



# **H2PORTS – FINAL CONFERENCE**

## **Hydrogen in practice: port visions and realizations**

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North Adriatic Sea  
Port Authority  
Ports of Venice and Chioggia

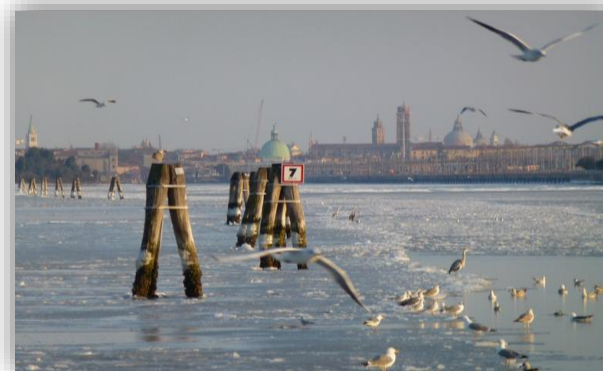




Port development strategy according to sustainability principles.

## KEY INVESTMENTS

- 1) Improving nautical accessibility
- 2) Rail access and intermodal connections
- 3) Developing **alternative fuels infrastructure**
- 4) Digitalization



# HYDROGEN ECO-SYSTEM AT THE PORT OF VENICE

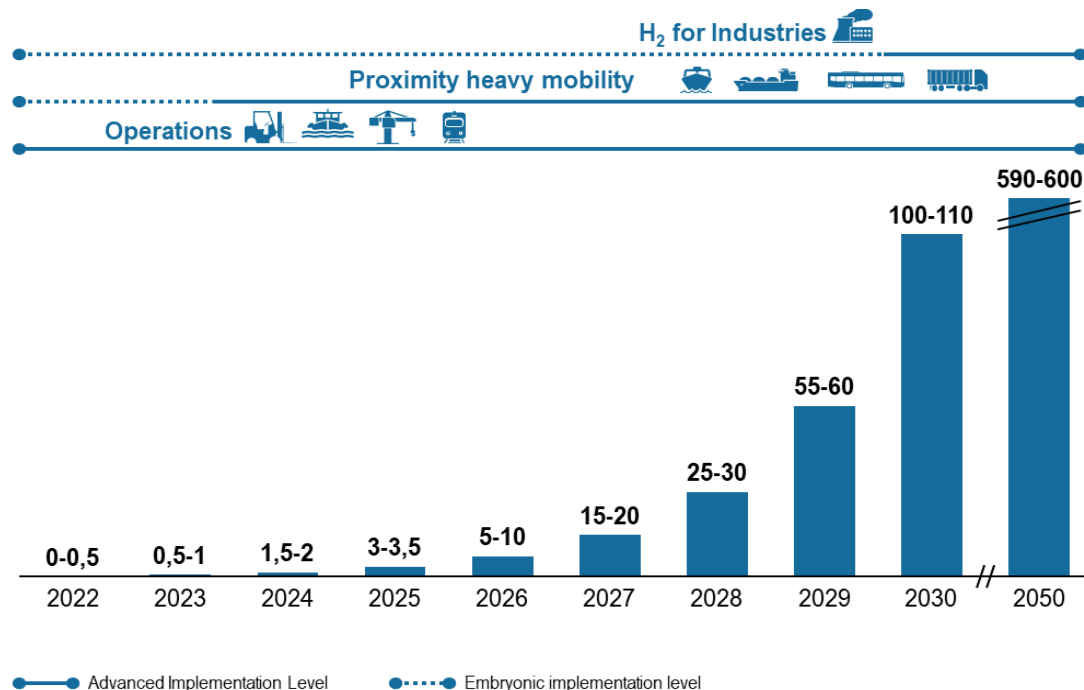
**Study for the development of a supply, production, storage and distribution system of hydrogen or hydrogen carriers to be used as fuel or as industrial feedstock within a potential "Hydrogen Valley" of the Port of Venice.**

The **development of "clean" H<sub>2</sub> demand** in the Port of Venice area is expected within 2030 - 2050:

- Port operations to partially switch to H<sub>2</sub> also thanks to public contribution, flagship initiatives and the ability to leverage financial aid.
- Heavy mobility to switch to H<sub>2</sub> thanks to favourable market conditions in terms of convenience of fuel cell alternatives vs. other fuels.
- Industry with volumes of "Clean" H<sub>2</sub>: substitution of grey H<sub>2</sub> with "clean" H<sub>2</sub>

The port of Venice could act as a **hub for import/export of H<sub>2</sub>** to meet the growing demand of the hinterland and the N-E Italy.

Ramp-up assumptions of H<sub>2</sub> [2022-50; TONs k] demand volumes



Venice as a hydrogen hub



# PROMOTING THE VENICE HYDROGEN VALLEY



## MEMORANDUM OF UNDERSTANDING

NASPA, SAPIO and HYDROGEN PARK  
Cooperate to promote the **Hydrogen Valley** in the area  
of Porto Marghera

**CANTIERE IDROGENO** the initiative promoted by Veneto  
Region and Venice World Sustainability Capital Foundation

European Clean  
Hydrogen Alliance



## MEMBER OF THE EUROPEAN CLEAN HYDROGEN ALLIANCE

NASPA plans its energy transition to help decarbonizing  
port operations and becoming an energy hub, setting a  
roadmap to implement the European Green Deal

# HYDROGEN ECO-SYSTEM AT THE PORT OF VENICE

1- **RENEWABLE HYDROGEN PRODUCTION PLANT:** production plant by electrolysis, using fully renewable energy sources (photovoltaics), with high-pressure compression system for highly efficient logistics distribution, with a CAPEX of **24 Mln € - SAPIO Srl and Eco+Eco (Veritas Group)**

2- **HYDROGEN-POWERED VESSEL** for inspections and other activities: a 10-metre LOA, up to 8 passengers, equipped with a hydrogen fuel cell capable of delivering up to 100kW of power. The vessel CAPEX is **2 Mln € - NASPA**

3- **HYDROGEN PORT EQUIPMENTS** for a total value of CAPEX **4.5 Mln € - NASPA / Port operators**



# GREEN HYDROGEN PRODUCTION – SAPIO & VERITAS Group

**July 2025** – Start of construction works of the new renewable hydrogen production plant

**June 2026** – End of the works and starting operations

**Total investment: 24 Mln€** - 17 mln € co-financed #NextGen EU Fund

**Green H2 production: 750 tons / years**



*Respirare il futuro*



HYDROGEN VALLEY VENEZIA



*Breathing the future*

# GREEN HYDROGEN VENICE – ENI & AVM

ENI and AVM, through Green Hydrogen Venezia, launched an investment of over **€50 million for the construction of a green hydrogen production and refuelling station** at Porto Marghera (Venezia)

The project includes an **8 MW electrolyzer** for the production of renewable hydrogen, and a dedicated hydrogen pipeline feeding a refuelling station.

The refuelling station will supply hydrogen to a fleet of **94 hydrogen-powered buses** co-financed by **#NextGen EU Fund**

The project timeline: works started recently (2025) and completion is forecast by summer 2026.

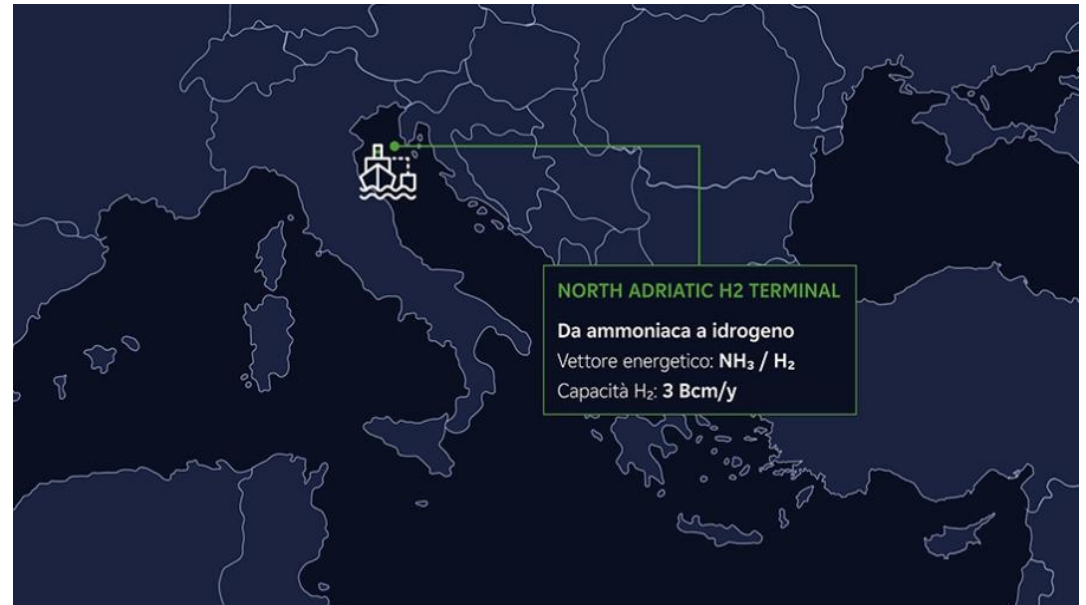


# NORTH ADRIATIC H2 TERMINAL - EDISON

The North Adriatic H2 Terminal will be built in the Northern Adriatic and designed to meet the **industrial demand for green hydrogen** in the Marghera area, with a capacity of up to 1.7 million tons per year (equivalent to 3.3 billion cubic meters of hydrogen).

It will be connected via pipeline to the future **Italian H2 Backbone network**, ensuring access both for local consumers and the national and EU systems.

In 2024 it was included in the **EU Ten-Year Network Development Plan (TYNDP)** for energy infrastructure and proposed as EU's Projects of Common Interest (PCI). It is at an advanced stage of development, with feasibility studies and market activities already underway.







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## STRATEGIC PLANNING AND DEVELOPMENT DEPARTMENT

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