

Motor Oil (Hellas) Group

BLUE MED

Hydrogen IPCEI Project

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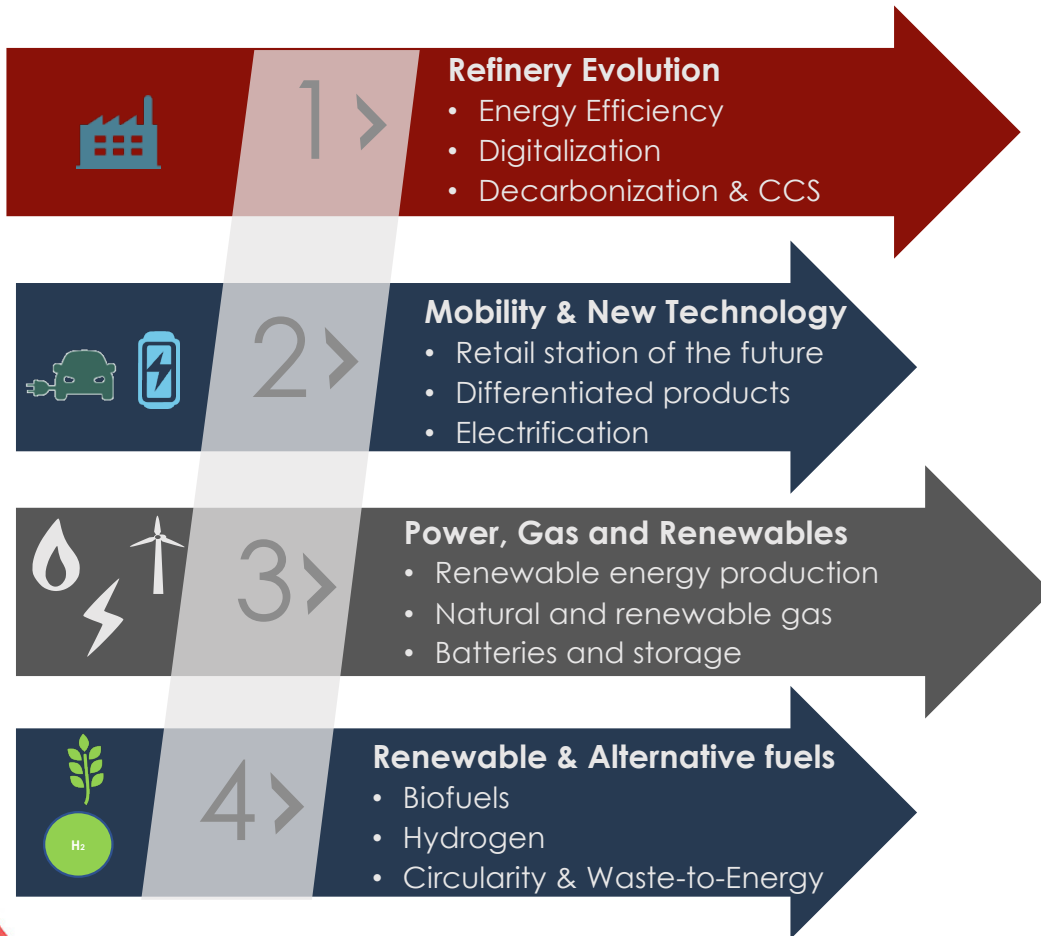
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Motor Oil Group Strategic Pillars

Continuous Investment Strategy



Motor Oil's Vision and Plan as Hydrogen Supplier

Phase-1: Field demonstration

2023-2024

Demo Projects

Phase-2: Scale-Up Implementation

2024-2026

IPCEI Framework

Phase-3: Maturity

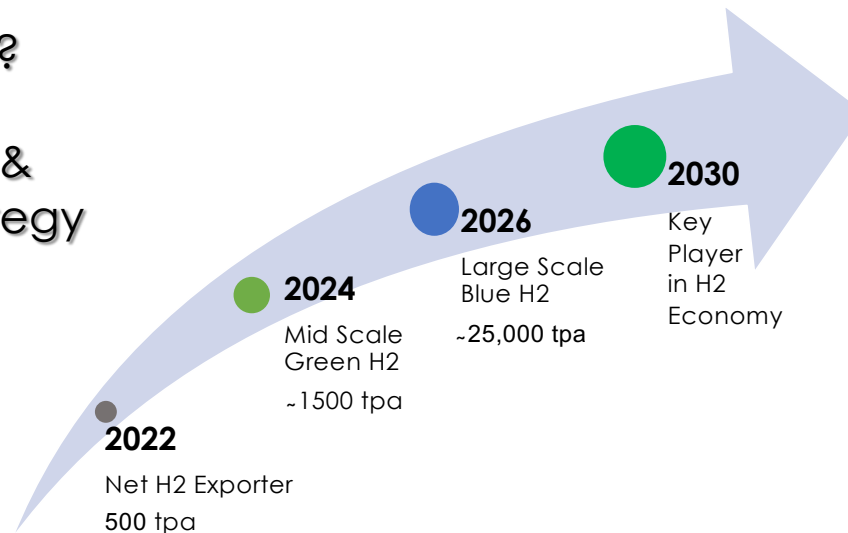
>2026

Massive Market Roll-out

Hydrogen Key Lever in
Carbon Neutral Economy
& Integral to MOH's
transition journey

Color of Hydrogen ?

All types important &
supported by our Strategy



Competitive Advantages:

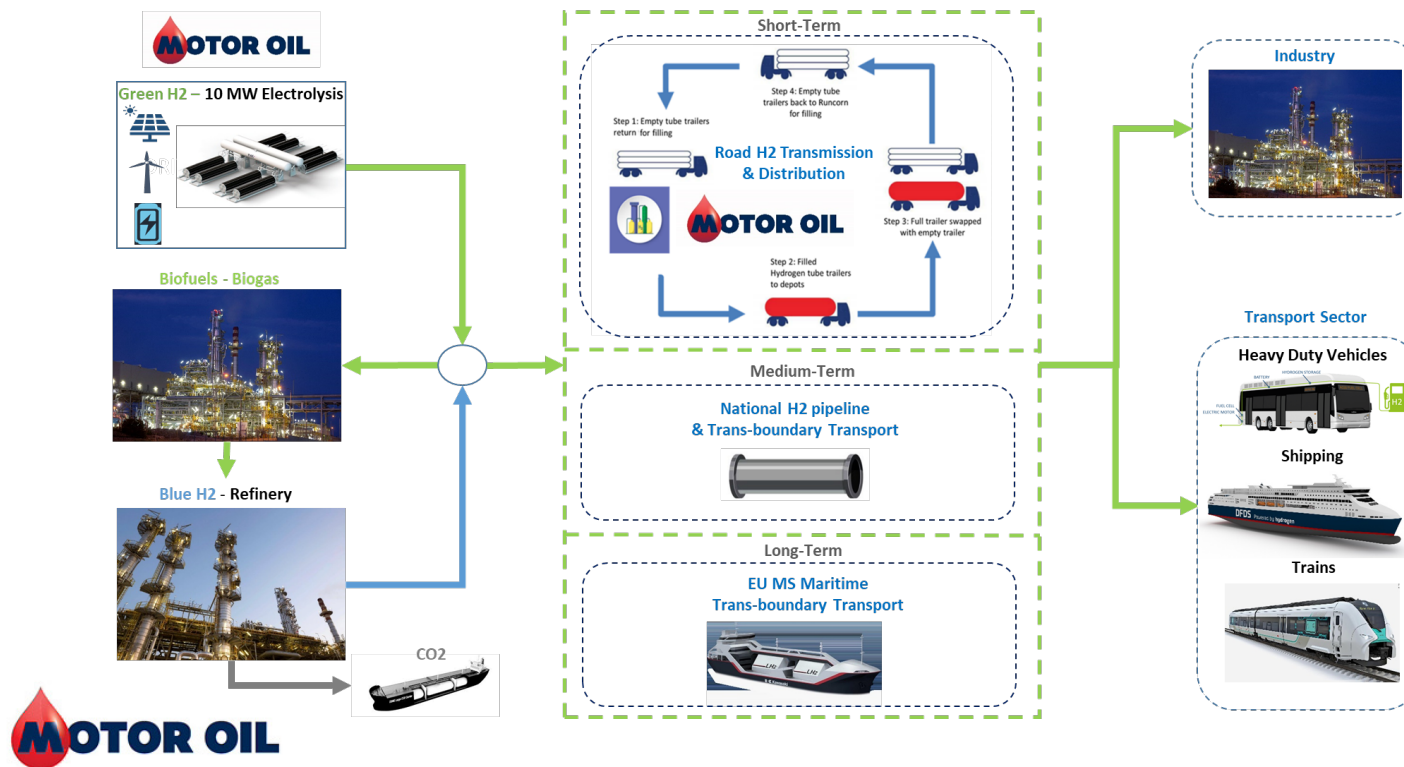
- **Rapid deployment** by end-2022
- **Bulk volumes** readily available
- Low & competitive **cost**
- Full supply chain **experience**
- **Health & Safety** track record
- **Complementarity** and synergies fully exploited in entire value chain



BLUE MED – H2 IPCEI Project by Motor Oil

Phased development of a flexible, scalable and cost advantaged infrastructure for the production and distribution of **Renewable & Ultra-low Carbon Hydrogen** for use in industry and transport

- Umbrella Program demonstrating a **South Hydrogen Valley in Greece**
- Fosters complementarity and synergies through extensive network of collaborations
- Duration 4-5 years - Full deployment end-2025



Decarbonization of
Industry and transport

H2 Export
~24000 t/y

H2 Captive
~35000 t/y

Achieve Competitiveness
with fossil fuels

Regulatory Framework

- Swift creation of a **Regulatory Framework** is key for the development of Hydrogen value chain
- **Hydrogen IPCEI projects** provide an opportunity for knowledge dissemination, technology replication and regulatory alignment across the European hydrogen value chain
- The framework **required for BLUE MED development** (& other projects) comprises:
 - Compression and storage of high-pressure hydrogen (>200 bar) at industrial sites
 - Transport of high-pressure hydrogen (>200 bar) through national roads
 - Storage of high-pressure hydrogen (>200 bar) at gas stations
 - Transport, storage and use of high-pressure hydrogen (>200 bar) at ports
 - Supply and distribution of Hydrogen
 - Use of high-pressure hydrogen in heavy duty vehicles and buses (350 bar) and in maritime
 - Permitting for hydrogen production and storage installations as well for supply and distribution
 - Specifications and regulations for hydrogen injection in Natural Gas network
 - Regulatory alignment of areas and infrastructure with emphasis on gas and power infrastructure
 - Compatibility of hydrogen installations with other conventional fuels
 - Purity of fuels supplied, supply methodology and categories of supplied vehicles
 - Requirements of Technical Inspections, the necessary certifications and the appropriate control bodies
 - The design of control mechanisms for smuggling (analogous to inputs - outputs in liquid fuels)
 - Extension of guarantees of origin for hydrogen - incentives and state aid issues

Thank You

At Motor Oil Group we are moving responsibly towards a sustainable future. Shaping the future of energy.

