

The Adriatic-Balkan Area Platform Ports as Energy Hub: The Hydrogen Resource

Expert Barbara Trincone
Area: Adriatic-Balkan
Regions Involved: Apulia and Friuli Venezia Giulia



Presidenza del Consiglio dei Ministri
Dipartimento per le politiche di coesione e per il sud
Ufficio V - Servizio XVIII - Coordinamento e Monitoraggio
Programmi CTE



**Unione
europea**



Programma complementare di azione e
coesione sulla governance nazionale dei
programmi dell'obiettivo cooperazione
territoriale europea (CTE) 2014-2020

PIANO DI ATTIVITÀ PER L'ATTUAZIONE
DELLA LINEA 5 "PROGETTUALITÀ
STRATEGICHE E STUDI" DEL PAC CTE
2014-2020

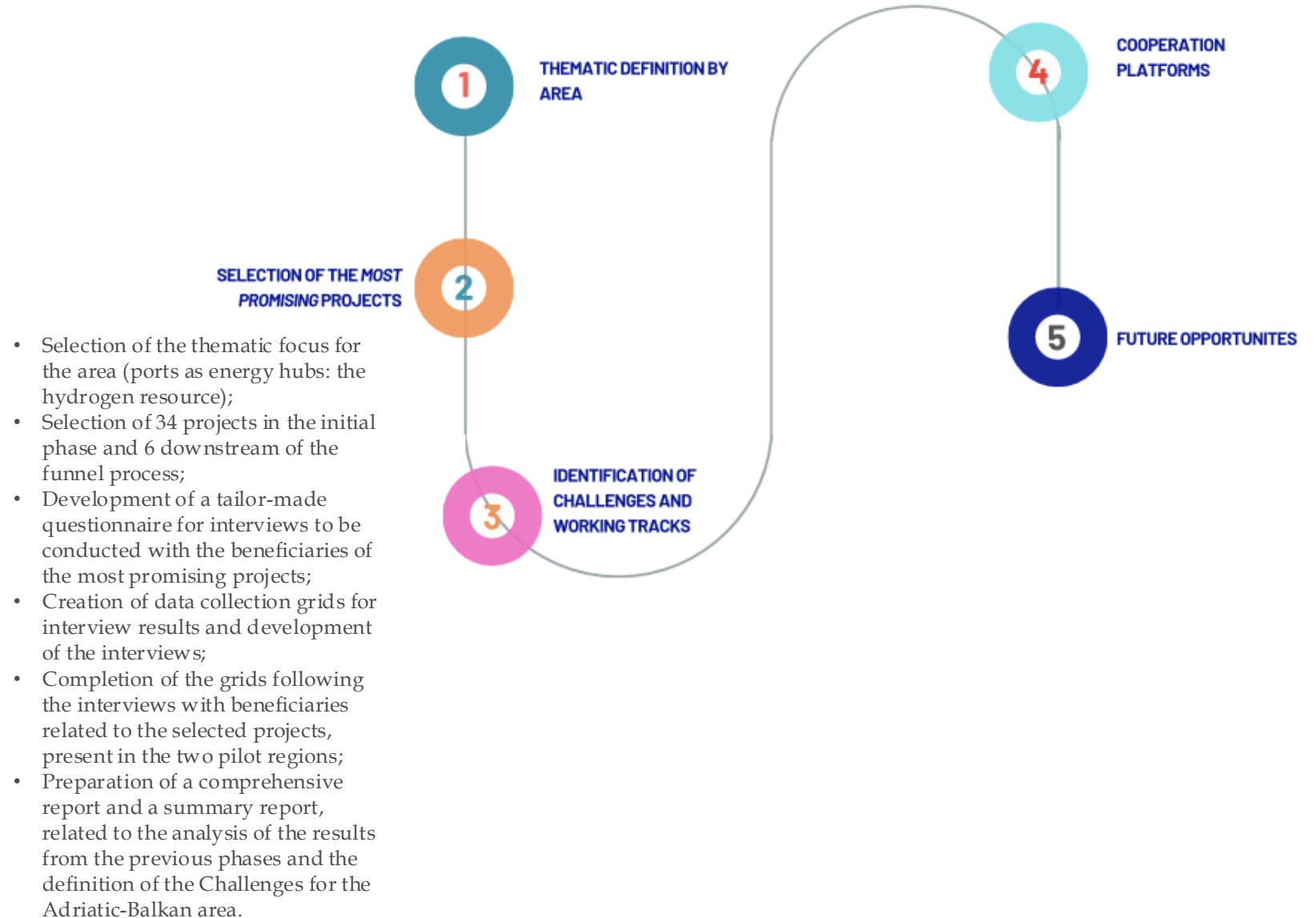
01. Project Pathway of the Territori Project

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen Resource

PROGETTO STRATEGICO

TERRITORI

MODEL "TERRITORI"



02. Cross-cutting Action: Participation in strategically significant international events

Mar 01, 2023

Help to identify priorities in R&I in the logistics sector: join the in-person workshop on 1st March, Brussels

© Tuesday, January 17th, 2023



For all stakeholders interested in R&I in freight transport and logistics

9:30 – 15:00 (CET) Wednesday, March 1st 2023

BluePoint, Bd Auguste Reyers 80, 1030 Brussels

European Hydrogen Week 2023 - Your Access Pass & Practical Information



CHECK what are the strategic contents related to R&I priorities at European level



EVALUATE the potential for membership of partners involved in the area and by theme to join ALICE



SHARE this potential with the governance of the Territories project



BUILDING networking



Valorise any adherence to ALICE as a project output

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen Resource

PROGETTO STRATEGICO

TERRITORI

03. Thematic Selection and *Most Promising* Projects

Participating regions	Apulia and Friuli Venezia Giulia
Thematic	PORTS AS ENERGY HUB: THE HYDROGEN RESOURCE ambito di sviluppo prioritario e strategico dell'area Adriatico-Balcanica

PRIORITY AND STRATEGIC DEVELOPMENT AREA OF THE ADRIATIC-BALKAN REGION

- **Horizon projects: 3**
- **Project of the National Operational Program : 1**
- **Project of Special Economic Zone: 1**
- **Projects of the European Territorial Cooperation: 29**

- 7 ITALY_ALBANIA_MONTENEGRO;
- 3 GREECE_ITALY
- 12 ITALY_CROATIA
- 2 ADRION
- 5 ITALY_SLOVENIA



- 1 ITALY_ALBANIA_MONTENEGRO;
- 1 ITALY_CROAZIA;
- 3 ITALY_SLOVENIA;
- 1 ITALY_CROATIA;

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen Resource

PROGETTO STRATEGICO **TERRITORI**

04. Thematic Focus and Selection of the Investigation Sample

Thematic Focus	Ports as Energy Hubs:
Campione d'indagine	6 projects CLEANBERTH Interreg Italy-Slovenia 2014-20 DEEPSEA Interreg Italy-Croazia 2014-20 METRO Interreg Italy-Croazia 2014-20 SMARTPORT Interreg Italia-Albania-Montenegro 2014-20 SUPAIR Interreg Italy-Adriatic 2014-20 SUSPORT Interreg Italy-Croazia 2014-20

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen
Resource

PROGETTO STRATEGICO

TERRITORI



Presidenza del Consiglio dei Ministri
Dipartimento per le politiche di coesione e per il sud
Ufficio V - Servizio XVIII - Coordinamento e Monitoraggio
Programmi CTE

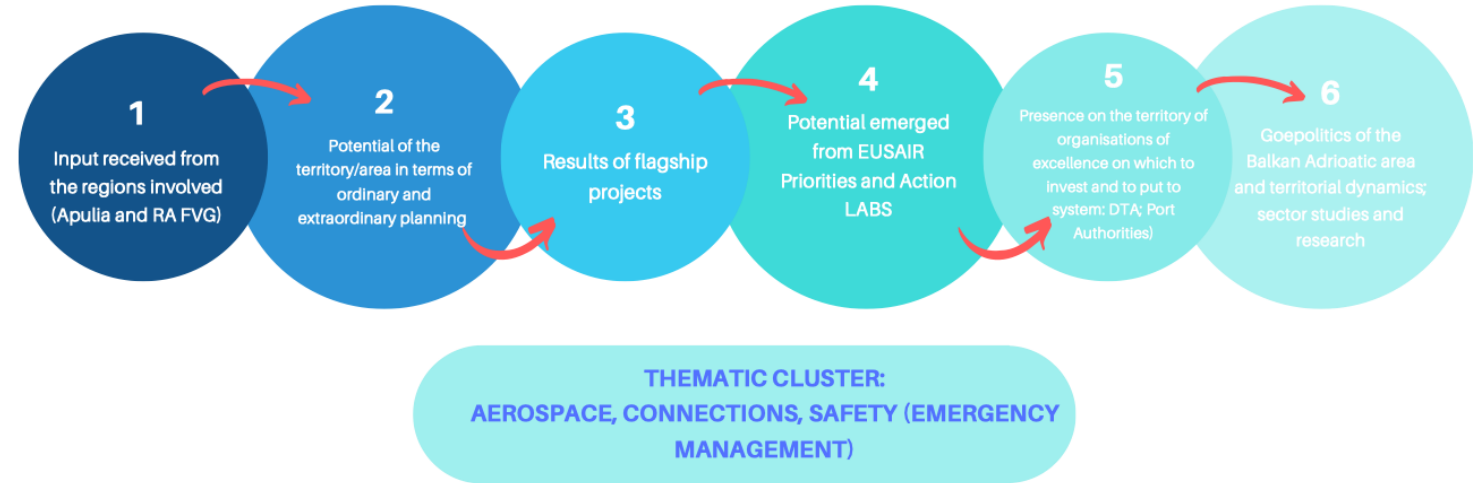


Unione
europea



PAC CTE
2014-2020

05. Thematic Clusters



The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen Resource

PROGETTO STRATEGICO **TERRITORI**



EUSAIR – Pillar 2

Technical Assistance for the development and implementation of the Flagship Project «Green and Smart Ports»

Ports as green hubs		Safety in ports		Digitalisation in ports				
Promotion of ports as new clean energy hubs for integrated electricity systems, hydrogen and other low-carbon fuels	Greening ground port services and operations	Promotion of ports as testbeds for waste reuse and the circular economy	Enhancing transport safety and security	Development of efficient capacity allocation and traffic management systems	Diffusion of innovation, data and AI for smart mobility	Italy-Croatia	Italy-Slovenia	Central Europe
5	13	16	25	8	9	X	X	X



Number of Flagship actions consistent with each theme & scope of the “Green/Smart Port” concept list (Inception Report)

06. Selected challenges

The challenges linked to the theme of Ports as Energy Hubs: The Hydrogen Resource represent high-level, macro, and long-term ambitions. For each challenge, work tracks are associated. These challenges are starting points to address innovative themes relevant to the interests expressed by the Territories, aiming to develop systems in the complex field related to the topic.

Challenge 1: Policy, regulation, and governance on hydrogen.

Challenge 2: Internationalization or regionalization: the role of Exclusive Economic Zones and international Hydrogen Valleys.

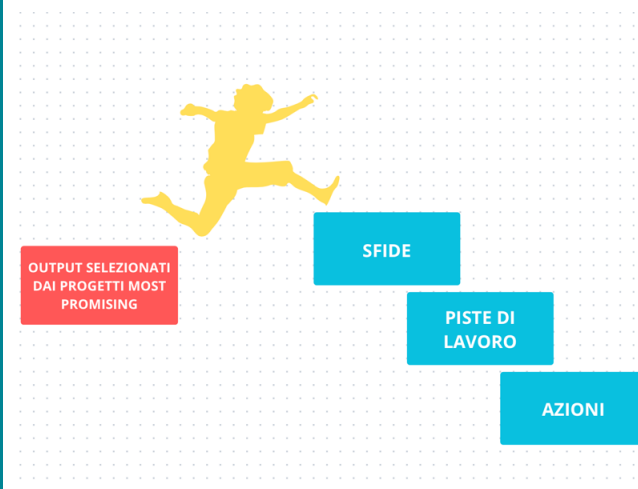
Challenge 3: Energy integration and holistic approach in ports

Challenge 4: Public Acceptance and Opinion on Hydrogen.

Challenge 5: International corridors for green hydrogen

Challenge 6: Physical and digital security for hydrogen.

Challenge 7: Sector-specific training. Sfida 1: Policy, regolamentazione, governance sull'idrogeno



The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen
Resource

PROGETTO STRATEGICO

TERRITORI

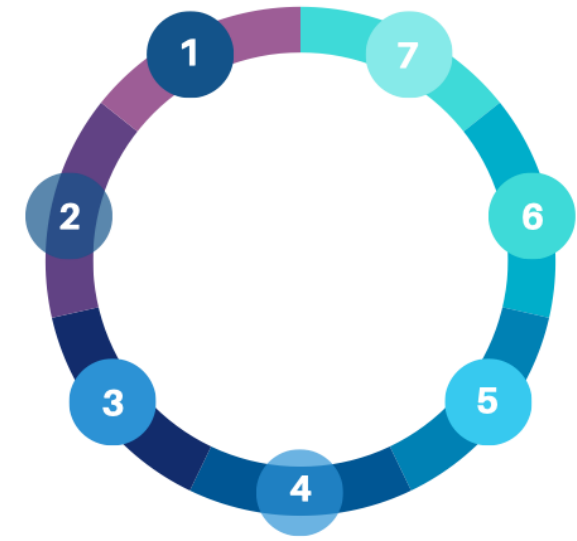
07. Main Challenges Identified

- 1 HYDROGEN POLICY, REGULATION AND GOVERNANCE

- 2 INTERNATIONALISATION OR REGIONALISATION: THE ROLE OF EXCLUSIVE ECONOMIC ZONES AND INTERNATIONAL HYDROGEN VALLEYS

- 3 ENERGY INTEGRATION AND HOLISTIC APPROACH IN PORTS

- 4 PUBLIC ACCEPTANCE AND OPINION ON HYDROGEN



- SECTOR-SPECIFIC TRAINING 7

- PHYSICAL AND DIGITAL SECURITY FOR HYDROGEN 6

- THE INTERNATIONAL GREEN HYDROGEN CORRIDORS 5

- CHOISE APULIA REGION
- CHOISE FVG REGION

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen Resource

PROGETTO STRATEGICO **TERRITORI**

08. The Identified Area of Interest

Hydrogen Platform: Convergence on the Topic Regarding the Selection of Challenges

Challenge 5: International Corridors for Green Hydrogen

(Inclusive of Challenges 2 and 3)

The Adriatic-Balkan Area Platform Ports as Energy Hub: The Hydrogen Resource

PROGETTO STRATEGICO

TERRITORI

Selected Challenges by Pilot Regions

Challenge 2: Internationalization or regionalization: the role of Exclusive Economic Zones and international Hydrogen Valleys.

Challenge 3: Energy integration and holistic approach in ports

Challenge 5: International corridors for green hydrogen

WORK TRACKS:

- Defining the role of EEZs, the Single SEZ for Southern Italy, and Simplified Logistics Zones in developing ports as energy hubs.
- **Establishing a National Sustainable Ports Plan Coordinating Group.**
- **Defining hydrogen import/export supply chains through the analysis of hydrogen-friendly supply chains (friendshoring).**

WORK TRACKS:

- **Building European and international partnerships outside the EU for developing independent and collaborative value chains.**
- Market innovation through an open innovation matchmaking platform.
- Developing roadmaps for the transition to green hydrogen.
- Jointly designing and developing diversified energy projects in the port sector (wind, solar, cold ironing, hydrogen).
- Building port energy communities.

WORK TRACKS:

- **Definition of hydrogen import/export supply chains through the analysis of hydrogen friendshoring supply chains**
- **Establishment of international agreements for the development of green hydrogen corridors**
- **Creation of a Sustainable Ports Plan Coordinating Group at the national level**

Regione Friuli Venezia Giulia

Regione Friuli Venezia Giulia

Apulia
 Regione Friuli Venezia Giulia

09. Orientation of Platforms and Potential Developments

Some Results

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen
Resource

PROGETTO STRATEGICO

TERRITORI

ORIENTATION OF PLATFORMS AND POTENTIAL DEVELOPMENTS

WHAT TO SYSTEMISE :

The Working Tracks of the Selected Challenges

- Challenge 2: Internationalisation or regionalisation: the role of Exclusive Economic Zones and international Hydrogen Valleys
- Challenge 3: Energy integration and holistic approach in ports
- Challenge 5: International Green Hydrogen

It should be noted that, as a result of the activities carried out within the platform and the discussions recently held, also with the MASE contact persons, a growing interest has also emerged for challenge No. 3, which will therefore be explored in depth together with challenge No. 5, already identified by the two pilot regions

SOME RESULTS

- Involvement of the Ministry for the Environment and Energy Transition
- Involvement of other Regions (Abruzzo, Basilicata, Piedmont) in addition to the involvement of the Joint Committee Regions (Puglia, Lazio and Veneto) and the Pilot Regions (Friuli Venezia Giulia)
- Involvement of 2 AdSPs (Ionian Sea and Eastern Adriatic Sea)
- Launch of a Horizon Europe call
- Proposal to set up an interregional round table to support the implementation of the objectives of the National Hydrogen Strategy
- Connection with the objectives of the EUSAIR Macro-regional Strategy

10. The Cooperation Platform: Activities and Participants

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen
Resource

PROGETTO STRATEGICO

TERRITORI

ACTIVITIES

2 PLATFORM MEETINGS

- 1) ONLINE: 04 APRIL 2024
- 2) ON-SITE: ROME 14 NOVEMBER 2024

PARTICIPANTS

- **Ministry of the Environment and Ecological Transition:** Technical Secretariat;
- **Apulia Region: Department of Economic Development:** Special Structure for Euro-Mediterranean Cooperation; Energy and Alternative and Renewable Sources Service; Energy Transition Section; Section for the Promotion of Trade, Crafts and Internationalisation of Enterprises.
- **Friuli Venezia Giulia Region:** International Relations and European Planning Service; Energy Transition Service; Integrated Port and Logistics Service; National Crisis and Industrial Transition Service; Central Directorate for Labour, Training, Education and Family; Central Directorate with Special Responsibility for Strategic Innovation, Research and University Projects;
- **Lazio Region:** Area of Specialisation for Enterprises and European Cooperation
- **Veneto Region:** European Territorial Cooperation and Macro-regional Strategies Unit
- **Abruzzo Region:** Territorial and International Cooperation Office
- **Piedmont Region:** Environment, Energy and Territory Department
- **Tuscany Region:** International Activities and Investment Attraction Department
- Presidency of the Council of Ministers, Department for Cohesion Policies and for the South, Service XVIII Coordination and Monitoring of ETC Programmes
- **ARTI Puglia:** Experts
- **EUTALIA Experts for the Territories Project**

11. The cooperation platform:

Future directions for work

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen Resource

PROGETTO STRATEGICO

TERRITORI

FUTURE DIRECTIONS FOR WORK

- **Policy Actions:**

- Verticalisation of the regional and/or territorial hydrogen observatories (if present) or other supporting instruments to the PNIEC;
- Analysis related to hydrogen issues in the port area incorporating the analysis of existing and planned regasifiers in port or neighbouring areas, including the presence of disused areas
- Analysis of regulations and legal frameworks (European, national and local) to verify potential barriers to the development of the hydrogen supply chain and tools to overcome them
- Enlargement of the involvement of other Regions (Abruzzo, Basilicata and Piedmont) to the group of Regions that are already working on the Territories project, by virtue of the allocation to these territories of funding dedicated to the Flagship and Hydrogen Valley projects
- Establishment of interregional tables to realise the objectives of the National Hydrogen Strategy

- **Participation in existing European platforms with a view to networking:** ALICE; HYDROGEN EUROPE; etc.

- **Participation in international/European calls:** Horizon Europe; Clean Hydrogen Partnership; Interreg; Global Gateway (climate and energy and transport themes); etc.

- **Tools:** Connection to the European STEP platform, among others.

CONVERGENCE ON THE PLATFORM'S OBJECTIVES AND NEXT STEPS IN THE MEDIUM/LONG TERM

Hypothesis of the establishment of a National Hydrogen Observatory

ESTABLISHMENT OF A NATIONAL HYDROGEN OBSERVATORY TO INTERFACE WITH THE STEP PLATFORM. THE OBSERVATORY WOULD HAVE A DIFFERENT MISSION FROM H2IT, WHICH IS NOT GOVERNED BY THE NATIONAL GOVERNMENT.

THE OBSERVATORY COULD BRING TOGETHER THE DIFFERENT SOURCES AND PROGRAMMES BELONGING TO THE SAME THEMATIC AREA (NRRP, EUSAIR, HYDROGEN VALLEY, PROGRAMME MANAGEMENT AUTHORITIES, REGIONAL DEPARTMENTS), IN ALIGNMENT WITH AND RELATIONSHIP TO EUROPEAN PLATFORMS AND THE EUROPEAN CLEAN HYDROGEN PARTNERSHIP AND TAKING INTO ACCOUNT THE OBJECTIVES AND FINANCING OF THE STEP PLATFORM 'Strategic Technologies Platform for Europe'.

13. The cooperation platform:

Future directions for work

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen Resource

PROGETTO STRATEGICO

TERRITORI

THE POSSIBLE CONTENTS OF A FORTHCOMING PROJECT PROPOSAL

CONCEPT:

The aim of the project is to define Energy Communities in ports as pilot Energy Communities, through which the different types of barriers (financial, administrative, social and infrastructural) to the development of renewable energies will be reconstructed. Thanks to this reconstruction, it will be possible to define tools for the administrative simplification of authorisation processes and it will be easier to envisage the reduction of regulatory barriers to the spread of renewable energies. In addition, the project envisages the definition of recommendations and standards for the development of possible sustainable finance instruments and the definition of requirements for the drafting of smart contracts, which could facilitate the implementation of an automated and flexible mechanism capable of remunerating prosumers in real time and adjusting energy demand, when necessary, to supply.

Furthermore, the establishment of a Port Community energy cooperation platform will have to be based first and foremost on the definition of the actors of such a community on the collaborative model (Botsman and Rogers) of collaborative consumption, collaborative production, collaborative learning and collaborative financing. It acts as a pilot energy community, useful for the definition of Market Deployment Measures for renewable energy systems. It offers the possibility of imagining a diffusion of this phenomenon to other Port Communities and on a large scale with the objective of being able to give some direction in response to the Energy Trilemma (World Energy Council): combining affordability, environmental sustainability, and security of supply, to address which requires an accurate analysis of the sector's rules and regulations.

14. Implemented and produced documents

- Methodological guidelines for the activation of cooperation platforms and subsequent integration plans (March 2023)
- Pathway for the identification of thematic clusters (March 2023)
- Data sheet for the Adriatic-Balkan area projects (March 2023)
- Report on the activation of capitalisation processes of the outputs of the selected projects_extended (January 2024)
- Report on the activation of processes of capitalisation of the outputs of the selected projects_summary (January 2024)
- Cooperation platforms on the topic of Ports as energy hubs: the hydrogen resource (May 2024)
- Accompanying note to the Adriatic-Balkan project (May 2023)
- Guidance document of the platforms for the Adriatic-Balkan area (annex 1) (May 2024)
- Progress of the cooperation platforms on the theme Ports as energy hubs: the hydrogen resource (annex 2) (July 2024)
- Document on the hypothesis of a National H2 Observatory (July 2024)
- Accompanying note to the platform in presence (October 2024)
- Horizon Europe call for proposal document: Technical and Concept sheet (November 2024)
- Modelling of the pathway activated by the Territories project (December 2024)

The Adriatic-Balkan Area Platform
Ports as Energy Hub: The Hydrogen
Resource

PROGETTO STRATEGICO

TERRITORI