September 9, 2024

First Ammonia Series B advances its flagship facility in Victoria, Texas and establishes ties to Asia

First Ammonia is proud to announce a milestone in its Series B round with investments from a group of global investors including the Development Bank of Japan affiliated company Mercuria Holdings and Tokyo-based investment company Manies Group.

The Series B investments will launch the fabrication of First Ammonia's next generation green ammonia plant, which will deploy Topsoe's solid oxide electrolyzer cells (SOEC) integrated with an ammonia loop to maximize the ammonia output with the lowest possible electricity input. Designed for fluctuating operations, this plant will ramp up and down to match the availability of renewable energy and contribute to the stability of the local grid.



Image of First Ammonia's flagship facility under development in Victoria, Texas

With a partnership for up to 5GW of production, First Ammonia and Topsoe are working together to create a future of flexible, decentralized, green ammonia production. The simplicity of the plant design lowers construction risk and cost, paving the way to a lower cost product. Meanwhile the flexibility in plant size and operation allows green plants to be built at the optimal size to match local resource availability with demand.

While ammonia today is produced in massive, centralized fossil gas or coal dependent plants, in the future the ammonia fertilizing our food supply will be created with renewable energy for greater security of supply and price stability. Clean ammonia is also a building block in the chemical sector, will serve as a fuel to provide electricity when wind and solar are absent, and will power international shipping to eliminate the carbon emissions and the toxic fumes harming the world's coastal communities.

This Series B represents an important step for realizing this green future. The investments bring First Ammonia closer to FID at its flagship facility at the Port of Victoria, Texas. As announced at the US -German Hydrogen Conference in Berlin in October 2023, First Ammonia has partnered closely with Uniper to deliver green ammonia as part of the global effort to reduce GHG emissions, with every 100MW plant equivalent to 180,000-240,000MT of CO₂ avoided per annum when compared to fossil ammonia. The value of this partnership was further highlighted in Uniper's Annual Report 2023 and Sustainability Report 2023.



Lance Titus (Uniper), Joel Moser (First Ammonia), and Kim Hedegaard (Topsoe) at the US-German Hydrogen Conference hosted by the German government in Oct 2023

The flagship facility in Victoria also benefits from the remarkable support of the Victoria community, as both the Victoria Economic Development Corporation and the Port of Victoria continue to make invaluable contributions to the realization of this groundbreaking plant.

While the Topsoe and Uniper partnerships have established First Ammonia's transatlantic ties, these Series B investments establish First Ammonia's transpacific ties to Japan and the larger Asia-Pacific region. Japan was the first country to publish a national hydrogen strategy in 2017, laying the foundation for an exceptional level of expertise on hydrogen and its derivatives. As Japan continues in its leadership role in clean ammonia, the partnership with Mercuria Holdings and the Manies Group will help expand First Ammonia's presence in the region.

Quotes:

"We are excited to welcome Mercuria Holdings and the Manies Group to the First Ammonia team as we work together with our partners to decarbonize heavy industry, transport fuels, and power generation. Mercuria Holdings and the Manies Group each bring incredible networks and expertise. They will be pivotal as we build green plants from Texas to Southeast Asia, and around the world" – First Ammonia CEO Joel Moser

"First Ammonia is a pioneer in the industry, and Topsoe congratulates them on another successful fundraising round. We're thrilled to partner with a visionary and determined company on a groundbreaking project, which will be one of the earliest commercial-scale, green ammonia production facilities." – *Topsoe CEO Roeland Baan*

"We are pleased with First Ammonia's progress in advancing their Port of Victoria Green Hydrogen Project with compelling economics and configuration aligned with RFNBO requirements." – Uniper CCO Carsten Poppinga

"As Japan aims to achieve carbon zero by 2050, green ammonia will be important in decarbonization projects, and the best place for it is outside Japan. Through this investment, we will not be limited to the business in the private sector but will have the potential to build a medium to long-term, epic-scale platform business (green ammonia supply chain) by collaborating between the public and private sectors and involving strategic partners in Asia. With this investment, we hope to contribute to building a green ammonia supply chain through our main business of fund management." – Mercuria Holdings Inc CEO Toshihiro Toyoshima

"We feel it is our mission to be able to develop this project as a partner making strategic preparations from the management side, especially for expansion in Asia, in which major players with high credibility from the United States and Europe are participating. While making the most of our company's edge as an innovator, we will collaborate with offtakers mainly in Japan and promote transportation and related infrastructure development projects in the future, contributing to increasing Japan's presence in the green ammonia business."

– Manies Group Inc. CEO Hirotsugu Fujii

Companies:

About First Ammonia

First Ammonia is developing modular, commercial-scale plants to produce green ammonia from fluctuating renewable energy using efficient SOEC technology. First Ammonia has secured a supply of 5GW of electrolyzers from Topsoe with the world's largest ever electrolyzer capacity reservation agreement. First Ammonia is acquiring project sites around the world with access to low-cost, surplus renewable energy. Green ammonia will play a central role in the decarbonization of agriculture, chemicals, power generation and storage, and transportation as a renewable energy-based fuel that is carbon-free end to end. Headquartered in New York, First Ammonia will operate production facilities on five continents, with the help of our engineering and project development team that spans First Ammonia offices in Houston-Texas and Copenhagen-Denmark.

About Topsoe

Topsoe is a leading global provider of technology and solutions for the energy transition. Topsoe combats climate change by helping its customers and partners achieve their decarbonization and emission reduction goals.

Based on decades of scientific research and innovation, Topsoe offers world-leading solutions for transforming renewable resources into fuels and chemicals for a sustainable world, and for efficient and low-carbon fuel production and clean air.

Founded in 1940, Topsoe is headquartered in Denmark, with over 2,800 employees serving customers all around the globe. To learn more, visit www.topsoe.com.

About Uniper

Düsseldorf-based Uniper is an international energy company with activities in more than 40 countries. The company and its roughly 7,000 employees make an important contribution to supply security in Europe, particularly in its core markets of Germany, the United Kingdom, Sweden, and the Netherlands.

Uniper intends to be completely carbon-neutral by 2040. Uniper aims for its installed power generating capacity to be more than 80% zero-carbon by 2030. To achieve this, the company is transforming its power plants and facilities and investing in flexible, dispatchable power generating units. Uniper is already one of Europe's largest operators of hydropower plants and is helping further expand solar and wind power, which are essential for a more sustainable and secure future. The company is progressively expanding its gas portfolio to include green gases like hydrogen and biomethane and aims to convert to these gases over the long term.

About Mercuria Holdings Co.

Mercuria Holdings is a holding company of Mercuria Investment, established in 2005 by founding members from the Development Bank of Japan (DBJ). Mercuria Holdings is currently affiliated company of DBJ. Headquartered in Tokyo, the company also has offices in China, Hong Kong, Thailand, Vietnam, and Singapore. Under the corporate mission "Changing Today's Japan Through the Power of Funds," Mercuria manages funds that invest in alternative assets, such as buy-out, venture capital, real estate, aircraft and renewable energy, and makes principal investments in these funds as well as in promising companies and businesses. In recent years, Mercuria also has been focusing on environmental investments, primarily in the Asian region. Through its investment in First Ammonia, Mercuria aims to contribute to further promoting decarbonization not only in Japan but also in other Asian countries.

About Manies Group

The Manies Group is a Tokyo-based investment company that focuses on next-generation growth opportunities backed by cutting-edge technologies that lead a new era, Teams that can build business supply chains with foresight ahead of the times have been pioneering investment projects in the past, including renewable energy infrastructure business in Taiwan, with the ambition to build at least 500 MW of mega solar as of today.

The experience and contacts of the management team, which is made up of a diverse range of backgrounds, promote project management and develop business activities that are distinct from those of traditional financial institutions, based on the trust gained through such functions, the company is working to find major Japanese operating companies that will become off-takers for the green ammonia produced in the future and involve them in projects, in order to meet the expectations of our becoming the central axis in the establishment of a new business supply chain.