

K | KEY THE
ENERGY
TRANSITION
EXPO

Riminifiere, 5-6-7 Marzo 2025

**DALL'INNOVAZIONE ALL'APPLICAZIONE: LE SOLUZIONI PER
L'IDROGENO DI PIETRO FIORENTINI E HYTER**

Maura Russo
Hydrogen Product Specialist





**Pietro
Fiorentini
Group**

**Ongoing
hydrogen
projects**

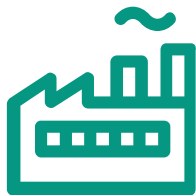
**Complete
hydrogen
ecosystems**

Figures for the Group, constantly evolving

Pietro Fiorentini is now one of the largest industrial companies in the North East of Italy, with its main headquarters at **Arcugnano, near Vicenza**. The Group has more than thirty-five production sites and commercial offices both in Italy and abroad, employing around 2,800 people worldwide.



More than
2.800
collaborators
around the world



20 production
facilities:
10 in Italy and
10 abroad



Offices in
Europe,
America,
Africa and **Asia**



Group turnover
≈ 500 € mln



Services
to over 100
countries



**Pietro
Fiorentini
Group**

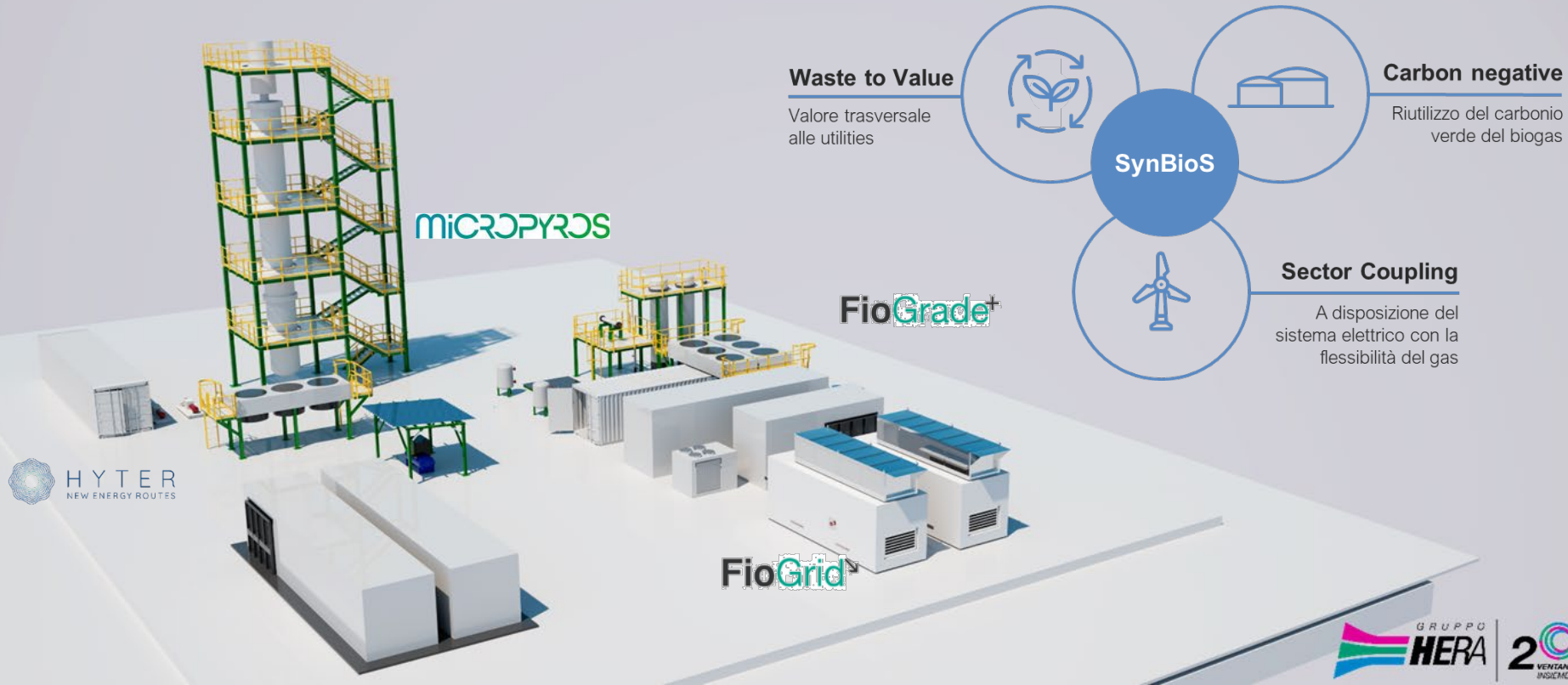
**Ongoing
hydrogen
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**Complete
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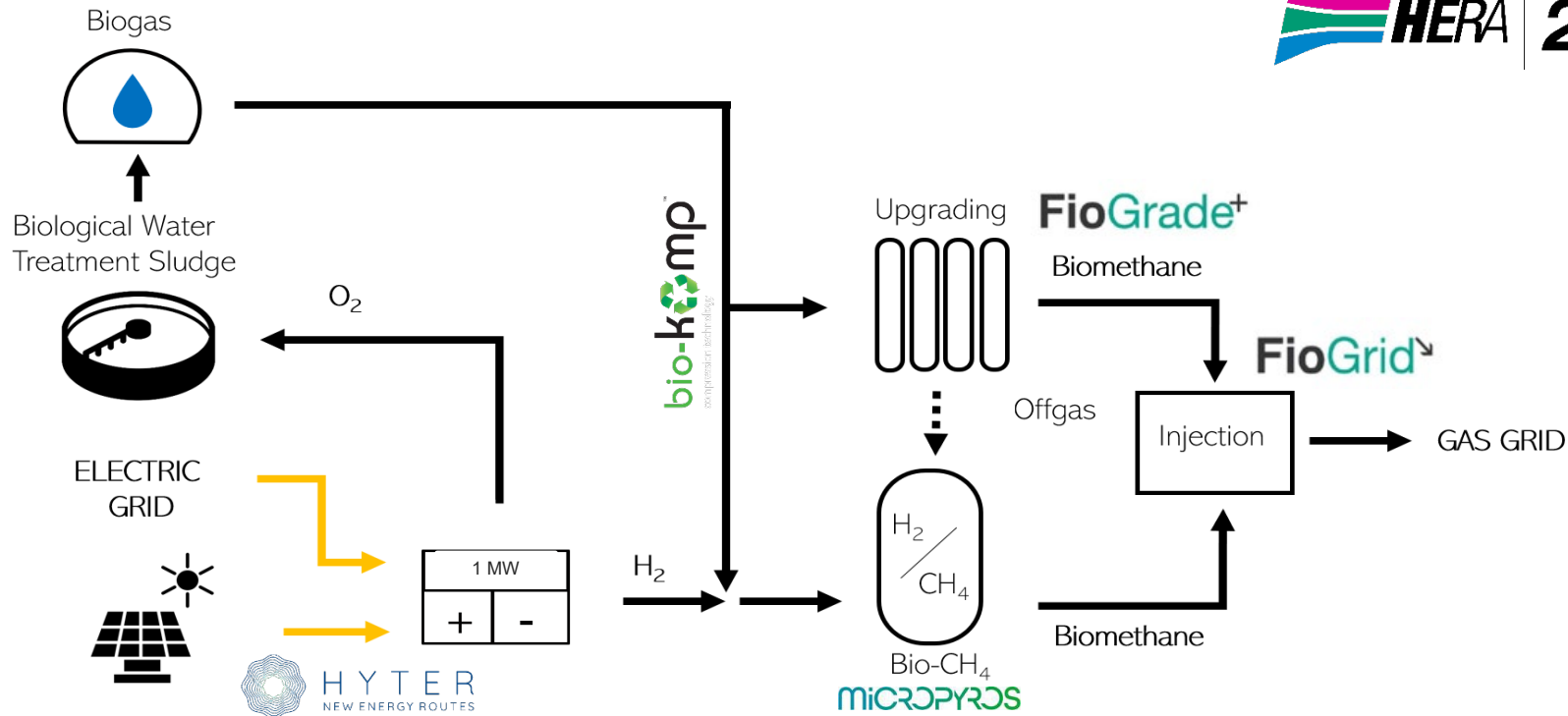
Where we started from: PF Hydrogen Innovation Lab



SynBioS: the first commercial plant for e-methane production in Italy



SynBioS: PF solution for P2M





HYTER

NEW ENERGY ROUTES



Our solutions for hydrogen production

Hyter is a company founded in 2011, based in Desenzano del Garda, currently **100% part of the Pietro Fiorentini Group**. We can offer a **wide range of solutions for hydrogen production with AEMWE and PEM technologies**.



	AEMWE Rigel	AEMWE Sirius	PEM Solutions
STACK SIZE	10kW – 2Nm ³ /h	150kW – 33,8Nm ³ /h	1.250kW – 255Nm ³ /h
GENERATOR SIZE	2Nm ³ /h [...] 24Nm ³ /h	33Nm ³ /h [...] 200Nm ³ /h	200Nm ³ /h [...] 2.000Nm ³ /h



Electrolife project

PROJECT GOAL

Enhance the **durability** of the electrolyzers and **improve performances** by **reducing the use of critical materials** focusing on different electrolysis technologies

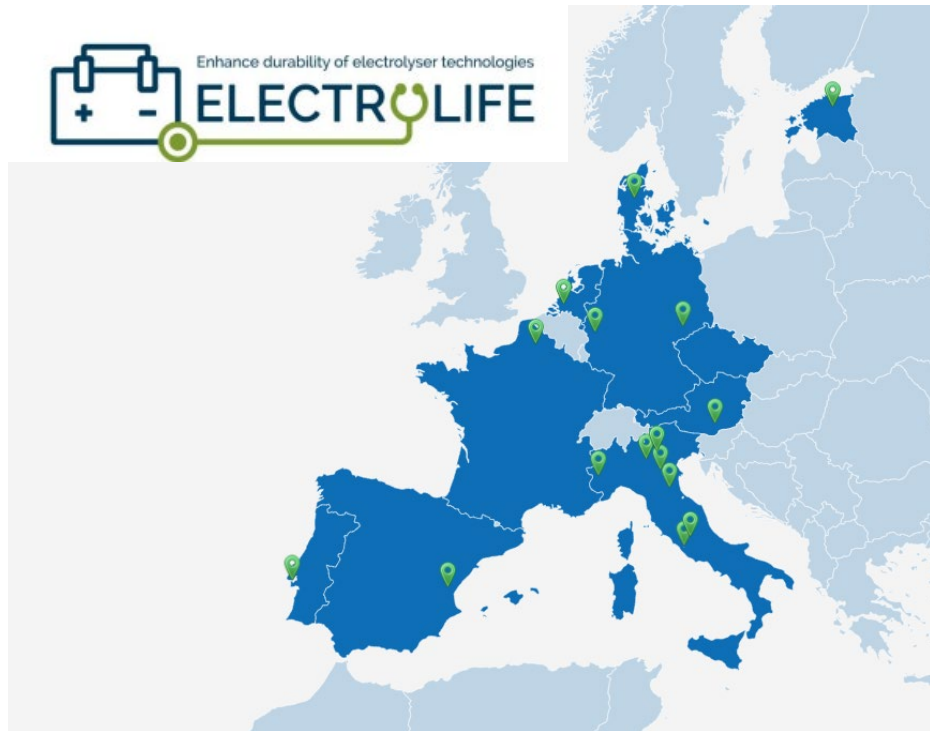
PERFORMANCE GOALS

To improve:

- Degradation
- Current Density
- Electricity consumption
- Use of CRM as catalysts
- CapEx and OpEx

TIMEFRAME

5 years (2024-2028)



Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the Clean Hydrogen Partnership. Neither the European Union nor the granting authority can be held responsible for them.

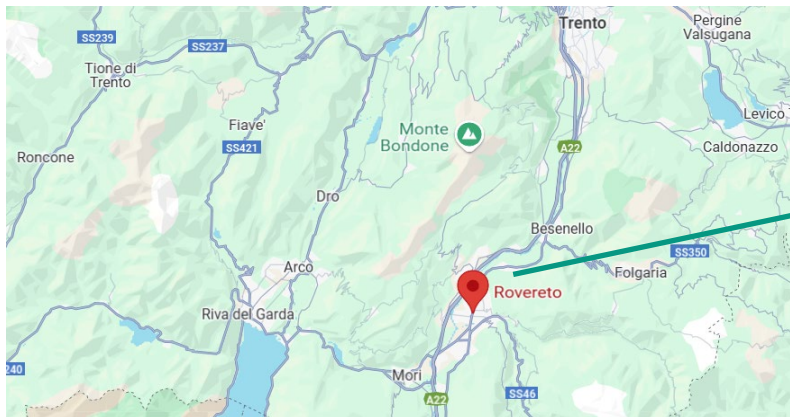


Our role in the Italian Hydrogen Valleys development

PROJECT GOAL Part of the “PNRR M2C2-I3.1 ROVERETO”. The aim of the Rovereto Hydrogen Valley is to produce hydrogen with our electrolyzer in order to use it in co-generation

DESCRIPTION 1 MW electrolyzer with PEM technology

TIMEFRAME 2024 - 2026

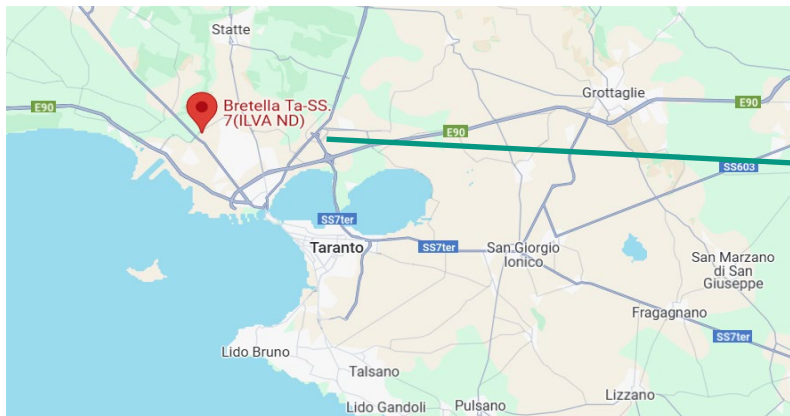


Our role in the Italian Hydrogen Valleys development

PROJECT GOAL Part of the “PNRR M2C2-I3.1 STATTE”. The aim of this Hydrogen Valley is the production, compression and loading of tube trailers to sell hydrogen to third partners

DESCRIPTION 4 MW electrolyzer with PEM technology

TIMEFRAME 2024 - 2026

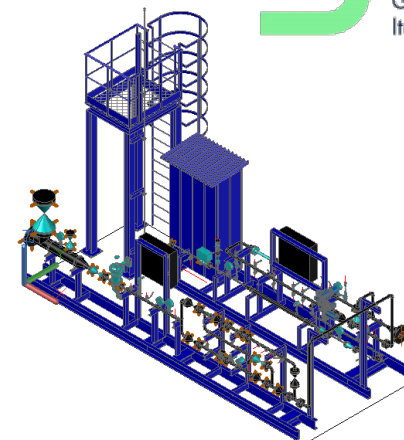
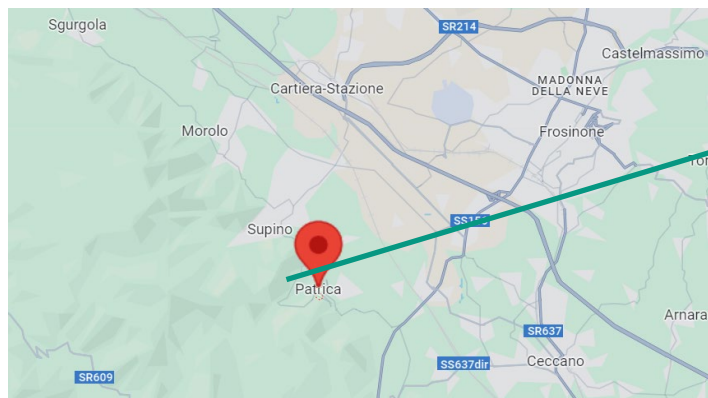


Helios Valley Downstream: our blending station for SGI

PROJECT GOAL PNRR Hydrogen Valley/Delibera ARERA 404/22: decarbonisation project of the industrial agglomeration of Frosinone through the transition from methane to methane/hydrogen blending.

DESCRIPTION Blending station to mix CH₄/H₂ up to 25% v/v with experimental plant for gas stratification analysis

TIMEFRAME 2024-2026





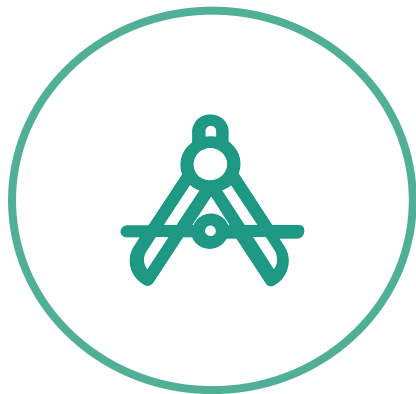
**Pietro
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**Ongoing
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Complete hydrogen ecosystems

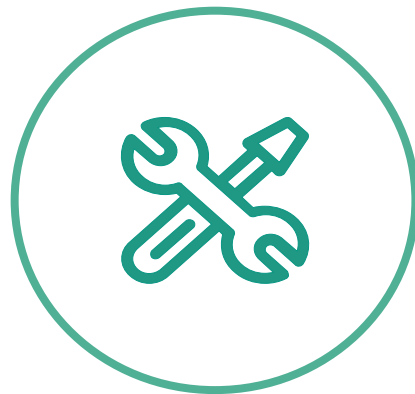
Our **complete solutions** support the decarbonisation path in order to meet the energy transition targets. We propose ourselves as an **EPC** by **mostly integrating our hydrogen technology solutions**.



Engineering



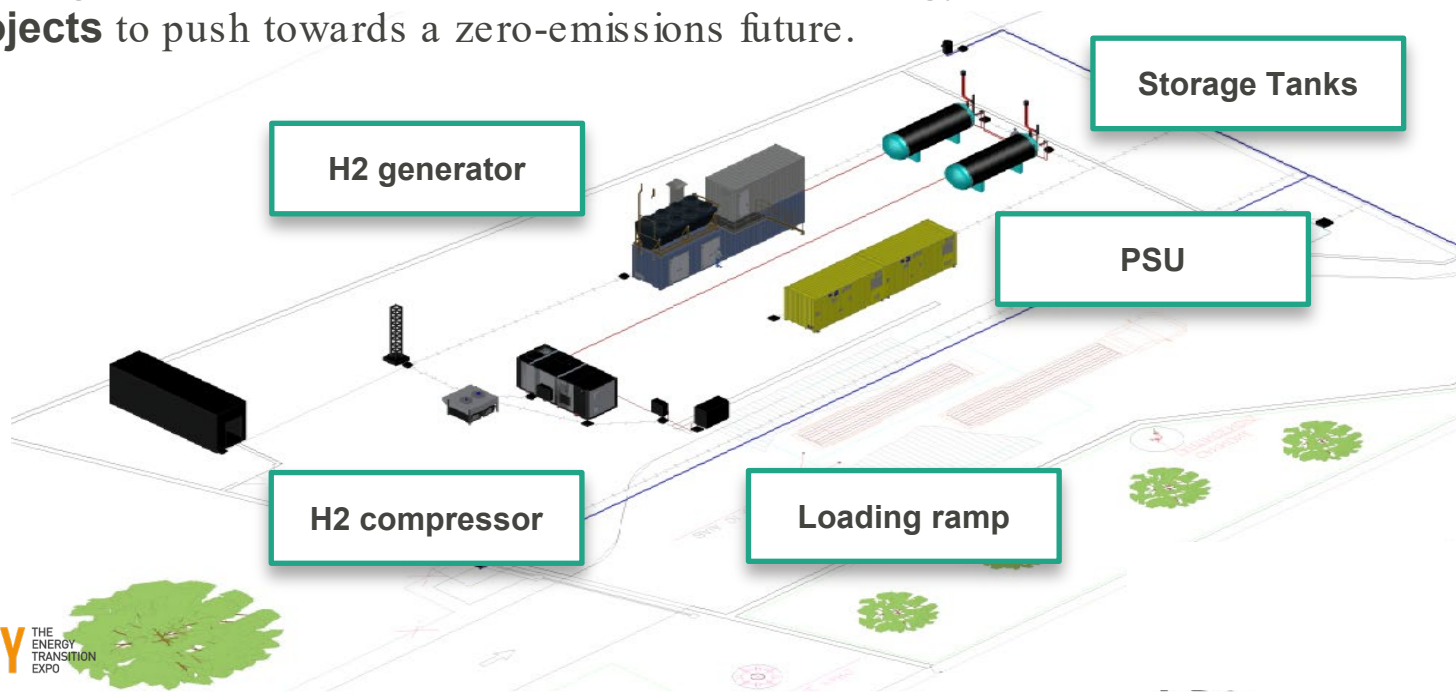
Production



Service

Complete hydrogen ecosystems

Our hydrogen solutions are suitable for the **gas distribution networks**, as well as for the **“hard to abate” industries**. We are also focused on the **production of synthetic methane**, enabling the transformation of excess renewable energy into a valuable resource, and **mobility projects** to push towards a zero-emissions future.





OUR CONTACTS

OUR SOLUTIONS



Maura Russo

