



Joint Press Release

First accredited low-carbon ammonia shipment for power generation dispatched from Saudi Arabia to Japan

- *Project supports Japan's ambitions to harness ammonia as a lower-carbon energy solution*
- *Aramco, FOC, SABIC AN, MOL, and JOE collaborate to deliver important milestone*
- *Low-carbon ammonia has significant potential to decarbonize hard-to-abate industries*

DHAHRAN, Saudi Arabia, April 21, 2023 – A first shipment of independently-certified low-carbon ammonia has arrived in Japan for use as fuel in power generation. It represents another milestone in the development of this lower-carbon energy solution.

The shipment is the result of a successful multiparty collaboration across the low-carbon ammonia value chain. The ammonia was produced by SABIC Agri-Nutrients ("SABIC AN") with feedstock from Aramco, and sold by Aramco Trading Company to the Fuji Oil Company ("FOC"). Mitsui O.S.K. Lines ("MOL") was tasked with shipping the liquid to Japan, then the low-carbon ammonia was transported to the Sodegaura Refinery for use in co-fired power generation, with technical support provided by Japan Oil Engineering Co ("JOE").

The ammonia is categorized as low-carbon because CO₂ from the associated manufacturing process was captured and utilized in downstream applications.

Japan's Ministry of Economy, Trade and Industry has announced plans to increasingly harness ammonia as a fuel for power generation and for ship propulsion, as part of the country's 2050 decarbonization goals.

Olivier Thorel, Aramco Senior Vice President of Chemicals, said: "This is another milestone that highlights the possibilities for low-carbon hydrogen and ammonia made from Aramco feedstock, with the potential to play a role in a lower-carbon future. Not only is low-carbon ammonia a means to transport lower-carbon hydrogen, it is an important energy source in its own right that can help decarbonize key sectors – including power generation for both utilities and industries. By dispatching this accredited low-carbon ammonia to Japan, we are helping chart a course for the development of this vital commodity."

Abdulrahman Shamsaddin, SABIC AN CEO, said: “Our aim is to capitalize on this important milestone to grow and expand our positive contribution toward carbon neutrality. SABIC Agri-Nutrients made a public commitment not only to become carbon neutral by 2050 but also to collaborate with customers to help them achieve their net-zero emission targets. Customers in the energy, fertilizer and chemical sectors are looking for suppliers of lower-carbon hydrogen and ammonia. And we can meet their demand by leveraging our long-standing strengths across the value chain.”

Shigeto Yamamoto, FOC Representative Director, President, said: “As Japan aims to achieve carbon neutrality by 2050, low-carbon ammonia is expected to be a next-generation fuel that can contribute to the reduction of CO2 emissions. In order to reduce CO2 emissions from our own operations, we have been working on co-firing ammonia, which is a by-product of the petroleum refining process, in the boiler at our Sodegaura Refinery, and we plan to burn low-carbon ammonia imported this time with the cooperation of our partners in the same boiler. We will continue these efforts to contribute to the construction of the ammonia supply chain.”

Mohammed Al-Mulhim, Aramco Trading Company CEO, said: “This landmark achievement is an example of excellent collaboration across businesses within Aramco, SABIC, Aramco Trading and our Japanese partners, and indeed a major boost for our sustainability efforts.”

Toshiaki Tanaka, MOL Representative Director, Executive Vice President Executive Officer, said: “Ammonia is expected to be in great demand as a next-generation, clean energy source. Japan aims to achieve a carbon-neutral society by 2050, and we are very pleased to transport independently-certified low-carbon ammonia from Saudi Arabia to Japan. We are aiming for a track record of safe, reliable services across multiple transportation modes, in accordance with our customers’ needs. By combining accumulated knowledge and proactively participating in a broad range of value chains, we hope to contribute to the decarbonization of society.”



The accredited low-carbon ammonia was transported to the Fuji Oil Company’s Sodegaura Refinery for use in co-fired power generation

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About Aramco

Aramco is a global integrated energy and chemicals company. We are driven by our core belief that energy is opportunity. From producing approximately one in every eight barrels of the world's oil supply to developing new energy technologies, our global team is dedicated to creating impact in all that we do. We focus on making our resources more dependable, more sustainable and more useful. This helps promote stability and long-term growth around the world. www.aramco.com

About SABIC Agri-Nutrients

SABIC AN is a public joint stock company listed on the Saudi Exchange (Tadawul), where SABIC owns 50.1% with the remaining 49.9% being held by the private sector and the public on Saudi Exchange. It is one of the leading global fertilizer producers. SABIC AN's portfolio includes urea, ammonia, phosphate and other specialized products. www.sabic-agrinutrients.com/en

About FOC

FOC is an energy company that refines crude oil and sells petroleum products. One of our corporate philosophies is "stable supply of energy". By importing crude oil from countries around the world, mainly from the Middle East, and producing various petroleum products and stably shipping them both domestically and internationally, we play an important role in supplying energy that supports people's lives and industries. www.foc.co.jp/en/

About MOL

Mitsui O.S.K. Lines is a global leading shipping company operating about 800 ships across the world, headquartered in Japan. MOL develops various social infrastructure businesses centering on ocean shipping, technologies and services to meet ever-changing social needs including environmental protection. MOL's fleet includes dry cargo ships, liquefied natural gas carriers, Ro-Ro car carrier ships, oil tankers, etc. In addition to the traditional shipping businesses, MOL offers social infrastructure businesses including real estate, terminal and logistics, offshore wind power, as well as a Wellbeing & Lifestyle Business such as real estate, cruise ship and ferry. www.mol.co.jp/en/