now limits to the MRE development, nevertheless an important number of projects mainly in France Spain, Italy and Portugal are leading the way, testing installations in real conditions, to open the path for bigger projects.

## Industrial Value Chain of Blue Energy



Coopetition



# Why the necessity for a cluster in Mediterranean?

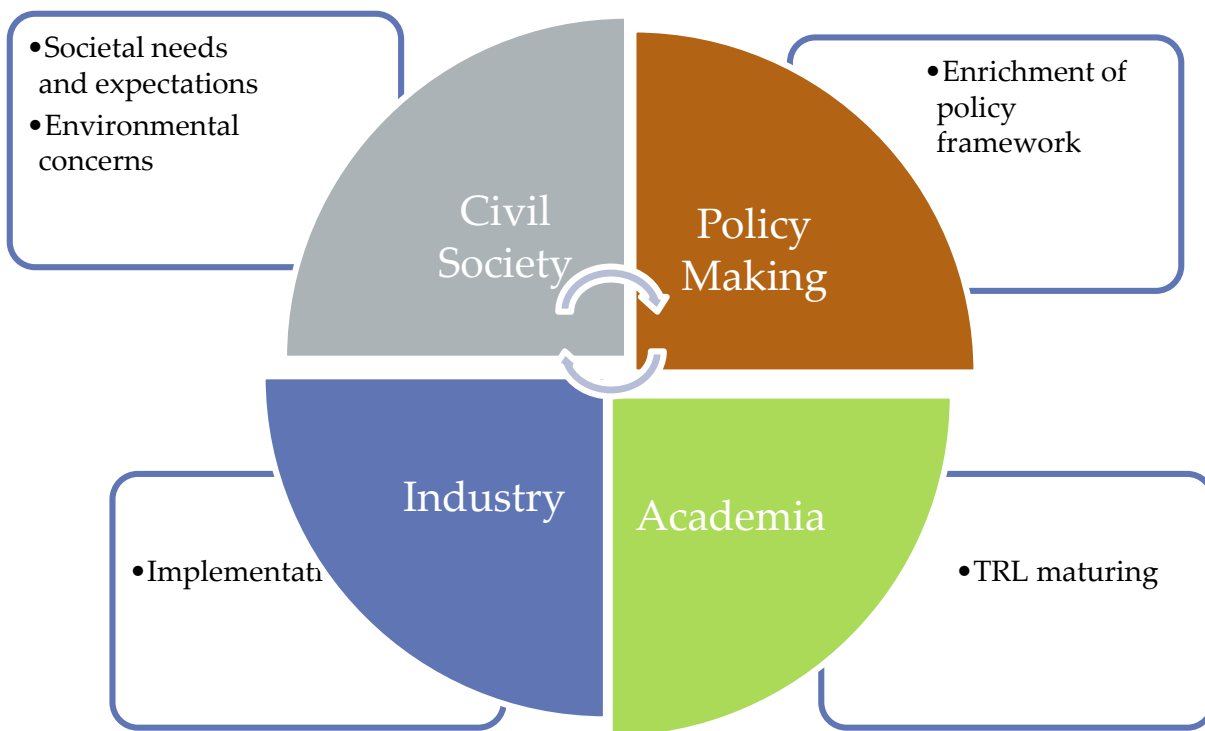
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A Mediterranean cluster responds to the following common needs of the MRE sector in the region:

- Strengthening of research, development and innovation
- Information exchange between stakeholders
- Setting up of common approaches for project development appropriate for the landscape of the basin, and its unique social and geomorphologic aspects.
- Solving of bureaucratic issues and financing difficulties for MRE development in Mediterranean.
- Capitalization on existing synergies and establishment of interconnections between transboundary key players.

## The Vision of PELAGOS:

In the context of PELAGOS project, the first trans-national Mediterranean Cluster in Blue Energy was created. It comprised 6 national HUBs that were launched in the first year of the project in Greece, Portugal, Italy, Cyprus, Spain and Croatia, as well as the existing French cluster: Pôle Mer Méditerranée<sup>4</sup> – Helix



450 304 from business, 90 from academia, 33 from government and 23 from the civil society

## **Information and Capacity Building services**

Capacity Building on Entrepreneurship & Technology Transfer

Capacity Building on Markets & MRE Tech-nology applications: (c) Capacity Building on innovation soft-skills development:

Workshops on spatial planning, coastal zone management and social acceptance of MRE:

## **Networking Services**

Blue Energy Platform ([www.be-cluster.eu](http://www.be-cluster.eu))

Company Missions to end users in Maritime Industries

Study Visits

Blue Energy match-making "Team-Up" ser-vices

Investor Ready Business Plans through men-toring & pitching services with investors:

## **Innovation services**

SMEs Innovation profiling performed

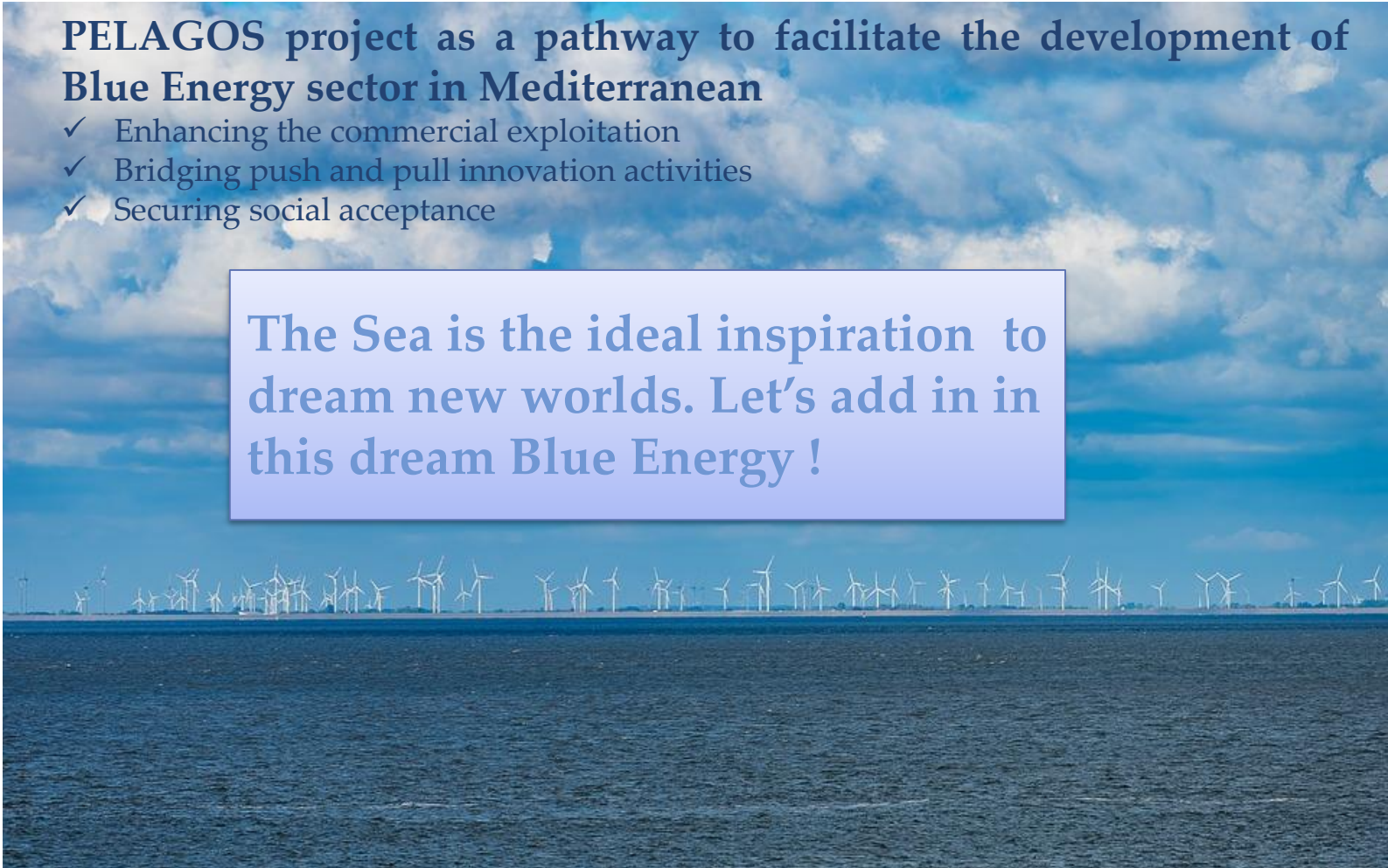
Blue energy Market driven Innovation Plans

Blue Energy twinning services - joint con-cepts

## PELAGOS project as a pathway to facilitate the development of Blue Energy sector in Mediterranean

- ✓ Enhancing the commercial exploitation
- ✓ Bridging push and pull innovation activities
- ✓ Securing social acceptance

The Sea is the ideal inspiration to dream new worlds. Let's add in in this dream Blue Energy !



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# Thank you for your attention

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