

Motor Oil Hellas Refinery

Key information

Motor Oil CO₂ roadmap:

The company approaching decarbonisation by increasing its portfolio of renewable energy plants, with plans to reach 2,000 MW renewable energy production capacity by 2030.

- 3 wind-power plants with total capacity of 10MW & the total renewable energy (RE) capacity increased to 363MW in 2021

Company: Motor Oil (Hellas)

Founded: 1970 in Agioi Theodoroi, Corinth

Located: Corinth, Greece

Products: An energy group, consisting of more than 90 subsidiaries



Technical aspects

In 2023, the company “Hellenic Hydrogen” was founded with Motor Oil holding 51% of the share capital, focusing on the development of green hydrogen production projects in Greece.

There is installed a Combined Heat and Power (CHP) production unit with an 85MW capacity, utilizing gas as its fuel. Natural gas is used both as a fuel and primary material source for the production of hydrogen and the facilities have a dedicated port for docking tankers, a mixed storage capacity of 2,600,000m³

On-site improvement of energy efficiency

- Used as an alternative fuel for combined heat and electricity, reducing CO₂ emissions by 16%
- Used as an alternative source for hydrogen production instead of naphtha and LPG, reducing CO₂ emissions by 8% and 19% respectively. Also used as a fuel for pre-heating installations, improving energy efficiency and reducing emissions.
- The upgrade and maintenance of fired heaters yielded 30% decreased fuel consumption
- The construction of a Power and Steam co-generation plant minimizes power losses from transmission Recovery of condensates and light mixture gaseous hydrocarbons has led to savings in energy, chemical treatment and makeup water
- Extensive monitoring of the energy performance of certain units
- The preventative maintenance program also helps in reducing energy demands through maximised heat recovery and minimised consumption

The future

- Increased energy efficiency
- The acquisition of and investment in new, low-carbon projects and technologies
- Integrated on-site RES and energy storage installations
- Innovative processing and digital technologies
- The development of E-mobility and an increase in EV charging stations
- The production of Clean Hydrogen
- The retail station of the future
- Renewable energy production from solar and wind power
- The transition to more green energy through CCGT plants and FSRU
- The production of advanced and recycled fuels
- The implementation of CCS
- Carbon offsetting
- The sustainable production of E-fuels

