

Air Liquide receives EU support to develop the first large-scale project for the production, liquefaction, and distribution of low carbon and renewable hydrogen from ammonia

Air Liquide has been awarded a grant of 110 million euros from the European Innovation Fund for its ENHANCE project in the port of Antwerp-Bruges, Belgium, that aims to produce and distribute low-carbon and renewable hydrogen derived from ammonia. As part of the project, Air Liquide intends to build, own and operate a first-of-its-kind large scale renewable ammonia cracking plant and an innovative hydrogen liquefier. ENHANCE is the first European industrial-scale project for the production and distribution of low-carbon and renewable hydrogen using ammonia as a feedstock.

As part of this initiative, Air Liquide intends to retrofit one of its hydrogen production units located in the Port of Antwerp-Bruges, using renewable ammonia as a feedstock instead of natural gas, and would also build a hydrogen liquefier. This new facility would support the development of a low-carbon and renewable hydrogen supply chain in Europe and contribute to the decarbonization of a wide range of hard-to-abate customers, such as refineries, chemicals, as well as heavy duty road, maritime transport and aviation. Replacing natural gas by ammonia to produce gaseous and liquid hydrogen would allow the project to reduce the CO₂ emissions by more than 300,000 tonnes per year.

This project would capitalize on the knowledge and expertise acquired from the Group's [ammonia cracking pilot plant](#) located in the port of Antwerp.

Armelle Levieux, member of the Executive Committee of Air Liquide, notably overseeing Innovation, stated: *"The combination of ammonia cracking and hydrogen liquefaction technologies offers an additional solution to support the growth of the global hydrogen market. We welcome the support from the European Commission for our ENHANCE project, which contributes to the emergence of a viable infrastructure for the supply of renewable and low-carbon hydrogen in Europe. In line with our ADVANCE strategic plan, this project supports Air Liquide's commitment to the energy transition, with low-carbon hydrogen playing a key role for the decarbonization of the industry and mobility. ENHANCE supports European ambitions towards carbon neutrality"*.

Ammonia - a molecule made of hydrogen and nitrogen - can notably be produced with a low-carbon footprint in geographies with abundant renewable energy sources such as sun, water and wind, or other low-carbon source of energy. A global supply chain infrastructure is already in place for its production, transportation and utilization at large scale, serving various industries.

The European Innovation Fund is one of the world's largest programs for promoting innovative low-carbon technologies. Receiving this funding is an essential milestone in making a final investment decision and starting the execution of this project.

AIR LIQUIDE CONTACTS

Air Liquide Corporate Communications
media@airliquide.com

Investor Relations
IRTeam@airliquide.com

About Air Liquide

A world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 60 countries with approximately 66,300 employees and serves more than 4 million customers and patients. Oxygen, nitrogen and hydrogen are essential small molecules for life, matter and energy. They embody Air Liquide's scientific territory and have been at the core of the company's activities since its creation in 1902.

Taking action today while preparing the future is at the heart of Air Liquide's strategy. With ADVANCE, its strategic plan for 2025, Air Liquide is targeting a global performance, combining financial and extra-financial dimensions. Positioned on new markets, the Group benefits from major assets such as its business model combining resilience and strength, its ability to innovate and its technological expertise. The Group develops solutions contributing to climate and the energy transition—particularly with hydrogen—and takes action to progress in areas of healthcare, digital and high technologies.

Air Liquide's revenue amounted to 27,5 billion euros in 2023. Air Liquide is listed on the Euronext Paris stock exchange (compartment A) and belongs to the CAC 40, CAC 40 ESG, EURO STOXX 50, FTSE4Good and DJSI Europe indexes.