



Interreg

Alpine Space



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H2MA

The evolution of **CLEAN HYDROGEN**



Perspectives from
production to use
in mobility and
industry

29th of October 2025
Venezia Heritage Tower
(Marghera, Venice)



Hydrogen in Sustainable Logistics Towards zero-emission mobility

Federico Zanette – Codognotto Group Sales Director



Our Vision

Passion and Innovation for Sustainable, Digital, and Human Logistics.



Optimisation of routes and modes of transport



Intermodal Transport



Switch to Green Fuels



Extensive use of green technologies



Partnerships with companies and institutions for Innovation



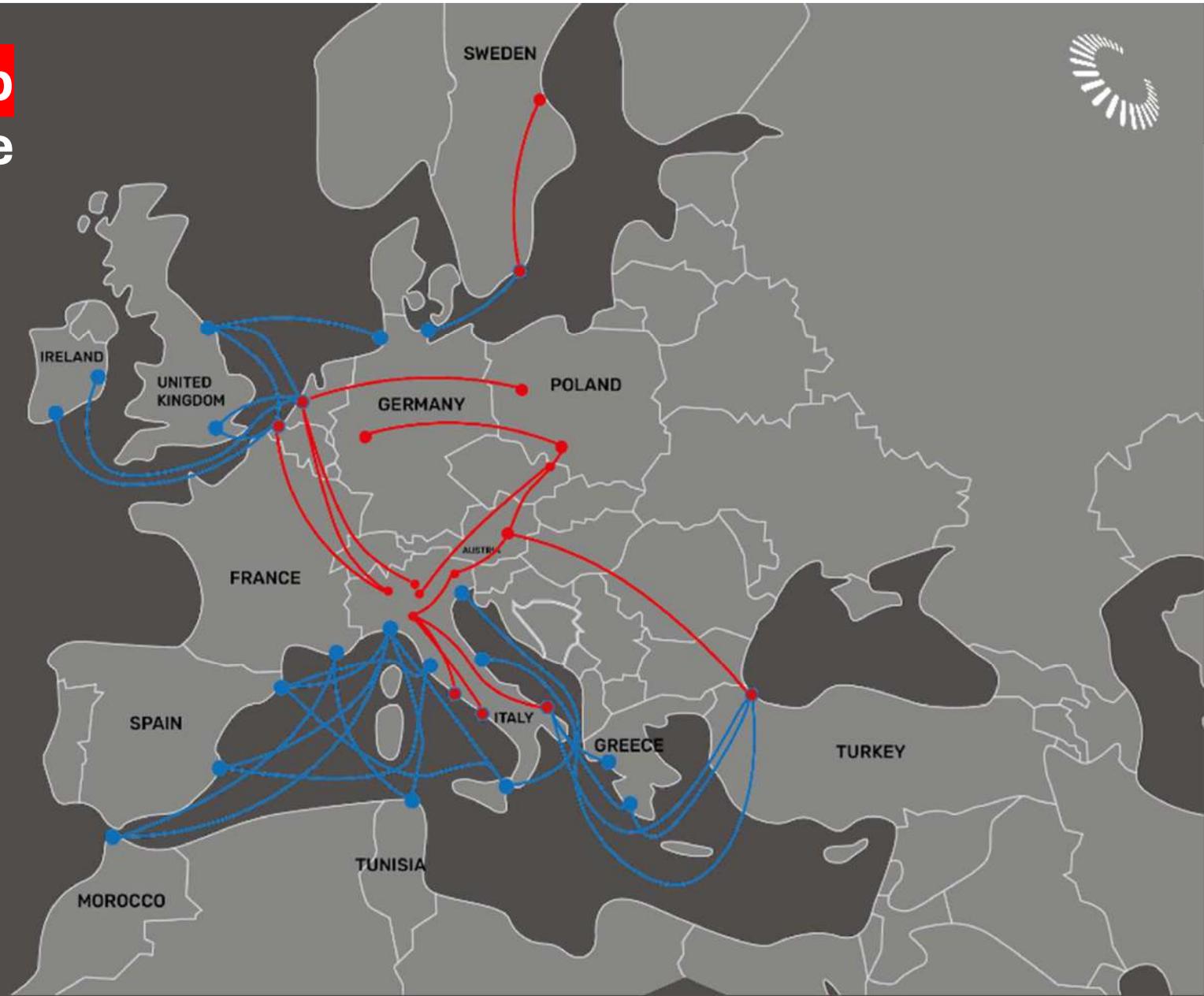
CO2 measurement and reporting

Codognotto's Path to Energy Transition

Codognotto **Setup** Intermodal Europe



- Rail connections
- Maritime connections



Our fleet 'environmentally-friendly'

BIO-LNG

BIO-LNG fuel allows a 95% reduction in CO2 emissions. In Italy, 100% of our vehicles are powered by bio-LNG.



HVO

HVO is Eni's Hydrotreated Vegetable Oil (HVO), 100% diesel from renewable raw materials. Compared to traditional fuel, HVO contributes to a reduction in CO2 emissions of up to 90%.



ELECTRIC

We are testing electric vehicles for manoeuvring activities and short-range distances. Starting from June 2025, 2 new full-electric vehicles on long-distance routes.



HYDROGEN

We collaborate with a panel of companies from the energy and automotive sectors to test hydrogen vehicles in the France-Italy territories.



Hydrogen Mobility – Key Challenges for Transport & Logistics

Barriers to Adoption of Hydrogen in Transport & Logistics

Vehicle Availability

- Few commercial model available
- High purchasing costs
- Technology still under development



Refuelling Infrastructure

- Limited diffusion of refuelling stations
- Insufficient geographical distribution
- Investment in infrastructures are needed



Cost of Green Hydrogen

- Current price is very high
- Expensive production from green energy
- Need for economies of scale



Market Uncertainty

- Evolving regulations
- Competition with other technologies
- Adoption timelines



Opportunities and Conclusions

The Future of Sustainable Logistics

Opportunities

- Superior range compared to electric vehicles
- Fast refuelling times (5-10 minutes)
- Suitable for long distances
- Zero local emissions
- Support from European policies

Conclusions

Hydrogen represents a promising technology for the future of zero-emission logistics, but it still requires time to overcome current challenges. Meanwhile, we continue to invest in immediate solutions such as intermodally, digitalization, and available alternative fuels.

- Gradual and pragmatic approach
- Investments in research and development
- Collaboration with technological partners
- Continuous monitoring of market evolutions





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Thanks for the attention!

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Codognotto Italia S.p.A.



Digitalization & Process optimization



- Continuous development of ICT projects for integrated planning aimed at improving production efficiency
- Participation in international working groups such as DTLF (Digital Transport Logistics Forum)
- Capitalization of acquired experience (e.g. synchromodality)
- e-CMR
- Codognotto Drivers App for digital trip management

