

PRESS RELEASE

2022-11-02

MHI and Indonesia Power Jointly Investigate Co-Firing with Hydrogen, Biomass and Ammonia in Power Plants Across Indonesia



[Pictured from left to right] Osamu Ono (Chief Regional Officer, Asia Pacific & India/MHI), Rachmad Handoko (Director/Indonesia Power) and Darmawan Prasodjo (President Director/PLN) at signing ceremony

Singapore, November 2, 2022 – Mitsubishi Heavy Industries, Ltd. (MHI), and PT. PLN Indonesia Power, a sub-holding of Indonesia’s state-owned electricity provider PT. PLN (Persero) (PLN), yesterday concluded a Memorandum of Understanding (MoU) to commence three feasibility studies on co-firing less carbon intensive fuels at power plants owned and operated by Indonesia Power. The three studies will be conducted jointly by Indonesia Power and MHI with support from its power solutions brand, Mitsubishi Power, and will aid in the advancement of solutions to accelerate the decarbonization of energy systems in Indonesia.

The first study will examine the technical and economic feasibility of co-firing up to 100% biomass at the Suralaya coal-fired power plant (CFPP). The study will consider various aspects of the biomass supply chain, including handling, storage, transport and boiler modification.

1/3

Mitsubishi Heavy Industries, Ltd.

Marunouchi Nijubashi Bldg., 3-2-3 Marunouchi, Chiyoda-ku, Tokyo, 100-8332, Japan
Email: mediacontact_global@mhi.com
Brand Magazine: spectra.mhi.com

MOVE THE WORLD FORWARD  **MITSUBISHI**
HEAVY
INDUSTRIES
GROUP

The second study, which will also use Suralaya CFPP as the reference plant, will investigate co-firing of ammonia produced by existing ammonia plants in Indonesia. A particular area of focus will be the potential to establish a blue ammonia supply chain with production and transportation from the ammonia plant and ammonia co-firing technology to apply in existing boiler.

The third study will evaluate technical and economic feasibility of hydrogen co-firing in an M701F gas turbine at the Tanjung Priok gas turbine combined cycle (GTCC) facility. MHI completed construction of the plant's Unit 2 GTCC system in 2019 as part of PLN's plans to build an 880 MW plant under the Jawa-2 Project.

The MoU was inked at an Energy Transition Day event organized by Indonesia's PLN Group on November 1, 2022. The event included discussions of initiatives and recommendations to achieve Indonesia's commitment of reaching net zero emissions by 2060, with over 250 industry professionals, government representatives and business leaders in attendance.

Osamu Ono, Senior Vice President, Chief Regional Officer, Asia Pacific & India, MHI, said: "For over 50 years, MHI and its power solutions brand Mitsubishi Power have helped evolve Indonesia's energy landscape, playing major roles in significant energy projects across the country. This new agreement with Indonesia Power will not only enhance the reliability and efficiency of existing facilities, including the Tanjung Priok plant we helped build, but also explore innovative solutions imperative to achieving urgent environmental sustainability goals while delivering on the country's critical energy needs."

Edwin Nugraha Putra, President Director, PT PLN Indonesia Power, said: "We are pleased to deepen our partnership with MHI to enable greater adoption of renewable energy and cleaner fuels, thus helping to achieve a sustainable energy transition in Indonesia. This new agreement underscores our commitment to support the continued development and decarbonization of the country's energy sector."

This new MoU builds on strong existing cooperation between MHI and PLN in Indonesia. Since 1971, MHI's power solutions brand Mitsubishi Power has been supporting PLN and Indonesia Power with solutions for power plants across the country, including the Tanjung Priok, Suralaya and Grati power plants. More recently, in March this year, MHI and PLN, together with Institut Teknologi Bandung, prepared a joint proposal on biomass co-firing adoption at Indonesia's thermal power plants and presented their findings to the national government.

Through this MoU and other ongoing initiatives, MHI, with support from Mitsubishi Power, will work to help the country achieve its Net Zero Emission 2060 target.

###

2/3

Mitsubishi Heavy Industries, Ltd.

Marunouchi Nijubashi Bldg., 3-2-3 Marunouchi, Chiyoda-ku, Tokyo, 100-8332, Japan
Email: mediacontact_global@mhi.com
Brand Magazine: spectra.mhi.com

MOVE THE WORLD FORWARD  **MITSUBISHI
HEAVY
INDUSTRIES
GROUP**

About Mitsubishi Heavy Industries Group

Mitsubishi Heavy Industries (MHI) Group is one of the world's leading industrial groups, spanning energy, smart infrastructure, industrial machinery, aerospace and defense.

MHI Group combines cutting-edge technology with deep experience to deliver innovative, integrated solutions that help to realize a carbon neutral world, improve the quality of life and ensure a safer world.

For more information, please visit www.mhi.com or follow our insights and stories on spectra.mhi.com.

About Mitsubishi Power

Mitsubishi Power is a power solutions brand of Mitsubishi Heavy Industries, Ltd. (MHI). Across more than 30 countries worldwide, Mitsubishi Power designs, manufactures and maintains equipment and systems that drive decarbonization and ensure delivery of reliable power around the world. Among its solutions are a wide range of gas turbines including hydrogen-fueled gas turbines, solid-oxide fuel cells (SOFCs), and air quality control systems (AQCS). Committed to providing exemplary service and working with customers to imagine the future of energy, Mitsubishi Power is also spearheading the development of the digital power plant through its suite of AI-enabled TOMONI™ solutions.

For more information, please visit <https://power.mhi.com>.

[Mitsubishi Power Logo (Business Brand Logo)]



PRESS CONTACT:

Corporate Communication Department

Mitsubishi Heavy Industries, Ltd.

Email: mediacontact_global@mhi.com