H2MA – GREEN HYDROGEN MOBILITY FOR ALPINE REGION TRASPORTATION

Venice and the Veneto Region: Mobility, Energy and the hydrogen industry

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Venice, 29th October 2025

North Adriatic Sea
Port Authority
Ports of Venice and Chioggia

THE NORTH ADRIATIC SEA PORT SYSTEM

Ports of Venice and Chioggia

2.200 hectares

27 Terminals (passenger, commercial, industrial and oil terminals)

15 km quays

40 km roads - 65 km railway tracks

Connected to the Inland Waterways System

PORT SUSTAINABLE DEVELOPMENT

Sustainability is a key part of the **Port Development Strategy,** beeing the core of so called POT three-year operational plan 2023-2025.

Several measures have been implemented to contribute to the **energy transition of the port systema** and the reduction of port activities environmental impacts**.**

- **DEASP -** Energy and Environmental Port Plan
- **VENICE BLUE FLAG voluntary agreement**: all the cruise companies committed themselves to using low sulpfur content fuels.
- **Onshore Power Supply (OPS)** developments
- **13 M € GREENPORTS project - Next Generation EU**
- **HYDROGEN eco-system developments.**

COLD IRONING IN THE PORT OF VENICE

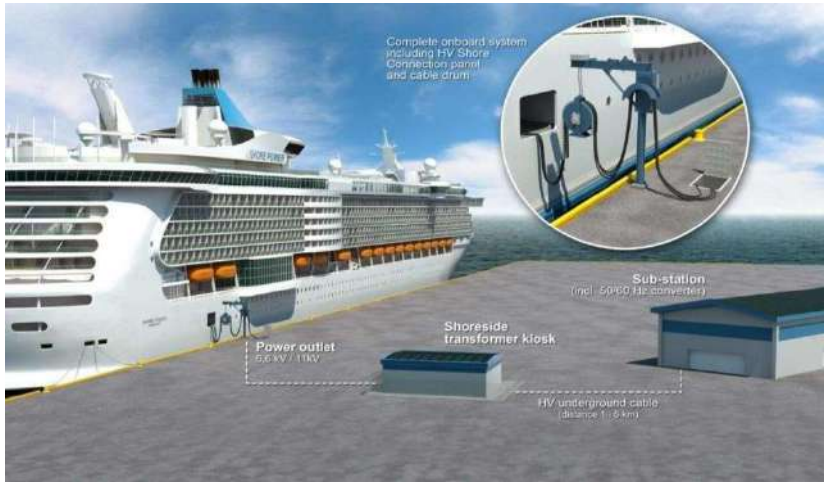
In 2022 North Adriatic Sea Port Authority was granted with almost **90 million €** Next Generation EU funds for OPS development in Marghera and Venice area

Project development and works award by
31-03-2024

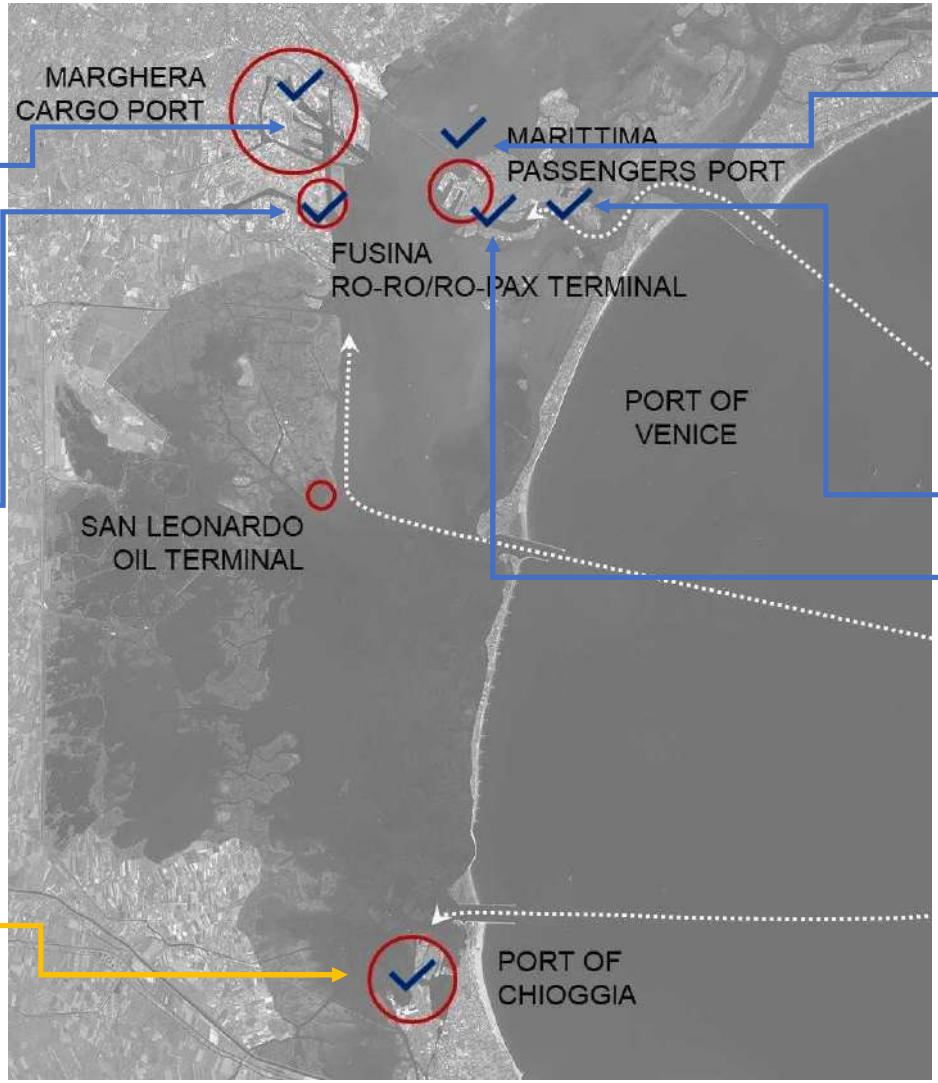
Starting of works by
30-06-2024

Power installation completed by
31-06-2026

58,6 M € for Marghera
32,2 M € for Venice



COLD IRONING: PROJECT DEVELOPMENT



Canale Nord
Sponda Nord

MoS Terminal
Fusina

Porto di
Chioggia

Marittima
Passenger Terminal

Riva
Sette Martiri

Santa Marta
e San Basilio

HYDROGEN ECO-SYSTEM AT THE PORT OF VENICE

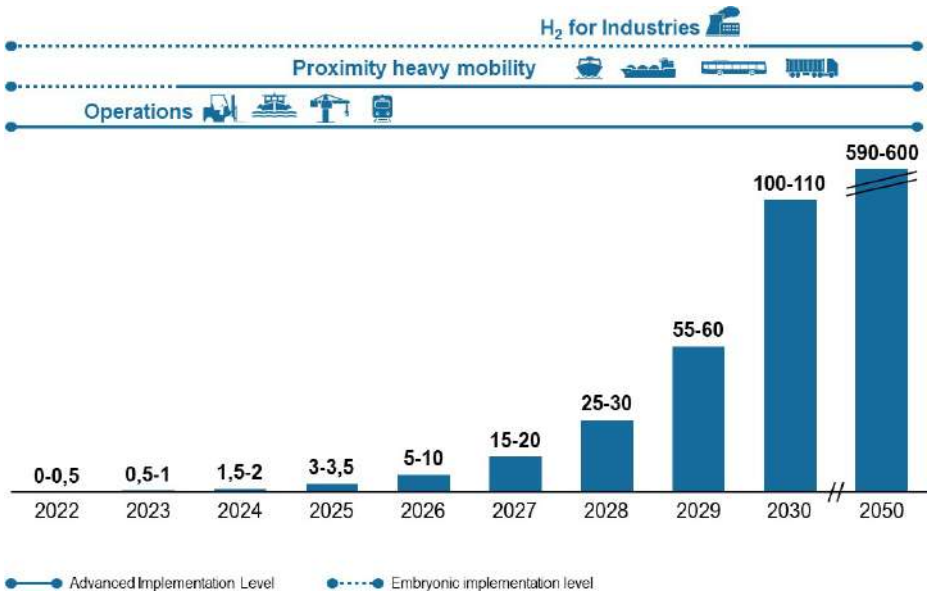
Study for the development of a supply, production, storage and distribution system of hydrogen or hydrogen carriers to be used as fuel or as industrial feedstock within a potential "Hydrogen Valley" of the Port of Venice.

The **development of "clean" H_2 demand** in the Port of Venice area is expected within 2030 - 2050:

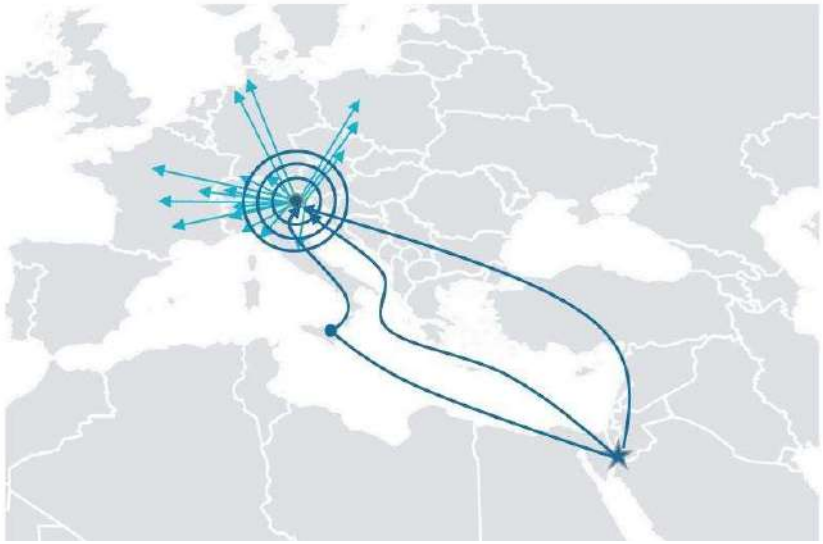
- Port operations to partially switch to H2 also thanks to public contribution, flagship initiatives and the ability to leverage financial aid.
- Heavy mobility to switch to H_2 thanks to favourable market conditions in terms of convenience of fuel cell alternatives vs. other fuels.
- Industry with volumes of "Clean" H2: substitution of grey H_2 with "clean" H_2

The port of Venice could act as a **hub for import/export of H_2** to meet the growing demand of the hinterland and the N-E Italy.

Ramp-up assumptions of H_2 [2022-50; TONs k] demand volumes



Venice as a hydrogen hub



HYDROGEN ECO-SYSTEM AT THE PORT OF VENICE

1-**GREEN HYDROGEN PRODUCTION PLANT**: production and storage autonomous plant by electrolysis, using fully renewable energy sources (photovoltaics) and the installation of a hydrogen refuelling station, with a CAPEX of **17 Mln € - SAPIO Spa**

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**

PROMOTING THE HYDROGEN ECO-SYSTEM

North Adriatic Sea Port Authority
Ports of Venice and Chioggia

SAPIO GRUPPO
Respirare il futuro

HydrogenPark
Società Consortile a Responsabilità Limitata

Autorità di Sistema Portuale del Mar Adriatico Settentrionale
Porti di Venezia e Chioggia

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