

Paris, January 3, 2017



USA: Air Liquide operates the world's largest hydrogen storage facility

Air Liquide has recently commissioned the largest hydrogen storage facility in the world, an underground cavern in Beaumont, Texas, in the Gulf Coast region of the U.S.

This unique hydrogen storage cavern complements Air Liquide's robust supply capabilities along the Gulf Coast, offering greater flexibility and reliable hydrogen supply solutions to customers via Air Liquide's extensive Gulf Coast Pipeline System.

The underground storage cavern is 1,500 meters deep and nearly 70 meters in diameter. The facility is capable of holding enough hydrogen to back up a large-scale steam methane reformer (SMR) unit for 30 days. Hydrogen is typically reformed from natural gas, since it is present in very small quantity in the air. As such, it is of great benefit to have a large, interconnected storage solution to **optimize supply to customers reliably and efficiently**. Hydrogen is used in the refining process to desulfurize fuels and in a number of other industrial and manufacturing processes.

Hydrogen's environmentally sustainable benefits go beyond its industrial applications. As clean energy, hydrogen used for mobility powers fuel cell vehicles with zero emissions, and can be stored and used to help manage electric grid demand.

This new hydrogen cavern follows the commissioning of Air Liquide's [first pure helium storage facility](#) in Germany in July 2016. These initiatives illustrate Air Liquide's innovative technologies and engineering capabilities to provide a reliable supply chain.

Michael Graff, Member of the Air Liquide Group's Executive Committee and Executive Vice-President for the Americas, said: ***"Air Liquide's investment in the world's largest hydrogen storage cavern is supported by the strength of the refining and petrochemicals markets along the U.S. Gulf Coast and the rising demand for hydrogen. This unique facility positions us to deliver even greater value to customers through innovative solutions."***

Hydrogen for industry use

Hydrogen is used today in many industrial sectors, especially in the oil refining process to produce sulphur-free fuels that comply with environmental regulations to chemicals and petrochemicals for the production of everyday products including polyurethanes (foams) for construction materials, polycarbonates for DVDs, and nylons for textiles. Air Liquide is also leading the way in producing hydrogen for use as a clean and sustainable energy for Fuel Cell Electric Vehicles.

Air Liquide Gulf Coast and Mississippi River Pipeline Systems

Air Liquide operates an extensive industrial gas pipeline system, which spans nearly 3,200 kilometers, supplying oxygen, nitrogen and hydrogen to customers along the U.S. Gulf Coast in Texas and Louisiana.

Air Liquide in the Americas

Air Liquide in the Americas is present in 14 countries across North America, Central America and the Caribbean, and South America. Air Liquide companies in the Americas offer industrial and medical gases, technologies and related services to customers in many industries including energy, industrial manufacturing, electronics and healthcare markets.

CONTACTS

Corporate Communications

Caroline Brugier
+33 (0)1 40 62 50 59
Aurélie Wayser-Langevin
+33 (0)1 40 62 56 19

American Air Liquide Communications

Michael Rosen
+1 713 624 8023

Investor Relations

Paris
+33 (0)1 40 62 50 87
Radnor
+1 (0) 610 263 8277

The world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 80 countries with approximately 68,000 employees and serves more than 3 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 lead its industry, deliver long-term performance and contribute to sustainability. The company's customer-centric transformation strategy aims at profitable 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 revenues amounted to €16.4 billion in 2015, and its solutions that protect life and the environment represented more than 40% of sales. On 23 May 2016, Air Liquide completed its acquisition of Airgas, which had revenues amounting to \$5.3 billion (around €4.8 billion) for the fiscal year ending 31 March 2016.

Air Liquide is listed on the Paris Euronext stock exchange (compartment A) and belongs to the CAC 40 and Dow Jones Euro Stoxx 50 indexes.

* Following the acquisition of Airgas on 23 May 2016