



PRESS RELEASE

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Air Liquide, Airbus and Groupe ADP partner to prepare Paris airports for the hydrogen era

Air Liquide, Airbus and Groupe ADP have signed a Memorandum of Understanding (MoU) to prepare the groundwork for hydrogen infrastructure deployment at Paris airports in anticipation of the arrival of hydrogen-powered commercial aircraft by 2035.

The partners will leverage their respective expertise to support the decarbonization of the aviation industry and to define the concrete needs and opportunities that hydrogen can bring to the sector. This partnership reflects the three partners' shared ambition to contribute to the emergence of an innovative and strategic French sector dedicated to achieving climate-neutral aviation worldwide.

To prepare for the arrival of the first hydrogen-powered commercial aircraft by 2035, **airports will need to adapt their infrastructure. In particular, liquid hydrogen production, storage and distribution systems will need to be defined.** The partnership announced today focuses on carrying out **feasibility studies** aimed at conceptualizing this infrastructure.

As a first step, a study involving **a representative panel of around 30 airports worldwide** will be launched to assess potential configurations for liquid hydrogen production, supply and distribution. **Detailed scenarios and plans will then be drawn up for the two main Paris airports: Paris-Charles de Gaulle and Paris-Orly.** These scenarios will be essential to defining the required infrastructure, including scope and location, and to identifying and integrating the constraints relative to both industrial and aviation safety standards.

This partnership brings together **complementary expertise** with the ambition to support – starting today – the transformation of airports and to pave the way for a new era of sustainable air travel.

Matthieu Giard, Air Liquide Group Executive Committee member and Vice-President of Hydrogen Activities, said: *"Air Liquide recently announced ambitious commitments to achieve carbon neutrality by 2050. We must now take action, notably by accelerating the development of the hydrogen sector in order to prepare for the future. To the aviation industry, Air Liquide brings its unique expertise in the hydrogen supply chain and, in particular, its technical mastery of liquid hydrogen, which requires exceptional proficiency in cryogenics. This partnership, led by three major players, reflects a shared desire to accelerate the energy transition and to build the future for more sustainable aviation."*

Antoine Bouvier, Airbus Head of Strategy, Mergers & Acquisitions and Public Affairs, added: *"This partnership between an aircraft manufacturer, an airport authority and a hydrogen expert is an important and necessary step to prepare for the entry-into-service of a zero-emission aircraft by 2035. By starting to introduce hydrogen at Paris airports now, we underscore the shared ambition of an entire ecosystem to make the decarbonization of the aviation sector possible and to achieve our emissions-reduction targets."*

And **Edward Arkwright, Groupe ADP Deputy CEO**, concluded: *"With our partners, we are ready to launch feasibility studies to enable the gradual introduction of hydrogen at Paris airports. We must prepare – starting today – to welcome hydrogen aircraft by 2035 by transforming our airports into hydrogen hubs, which, along with other solutions, such as sustainable aviation fuel, will enable the decarbonization of air travel."*

Hydrogen commitment

For Air Liquide

In full support of the 2015 Paris agreement, the Air Liquide commitments address the urgency of climate change and energy transition, targeting carbon neutrality by 2050. As a pioneer in hydrogen, the Group is convinced that hydrogen is a cornerstone of the energy transition. In the past 50 years, the Group has developed unique expertise enabling it to master the entire supply chain, from production and storage to distribution, contributing to the widespread use of hydrogen as a clean energy carrier for a wide range of applications such as industrial usages and clean mobility.

Air Liquide is committed to reaching several goals, investing approximately 8 billion Euro in the low-carbon hydrogen full value chain by 2035, and a total of 3-GW electrolysis capacity by 2030.

For Airbus

At Airbus, we are committed to leading the decarbonization of the aerospace sector. This includes reducing the CO₂ emissions of our aircraft, satellites and launch vehicles, as well as our industrial environmental footprint at sites worldwide and throughout our supply chain. To this end, we are contributing to meet key industry-wide environmental performance targets. We are also focused on delivering on our ambition to bring the world's first zero-emission commercial aircraft to market by 2035.

For Groupe ADP

The Group brings together a unique ecosystem to enable the gradual introduction of hydrogen at Paris airports. We must prepare – starting today – to welcome hydrogen aircraft by 2035 by transforming our airports into hydrogen hubs, in which we can develop multiple uses, alongside our stakeholders, around land mobility. The deployment of hydrogen, along with other solutions, such as sustainable aviation fuel, aims to accelerate the decarbonization of air travel.

About Air Liquide

Corporate Communications: media@airliquide.com

Investor Relations: IRTeam@airliquide.com

A world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 78 countries with approximately 64,500 employees and serves more than 3.8 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.

Air Liquide's ambition is to be a leader in its industry, deliver long-term performance and contribute to sustainability - with a strong commitment to climate change and energy transition at the heart of its strategy. The company's customer-centric transformation strategy aims at profitable, regular and responsible growth over the long term. It relies on operational excellence, selective investments, open innovation and a network organization implemented by the Group worldwide. Through the commitment and inventiveness of its people, Air Liquide leverages energy and environment transition, changes in healthcare and digitization, and delivers greater value to all its stakeholders.

Air Liquide's revenue amounted to more than 20 billion euros in 2020. Air Liquide is listed on the Euronext Paris stock exchange (compartment A) and belongs to the CAC 40, EURO STOXX 50 and FTSE4Good indexes.

More information on: www.airliquide.com and on Twitter: [@airliquidegroup](https://twitter.com/airliquidegroup)

About Airbus

Press contact: Matthieu Duvelleroy, +33 (0)6 29 43 15 64 - matthieu.duvelleroy@airbus.com

Airbus pioneers sustainable aerospace for a safe and united world. The Company constantly innovates to provide efficient and technologically advanced solutions in aerospace, defence, and connected services. In commercial aircraft, Airbus offers modern and fuel-efficient airliners and associated services. Airbus is also a European leader in defence and security and one of the world's leading space businesses. In helicopters, Airbus provides the most efficient civil and military rotorcraft solutions and services worldwide.

More information on: www.airbus.com and on Twitter: [@Airbus](https://twitter.com/Airbus) & [@AirbusPress](https://twitter.com/AirbusPress)

About Groupe ADP

Press contact: Lola Bourget, Head of Medias and Reputation Department, +33 (0)1 74 25 23 23

Investor Relations: Audrey Arnoux, Head of Investor Relations, +33 (0)6 61 27 07 39 - invest@adp.fr

Groupe ADP develops and manages airports, including Paris-Charles de Gaulle, Paris-Orly and Paris-Le Bourget. In 2020, the group handled through its brand Paris Aéroport about 33.1 million passengers and 1.8 million metric tons of freight and mail at Paris-Charles de Gaulle and Paris-Orly, and nearly 96.3 million passengers in airports abroad.

Boasting an exceptional geographic location and a major catchment area, the Group is pursuing its strategy of adapting and modernizing its terminal facilities and upgrading quality of services. The group also intends to develop its retail and real estate businesses. In 2020, group revenue stood at €2,137 million and net income at €-1,169 million.

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More information on: www.groupeadp.fr and on Twitter: [@GroupeADP](https://twitter.com/GroupeADP)