

News Release



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Air Products and thyssenkrupp Sign Exclusive Strategic Cooperation Agreement for World-Scale Electrolysis Plants to Generate Green Hydrogen

LEHIGH VALLEY, PA (July 6, 2020) – Air Products (NYSE: [APD](#)), a world leader in industrial gases megaproject development, and [thyssenkrupp Uhde Chlorine Engineers](#), the world leader in technologies and comprehensive solutions for large-scale electrolysis plants, today announced the signing of a Strategic Cooperation Agreement (SCA). The two companies will collaborate exclusively in key regions, using their complementary technology, engineering and project execution strengths to develop projects supplying green hydrogen.

thyssenkrupp will deliver its technology and supply specific engineering, equipment and technical services for water electrolysis plants to be built, owned and operated by Air Products. The collaboration leverages thyssenkrupp's technology supporting Air Products' development of green hydrogen as an energy carrier for sustainable transportation, chemicals and power generation.

"The SCA with thyssenkrupp is an important element of our value chain in developing, building, owning and operating world-scale projects and supplying green hydrogen for mobility, energy and industrial applications. We look forward to applying our complementary strengths and delivering substantial sustainability benefits through transformational green hydrogen projects," said [Dr. Samir J. Serhan](#), Chief Operating Officer at Air Products.

"We are proud to cooperate with Air Products in making value chains for fuels, chemicals, and industry feedstocks sustainable. Large-scale electrolysis is the key technology to connect renewable power to the different sectors of mobility and industry. As a world market leader in electrolysis we bring in both: technology and production capacity at scale. Already today, we are set to supply one gigawatt for water electrolysis plants per year, and we are prepared to ramp up the capacity in this rapidly evolving market," said Denis Krude, CEO at thyssenkrupp Uhde Chlorine Engineers.

thyssenkrupp has developed high-efficiency alkaline water electrolysis technology. With more than 600 projects and electrochemical plants worldwide with a total rating of over 10 gigawatts realized, thyssenkrupp has extensive in-depth knowledge in the engineering, procurement, and construction of these plants.

Matching the need for low-CAPEX, low-OPEX, reliable technology and solid project execution to make world-scale green hydrogen projects feasible, Air Products and thyssenkrupp are committed to deploying economic green hydrogen plants in the gigawatt size.

About Air Products

Air Products (NYSE: [APD](#)) is a world-leading industrial gases company in operation for nearly 80 years. Focused on serving energy, environment and emerging markets, the Company provides essential industrial gases, related equipment, and applications expertise to customers in dozens of industries, including refining, chemical, metals, electronics, manufacturing, and food and beverage. Air Products is also the global leader in the supply of liquefied natural gas

process technology and equipment. The Company develops, engineers, builds, owns and operates some of the world's most significant industrial gas projects, including gasification projects that sustainably convert abundant natural resources into syngas for the production of high-value power, fuels, and chemicals.

The Company had fiscal 2019 sales of \$8.9 billion from operations in 50 countries and has a current market capitalization of about \$50 billion. More than 17,000 passionate, talented, and committed employees from diverse backgrounds are driven by Air Products' higher purpose to create innovative solutions that benefit the environment, enhance sustainability and address the challenges facing customers, communities, and the world. For more information, visit airproducts.com or follow us on [LinkedIn](#), [Twitter](#), [Facebook](#), or [Instagram](#).

About thyssenkrupp

thyssenkrupp is a technology group with strengths in materials. Over 162,000 employees in 78 countries work with passion and technological know-how to develop high-quality products and intelligent industrial processes and services for sustainable progress. Their skills and commitment are the basis of our success. In fiscal year 2018/2019 thyssenkrupp generated sales of €42.0 billion.

The Chemical & Process Technologies business unit combines unique technological expertise and decades of global experience in the engineering, procurement, construction and service of chemical plants. We develop innovative processes and products for a more sustainable future and thus contribute to the long-term success of our customers in almost all areas of the chemical industry. Our portfolio includes leading technologies for the production of basic chemicals, fertilizers and polymers as well as complete value-chains for green hydrogen and sustainable chemicals.

For more information visit: www.thyssenkrupp-industrial-solutions.com

NOTE: This release may contain forward-looking statements within the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on management's reasonable expectations and assumptions as of the date of this release regarding important risk factors. Actual performance and financial results may differ materially from projections and estimates expressed in the forward-looking statements because of many factors not anticipated by management, including risk factors described in the Company's Form 10K for its fiscal year ended September 30, 2019.

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