Hydrogen demo Valley ENEA @ Casaccia Research Centre

Rossella Bozzini, 11 May 2022

Contatti

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TECHNIP ENERGIES AT A GLANCE

Listed on
Euronext Paris
Stock Exchange

Headquartered in Paris
Registered in
The Netherlands

60+
Years of operations

€6.7B
Full year 2021 adjusted revenue

A leading Project, Engineering & Technology company for the Energy Transition

€16.4B
Backlog at end 2021

Order intake €9.8B

~15,000
Employees in 34 countries

25+
Leading proprietary technologies

450 projects
Under execution

PROJECT CONTEXT

- Early 2021 ENEA, the Italian National Agency for New Technologies, Energy and Sustainable Economic Development, and the Ministry of Economic Development signed a collaboration agreement in order to create the first Italian Hydrogen Valley
- The project, conceived by ENEA, kicks off with a 14-million-euro investment
- TEN Italy Solutions developed for ENEA project prefeasibility study

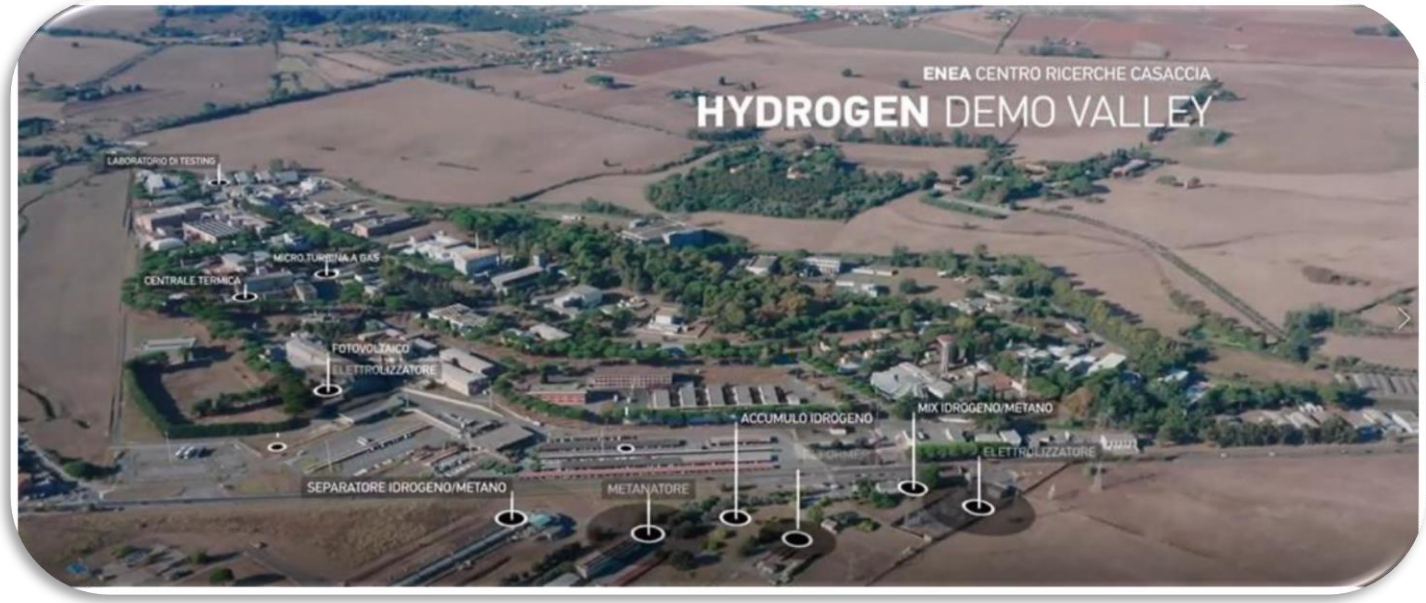
HYDROGEN DEMO VALLEY

‘’ Multifunctional infrastructures for the experimentation and the demonstration of hydrogen technologies‘’

CASACCIA RESEARCH CENTRE

- Established in 1959
- ENEA's largest complex of laboratories and demo sites
- 25 km NW of Rome, near Bracciano Lake
- 90 hectares over two adjacent sites, 190 buildings (offices, laboratories, demo plants and infrastructure)
- Population 1185 (ENEA personnel) and 250-300 visitors (interns, guest researchers, grant holders, service providers)

THE HYDROGEN DEMO VALLEY



Production

- ✓ 200+ kWp PV plant
- ✓ 200+ kWe Electrolysers
- ✓ Innovative H2 production

Transportation

- ✓ H2 – NG blending (5 ÷ 20 vol%) pipeline
- ✓ H2 pipeline

End Use

- ✓ Boilers
- ✓ E-fuel
- ✓ Mobility
- ✓ Fuel cells
- ✓ Gas turbines

PROJECT MAIN CHALLENGES

- TRL: high, demonstration activity
- High-tech infrastructure + technological «incubator»
- Tight schedule (may lead to staggered realisation)
- First Italian technological incubator to develop a national supply chain for production, transport, storage and use of hydrogen, focusing on research, technologies, infrastructures and innovative services: 40+ expressions of interest by potential industrial partners
- Collaboration with universities, research institutes, associations and companies, to boost the energy transition and decarbonisation