

# Equinor Energy and Mitsubishi Heavy Industries sign MoU for low carbon technology collaboration

Equinor Energy AS (Equinor) and Mitsubishi Heavy Industries, Ltd. (MHI) are pleased to announce the signing of a Memorandum of Understanding (MoU) for a low carbon technology collaboration. The non-exclusive cooperation agreement will see both companies develop and use technology to reduce the carbon footprint of oil & gas operations. In particular, the companies will look at further developing the hydrogen and carbon capture, utilization and storage (CCS/CCUS) value chains.

Makoto Kanda, Senior Vice President of MHI said: *"The clear urgency to decarbonize all areas of our economies and the ongoing transformation of the energy sector require not only shorter innovation cycles but also a holistic view of the energy value chain. Closer cooperation between technology providers and energy companies - as reflected in this MoU - will contribute to a better response to the challenges ahead, while ensuring the efficient and reliable production and use of energy."*

Country manager for Equinor Japan, Karsten Stoltenberg said: *"As an energy company developing oil, gas and renewable energy, it is important for us to collaborate with companies that have a clear vision for shaping the future of energy. Japan has set ambitious climate change commitments and is the home of large companies driving hydrogen and low carbon technology developments. Signing an MOU with a major technology provider like MHI will enable us to continue working on reducing the CO2 footprint from our oil and gas operations as well as developing new value chains at even greater speed"*

To date, MHI group provides a number of technologies along the hydrogen and CCUS value chains, including CO<sub>2</sub> capture, compression, regasification, and pressurization equipment. MHI has also further developed its advanced class gas turbines to be capable of utilizing hydrogen, currently at 30%, and ultimately 100%. Furthermore, the company's solid oxide fuel cell (SOFC) units can generate both electricity and heat. Thanks to its competence in shipbuilding, MHI group also provides solutions for long-distance CO<sub>2</sub> transport as the company draws on its expertise of building liquefied petroleum gas (LPG) carriers and liquefied natural gas (LNG) carriers which have the same architectural model as the LCO<sub>2</sub> ships needed in the CCUS value chain.

Equinor will develop business opportunities to de-carbonize existing value chains related to the oil and gas business, such as CCUS and hydrogen, and create synergies between renewable and oil & gas value chains. Equinor has strengthened its ambitions and aims to become climate neutral within 2050. The ambition concerns production emissions and energy use. The current portfolio will be developed to expand the renewable energy components which will be fundamental to achieving the goals of the Paris Agreement.

The MoU was signed by Sophie Hildebrand, Senior Vice President for Research & Technology, Equinor and Makoto Kanda, Senior Vice President of Mitsubishi Heavy Industries, Ltd.