ENEOS, JERA, and JFE Holdings to Begin Joint Study of a Hydrogen and Ammonia Supply Collaboration Based at the Keihin Waterfront Area

TOKYO – 21 April 2022 – ENEOS Corporation ("**ENEOS**"), JERA Co., Inc. ("**JERA**"), and JFE Holdings, Inc. ("**JFE**") have concluded a memorandum of understanding and begun to discuss in detail the possibility of establishing a hydrogen and ammonia receiving and supply base, and developing a supply project at the Keihin Waterfront Area in Kanagawa Prefecture.

Technological development is underway for the practical use of hydrogen and ammonia as next-generation clean fuels that do not emit CO₂ during combustion. Given an assumption of large-scale consumption of hydrogen and ammonia at power plants and industrial areas, it is essential to develop large-scale receiving and supply bases near high-demand areas.

At the Keihin Waterfront Area, located in the center of the Kanto region where energy demand is large, ENEOS owns refineries and a plant, JERA owns thermal power plants and an LNG receiving terminal, and main business area of both companies is an energy supply. In addition, JFE is working with Kawasaki City to devise options for repurposing land at the company's East Japan Works, where blast furnace and other facility operations will be suspended, and also deep-water wharves capable of docking large ships on Ogishima island and adjacent inland areas.

The three companies have decided to consider utilizing their business foundations in this area to collaborate on the following aspects of the hydrogen and ammonia supply business:

- Establishment of a hydrogen and ammonia receiving and supply base
- Development of a hydrogen and ammonia supply network
- Considering hydrogen and ammonia suppliers, transportation carriers, and transportation methods

One of the ENEOS Group's envisioned goals stated in its Long-Term Vision to 2040 is to contribute to the development of a low-carbon, recycling-oriented society and ENEOS Group are working to achieve this vision. Among hydrogen and ammonia, ENEOS is accelerating our efforts with a particular focus on the mass consumption of hydrogen. In anticipation of a hydrogen-oriented society, ENEOS is striving to develop a CO2-free hydrogen supply chain in Japan and

overseas, in addition to operating hydrogen stations for FCVs in Japan. In this study, ENEOS will consider the establishment of a base for receiving CO2-free hydrogen produced outside Japan and for supplying large-scale hydrogen customers in the vicinity.

Under its "JERA Zero CO₂ Emissions 2050" objective, JERA has been working to reduce CO₂ emissions from its domestic and overseas businesses to zero by 2050, to promote the adoption of greener fuels, and to pursue thermal power that does not emit CO₂ during power generation. JERA will continue to contribute to energy industry decarbonization through its own proactive efforts to develop decarbonization technologies while ensuring economic rationality.

JFE has been striving to reduce its own CO₂ emissions as well as throughout society based on the JFE Group Environmental Management Vision 2050, which is targeting a carbon-neutral JFE by 2050. In the Keihin Waterfront Area, JFE will spearhead efforts to establish a supply chain for decarbonized fuels such as hydrogen and ammonia by repurposing land that is part of JFE Steel's East Japan Works on Ogishima island. Through these and related initiatives, JFE hopes to play a leading role in realizing a zero-carbon metropolitan Tokyo.

The three companies will contribute to the establishment of a stable and economical supply chain for decarbonized fuels to achieve carbon neutrality by utilizing their accumulated technologies, knowledge, and assets.



Keihin Waterfront Area (courtesy of Kawasaki City)