



# 10<sup>th</sup> UfM Working Group on Blue Economy

*23 March 2022*

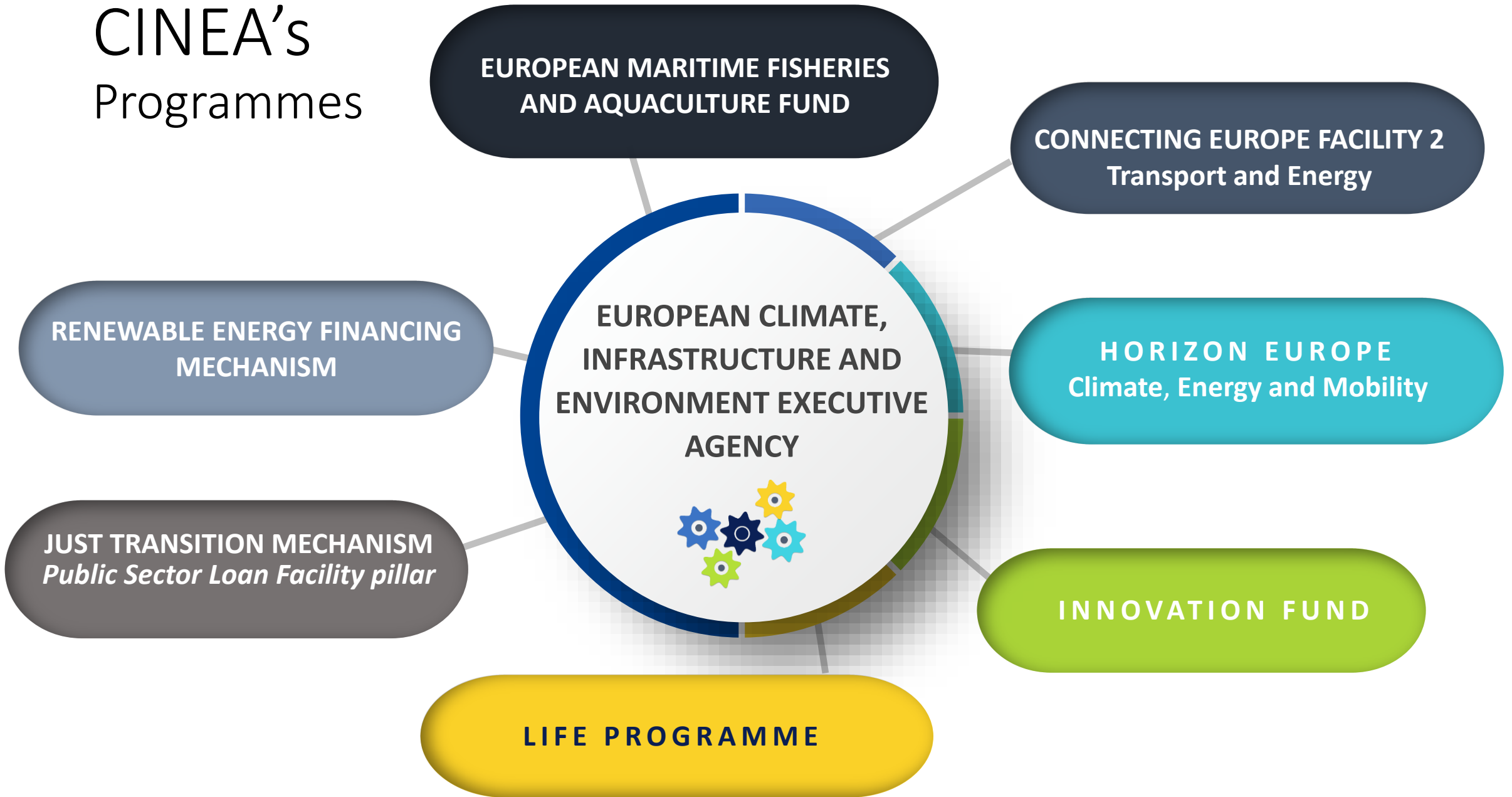
## Supporting the Blue Economy in the Mediterranean: CINEA calls and projects

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***CINEA.D.D3.1 - Marine living resources & Ocean governance***

# CINEA's Programmes



## Results of the Flagship call for the Western Mediterranean (call 2021)



### 1. EU WeMED\_NaTOUR

- Focus on West Mediterranean natural marine sites & maritime/coastal destinations to develop **transnational eco-smart tourism packages**
- Sustainable, responsible and eco-tourism, with specific reference to the “**new generations**”
- To design and pilot **eco-smart tourism packages for the school-trip tourism** market, addressed to primary, secondary schools (age groups: 6-10 yrs; 11-13yrs; 14-16yrs),
- With the strong involvement and collaboration of West Mediterranean tourism SMEs, offer “learn-by-visiting”

**Consortium:** IT, ES, MR, PT, BE/Duration: 28 Months/

Total cost: 995.854 EUR/Grant: 796.683 EUR



## 2. REBOOT MED



- Public-private partnership co-defining Blue Economy Action Plans for the **Recovery of the tourism sector**
- To **incubate, accelerate and test new eco/blue economy tourism packages** in 10 pilot areas in 6 WestMed countries.
- **Capacity building and awareness-raising** on the competitiveness and sustainability of the coastal and maritime tourism ecosystem -> through **local clusters** and a series of exchanges organised in collaboration with the WestMed Initiative;
- Promoting asset-based development approach -> support and stimulate tourism **SMEs, coastal communities and potential pioneers** (women, NEETs, startupper) to play as actors of change in re-imagining and re-building coastal and maritime tourism.
- Targeted **go-to-market services and testing activities**



# EMFAF support in the MED

- **AFRIMED:** Algal Forest Restoration In the MEDiterranean Sea (incl. TN, MA)
- **Cluster ACT:** Aggregation and Collaboration Tools to enhance cluster network in the maritime sector (incl. EG)
- **CMES-WestMed:** Common maritime education standards in the westmed (incl. TN)
- **DEEP BLUE:** Developing Education and Employment Partnerships for a Sustainable Blue Growth in the Western Mediterranean Region (incl. TN)
- **DiveSafe:** Integrated system for scientific and environmental underwater surveys, with advanced health & safety features (incl. IL)
- **ENSAMBLE:** Expertise and Networking to Sustain Actions in Med through Blue and Local Economy (incl. TN)
- **MedSkippers:** Professional skippers in the Mediterranean (incl. MA)
- **STARFISH 4.0:** Demonstration of an autonomous connected device and digital tools for safety of artisanal fishermen and sustainable management of small-scale fisheries (incl. MR)





## Mediterranean sea basin lighthouse

= actions to prevent, minimise and remediate litter and plastic pollution

=> to develop and disseminate scalable, breakthrough innovations to prevent, minimise, remediate and monitor pollution

- **Reduced pollution from litter, plastic and microplastic** in the Med, in line with EU Zero Pollution Plan & Convention for the protection of the Mediterranean sea against pollution;
- **Reduce beach litter** to less than 20 items per 100 meters of coastline in line with the Marine Strategy Framework Directive (MSFD) requirement;
- Accelerated uptake of **innovative solutions to prevent & minimize litter, plastic and microplastic pollution**;
- Effective **monitoring of marine litter quantities**, in line with EU methodologies, such as Single Use Plastics Directive and assessment of the impact of implemented measures;
- Support WFD and MSFD implementation (indicators and mechanism for assessments Good Environmental Status (**GES**))
- **Empowered citizens** taking action against pollution.

- **Closing date call: 12 April 2022/** (TOPIC ID: HORIZON-MISS-2021-OCEAN-03-01)



## Mission Ocean calls 2022

Participation of third countries to calls & as beneficiaries in any project under the Mission is possible on the basis of Horizon Europe rules.

### European Blue parks

= Protect and restore marine and fresh water ecosystems and biodiversity



#### Green Deal and the Biodiversity Strategy

- Protect, restore & sustainable use of marine biodiversity, ecosystems and related services, including blueprints for the creation of socio-economic benefit and required socio-economic transition processes through **innovative solutions for ecosystem-based management**;
  - Enhanced integrity and resilience of the ecosystem and **restored European blue natural capital**;
  - A blueprint for the **extension of marine protected areas** or their status shifted from “protected” to “**strictly protected**” and **creation of ecological corridors** as part of a blue Trans-European Nature Network, and a strategy to build such network;
  - **Connected support for well-managed marine protected areas**;
  - Reinforced EU leadership in international efforts to **combat biodiversity loss**, including through the protection, conservation, restoration and sustainable use of marine ecosystems and biodiversity.
- 
- **Closing date call: 12 April 2022/** (TOPIC ID: HORIZON-MISS-2021-OCEAN-02-01)



## Piloting citizen science in marine and freshwater domains

= Mission Enabling activities: Digital knowledge system, public mobilisation and engagement, dynamic investment ecosystem

- Up scaled & continued citizens science initiatives, targeting **young people** in all EU MS & Assoc.countries;
  - Increased **citizen awareness** about the challenges faced by the ocean and waters;
  - Mobilised & empowered citizens to take **actions to improve the monitoring of the health of the ocean and waters and to act against pollution**;
  - Promoted digital applications and testing kits enabling citizens to **collect data and observations**;
  - Promoted (digital) data collection and **participatory research** involving citizens for the monitoring and restoration of ocean and waters;
  - **Standardised protocols, standardised testing procedures** for citizen reporting
  - Contribution made to a special data layer for data provided by citizens, including real-time recordings of discharges and levels of pollutants and litter for different sites, to be harmonised and made publicly available through **EMODnet** and hence the **European Digital Twin Ocean**, and aligned with the Destination Earth initiative of the Digital Europe programme
- 
- **Closing date call: 12 April 2022/** (TOPIC ID: [HORIZON-MISS-2021-OCEAN-05](#))





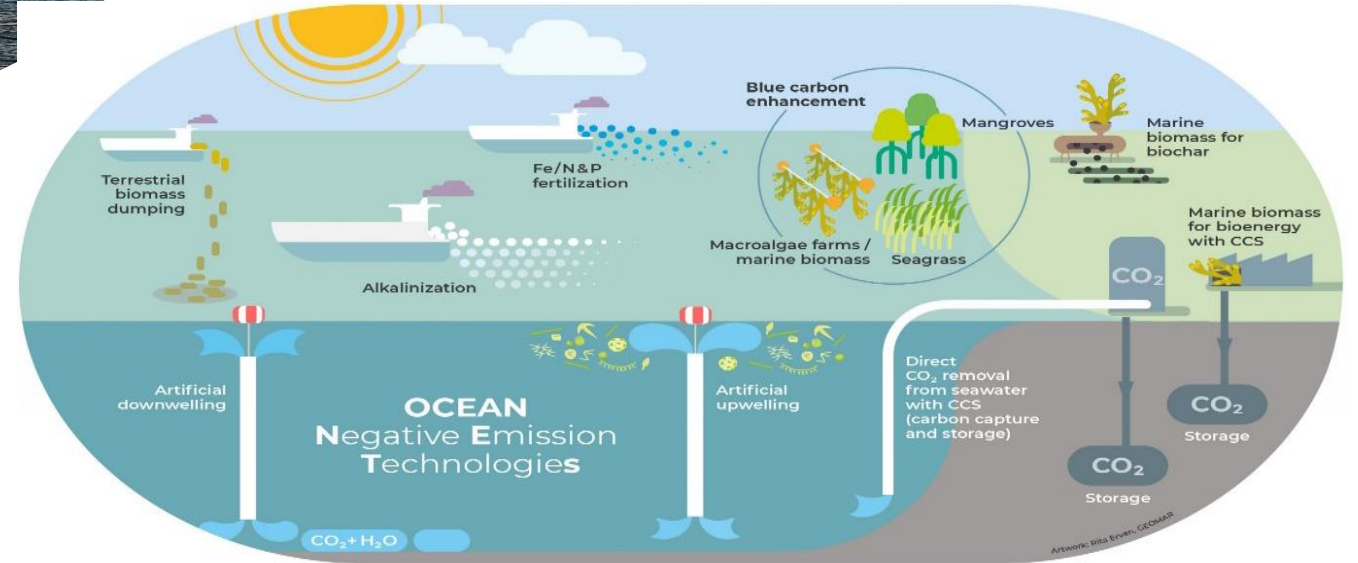
## OceanNETs

- > Carbon Dioxide Removal (CDR)
- > Negative Emissions Technology (NETs)

### ocean-based negative emissions technologies

OceanNETs aims to determine to what extent, and under what conditions, the large-scale deployment of **ocean-based negative emission technologies** could contribute to pathways for Europe and the world to achieve climate neutrality and the goals established in the Paris Agreement, as well as, to identify and prioritize options with the most potential in regard to **CO<sub>2</sub> mitigation**, environmental impact, risks, co-benefits, technical feasibility, cost effectiveness, and political and societal acceptance.

Consortium, partner [Universidad de Las Palmas de Gran Canaria \(ULPGC\)](#)



# CINEA

## The H2020 Waterborne portfolio

### H2020 WATERBORNE PORTFOLIO (2014-2021)

CINEA's Horizon 2020 waterborne portfolio covers projects funded via:

**BLUE GROWTH**  
waterborne transport related topics

**2020 GREEN DEAL CALL / AIRPORTS & PORTS TOPIC / PORTS SUBTOPIC**

**MOBILITY FOR GROWTH**  
waterborne transport topics (and related topics)

**Safer and more efficient waterborne operations**

Safer and more efficient waterborne operations through new technologies and smarter traffic management ([EfficientSea2](#), [LYNCEUS2MARKET](#))

Response to oil spills and marine pollutions ([GRACE](#))

Safer waterborne transport and maritime operations ([SEDNA](#))

Marine Accident Response ([LASHIRE](#), [SAFEPASS](#), [FLARE](#), [PALAEMON](#))

Human Factors in Transport Safety ([SAFEMODE](#))

#### Infrastructure

The Port of the future ([PIXEL](#), [PortForward](#), [COREALIS](#), [DocksTheFuture](#))  
Green airports and ports as multimodal hubs for sustainable and smart mobility ([PIONEERS](#), [MAGPIE](#))

#### Innovative shipbuilding and complex value-added specialized vessels

System modelling and life-cycle cost optimisation for waterborne assets ([SHIPLYS](#), [HOLUSHIP](#))

Development, production and use of high performance and lightweight materials for vessels and equipment ([FIBRESHIP](#), [RAMSSES](#))

High value-added specialised vessel concepts enabling more efficient servicing of

emerging coastal and offshore activities ([LINCOLN](#), [NEXUS](#))

Complex and value-added specialised vessels ([HYSEASIII](#), [TRAM](#), [NAVAIS](#))

Improved Production and Maintenance Processes in Shipyards ([Merit\\_YARD](#), [FIBREYEARS](#), [RESURGAM](#))

#### New and improved waterborne transport concepts

Preparing for the future innovative offshore economy ([MARIBE](#))

Delivering the sub-sea technologies for new services at sea ([DexROV](#), [BRIDGES](#))

New and improved transport concepts in waterborne transport ([GASVESSEL](#), [NOVIMAR](#))

Unmanned and autonomous survey activities at sea ([ENDURINGS](#))

The Autonomous Ship ([AUTOSHIP](#))

Moving Freight by Water: Sustainable Infrastructure and Innovative Vessels ([IW-NET](#), [NOVIMOVE](#), [AEGIS](#), [MOSES](#))

#### Energy efficient and zero emission vessel

Towards the energy efficient and emission free vessel ([E-FERRY](#), [LeanShips](#), [HERCULES-2](#))

Promoting innovation in the Inland Waterways Transport (IWT) sector ([PROMINENT](#))

Innovations for energy efficiency and emission control in waterborne transport ([AIRCOAT](#), [HYMETHSHIP](#))

InCo flagship on reduction of transport impact on air quality ([SCIPPER](#))

Ship emission control scenarios, marine environmental impact and mitigation ([EMERGE](#))

Retrofit Solutions and Next Generation Propulsion for Waterborne Transport ([Nautilus](#), [FASTWATER](#), [GATERS](#), [SeaTech](#))

Structuring R&I towards zero emission waterborne transport ([STEERER](#))

Under water noise mitigation and environmental impact ([SATURN](#))

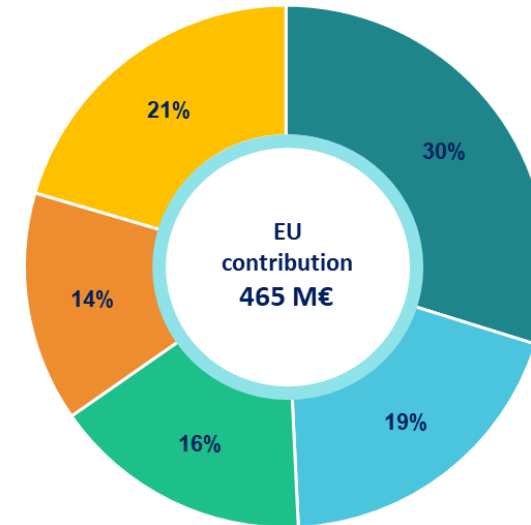
Improving impact and broadening stakeholder engagement in support of transport research and innovation ([LASTING](#), [PLATINA 3](#))

Decarbonising long distance shipping ([CHEK](#), [ENGIEMONIA](#))

H2020 WATERBORNE PORTFOLIO (2014-2021)

FROM 3 MULTI-ANNUAL WORK-PROGRAMMES (2014-15/2016-17/2018-20)  
**OVER €465M EU CONTRIBUTION**  
**28 TOPICS**  
**56 PROJECTS**

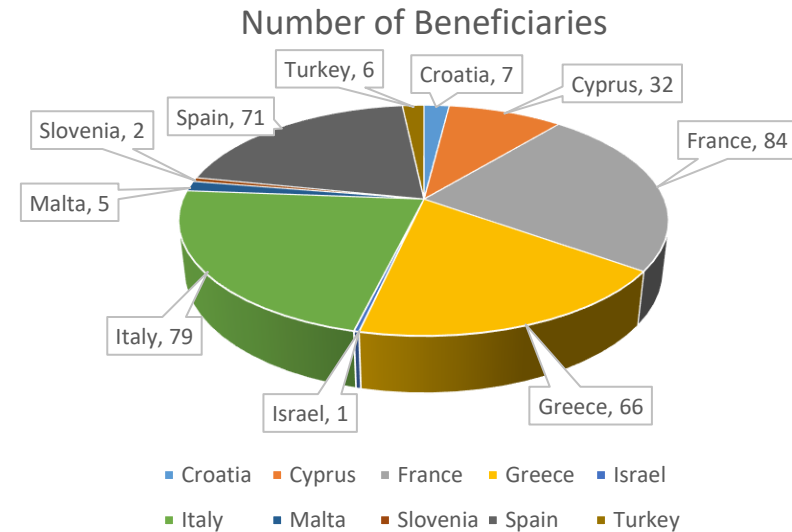
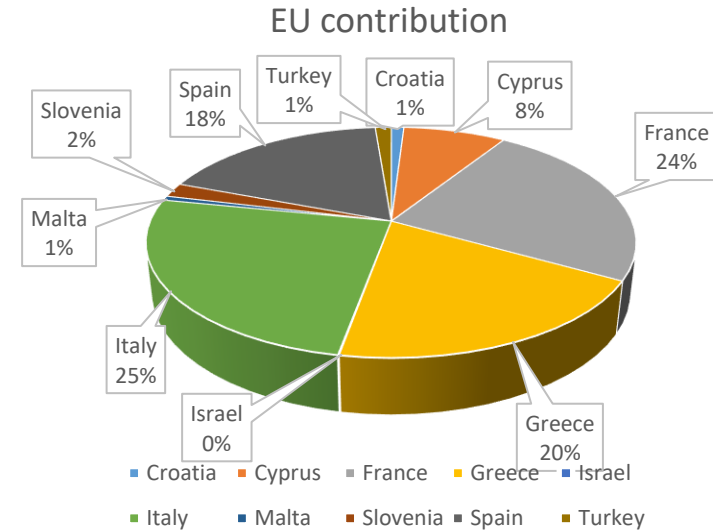
- Energy efficient and zero emission vessel
- Innovative shipbuilding and complex value-added specialised vessels
- Safer and more efficient waterborne operations
- Infrastructure
- New and improved waterborne transport concepts



# Participation of Mediterranean Countries

## *H2020 Waterborne Portfolio*

- ✓ 353 beneficiaries from Mediterranean countries
- ✓ 122Mil Euro EU contribution to Mediterranean countries
- ✓ 96% of projects with at least one Beneficiary from a Mediterranean country
- ✓ 21 Projects with Coordinator from a Mediterranean country



# Examples of interventions in Mediterranean countries

## *H2020 Waterborne Portfolio*



**Project Scipper:** Case studies and data collections concerning ships emissions in the port of Marseille (FR)

Video URL: <https://youtu.be/emugZTyfl6s>

Project website: <https://www.scipper-project.eu/>



**Project PIXEL:** Demonstrations of Internet of things in the ports of Piraeus (GR), Thessaloniki (GR), Monfalcone (IT) and Trieste (IT)

Video URL: <https://youtu.be/AD2hsqF9xzw>

Project website: <https://pixel-ports.eu/>



**Project ENDURUNS:** Demonstration of a hybrid Autonomous Unmanned Vehicle (glider) for unmanned underwater operations in the Adriatic and the Venice lagoon (IT) using hydrogen fuel cell technology.

Project website: <https://enduruns.eu/#>



# Forthcoming Funding opportunities – *Horizon Europe Open Call*



*HORIZON-CL5-2022-D5-01 : Call - Clean and competitive solutions for all transport modes:*

*Topics: Waterborne transport*

*Deadline for submission of proposals: 26/04/2022*

*Open to non EU countries Algeria, Morocco, Tunisia, Israel, Turkey*

| Topic                     | Title   | Topic EU Budget (Mil Euros) |
|---------------------------|---|-----------------------------|
| HORIZON-CL5-2022-D5-01-01 | Exploiting electrical energy storage systems and better optimising large battery electric power within fully battery electric and hybrid ships (ZEWT Partnership) | 16,00                       |
| HORIZON-CL5-2022-D5-01-02 | Innovative energy storage systems on-board vessels (ZEWT Partnership)   | 15,00                       |
| HORIZON-CL5-2022-D5-01-03 | Exploiting renewable energy for shipping, in particular focusing on the potential of wind energy (ZEWT Partnership)   | 18,00                       |
| HORIZON-CL5-2022-D5-01-04 | Transformation of the existing fleet towards greener operations through retrofitting (ZEWT Partnership)   | 25,00                       |
| HORIZON-CL5-2022-D5-01-05 | Seamless safe logistics through an autonomous waterborne freight feeder loop service  | 15,00                       |
| HORIZON-CL5-2022-D5-01-06 | Computational tools for shipbuilding  | 7,00                        |

# Connecting Europe Facility (CEF) – Funding opportunities



- **Alternative Fuels Infrastructure Facility: Recharging/refuelling infrastructure, Maritime and IWW Vessels (electric and H2), LNG bunkering vessels**
- **Motorways of the Sea:** Upgrade of port infrastructure, hinterland connections, dedicated terminals. Facilitation of Short Sea Shipping through ICT platforms, ice-breaking or actions ensuring year-round navigability
- **Maritime Ports:** Facilitation of port access, Basic port infrastructure, Shore-side electricity supply, Rail/road connections within the port
- **European Maritime Single Window environment (EMSWe)**
- **Vessel Traffic Monitoring and Information Systems (VTMIS)**

# Connecting Europe Facility (CEF) – Examples of ongoing projects



## 1. POSEIDON MED

<https://www.poseidonmed.eu/>

**European Cross-Border project** which aims to **introduce LNG as the main fuel for the shipping industry** and develop a sufficient infrastructure network of bunkering value chain. It focuses in the eastern Mediterranean region with five Member States (Cyprus, Greece, Italy, Croatia and Slovenia) involved.

## 2. Green C-Ports

<https://greencportsproject.eu/overview/>

Pilot the use of sensors, big data platforms, business intelligence tools and artificial intelligence modelling at the ports of Valencia, Venice, Piraeus, Wilhelmshaven and Bremerhaven.

Implement a Port Environmental Performance (PEP) IT platform that will receive real time data from the sensor networks and from existing port systems (i.e. PCS, PMIS and TOS).

=>> **Monitor emissions from ports and vessels** & reduce the impact of port operations on their cities.

# CALLS

## Forthcoming Funding opportunities !

### CEF-TRANSPORT (CEF-T)

- The CEF-T work programme 2021-2023 has a budget of **€18.2 billion**.
- There will be two calls for proposals of € 5.5 billion each in 2022 and 2023,
- 3-year rolling call for the Alternative Fuel Infrastructure Facility of € 1.5 billion (5 deadlines, every 6 months)
- € 200 million for technical assistance actions.

→ Keep on checking the funding and tenders portal of the European Commission.





## CEF-ENERGY [About the Connecting Europe Facility \(europa.eu\)](https://europa.eu)

- Aims at subsidising **interoperability of energy networks across borders and sectors**, facilitate decarbonisation, promote RES, ensure security of supply and further integration of the European energy market.  
-> **Funding to electricity, smart grids, CO2 and natural gas networks, with the aim to better interconnect energy networks.**
- Funding in the form of grants:
  - (a) actions relating to the **pre-approved projects of common interest** as set out at Article 14 of Regulation (EU) No 347/2013;
  - (b) actions supporting **cross-border projects in the field of renewable energy**, including innovative solutions, as well as storage of renewable energy, and their conception, as defined in Part IV of the Annex.
- Award criteria take into account consistency with EU and national energy and climate plans, including the principle of **'energy efficiency first'** and **cross-border dimension**, network integration and territorial accessibility, including for European islands and outermost regions.
- Budget for CEF–Energy 2021-27 → €5.84 billion.
- The Agency is envisaging (at least) annual calls for proposals for CEF-E funding.



## 1. **CEF-ENERGY** [About the Connecting Europe Facility \(europa.eu\)](https://europa.eu)

**€900 million** total funding received by the Mediterranean region since CEF (2014).  
**25 projects implemented** or finalised (6 are in the electricity sector and 19 in gas);  
**2 projects** resulted from the joint **transport-energy CEF-Synergy** call of 2016.

In 5th PCI list (EP's and Council's endorsement pending), the **Mediterranean region is concerned by 9 PCIs**  
-> possible funding from the Connecting Europe Facility.

-> **electricity and gas cross-border interconnectors** between the concerned countries' transmission networks that contain coastal or offshore elements and a **floating Liquefied Natural Gas terminal in Cyprus**.

SEE Transparency Platform: [PCIREF module \(europa.eu\)](https://europa.eu).

**Connecting Europe Facility - cross-border RES projects:** strong potential Mediterranean countries for renewable energy market development / vast renewable energy resources, falling technology costs and important growing energy demand.

**March 2022 = first call of expression cross-border RES projects** /Indicative deadline in Q2 2022.

Being in the CB RES list is a **precondition to receive CEF funding for technical studies and works**.

**Q4 2022 = first CEF-E Cross-border renewable energy call for technical studies and works** for the RES Union list projects /deadline early 2023.



## 2. RENEWFM (Renewable Energy Financing Mechanism) [EU renewable energy financing mechanism \(europa.eu\)](https://europa.eu)

- **New programme** contributing directly to the **clean energy transition** and the European Green Deal objectives. Aims at financing **installation/ operation of new RES capacity infrastructure** contributing to the objectives of the Paris Agreement, EU RES 2030 targets and to the long-term decarbonisation objective of the EU.
- Relies on a rolling process by which Member States express their interest and preferences for participating as contributing (sponsoring) and/or hosting RES project Member State.
- Grants are awarded to projects bidding at lowest support needed per requested RES capacity installed.
- **For the Mediterranean region, the main types of marine RES to be explored are offshore wind energy and ocean energy (energy from waves, tides/sea currents and thermal and salinity gradients).**  
Call expected by end of 2022

More calls HE Energy: [Destination-3 \(Energy Supply\)](#) - 3 Calls in 2022 with 32 topics and budget ~607m€  
& [Destination-4 \(Energy Demand\)](#) - 2 Calls in 2022 with 10 topics and budget ~140m€



# Keep in touch - CINEA



[cinea.ec.europa.eu/](http://cinea.ec.europa.eu/)



[@CINEA\\_EU](https://twitter.com/CINEA_EU)



[CINEA - European Climate, Infrastructure and Environment  
Executive Agency](https://www.linkedin.com/company/cinea-european-climate-infrastructure-and-environment-executive-agency)



[CINEATube](https://www.youtube.com/CINEATube)