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Press Release

The Japan Research Institute, Limited
Mitsubishi Heavy Industries, Ltd.
INPEX CORPORATION

JRI, MHI and INPEX Enter Contract with METI for Feasibility Study on CCS-EOR projects in Southern Mexico

(FY2015 Global Warming Mitigation Technology Promotion Project)

The Japan Research Institute, Limited (Head office: Shinagawa-ku Tokyo, President & CEO: Masahiro Fuchizaki, hereinafter referred to as "JRI"), Mitsubishi Heavy Industries, Ltd. (Head office: Minato-ku Tokyo, President & CEO: Shunichi Miyanaga, hereinafter referred to as "MHI") and INPEX CORPORATION (Head office: Minato-ku Tokyo, President & CEO: Toshiaki Kitamura, hereinafter referred to as "INPEX") (the three companies shall hereinafter be collectively referred to as "the feasibility study consortium") have submitted a joint proposal in response to a public offer by the Ministry of Economy, Trade and Industry (METI) on "Feasibility Study on CCS-EOR projects in Southern Mexico - FY2015 Global Warming Mitigation Technology Promotion Project (*1)" (hereinafter referred to as "commissioned work"). The feasibility study consortium has concluded a contract concerning the commissioned work with METI.

The commissioned work will be carried out from October 2015 to March 2016 to study the capability of CCS-EOR(*2) in Southern Mexico(*3) by applying the technology and know-how of the feasibility study consortium. CCS-EOR is the set of technologies that captures CO2, which is emitted from factories and power plants, and injects CO2 to the oil fields to enhance oil recovery. The feasibility study consortium will implement the evaluation of CO2 sources at petrochemical plants and refineries, investigate the EOR targeted oil fields, estimate the overall business profitability, and conduct other studies which are necessary to realize CCS-EOR.

Based on the study outcome, the feasibility study consortium will consider the business scheme of CCS-EOR and also examine the possible use of "Joint Crediting Mechanism" (JCM), the countermeasure for global warming promoted by the Government of Japan.

Project Structure

The feasibility study consortium appointed by METI will conduct the commissioned work in cooperation with Sumitomo Mitsui Banking Corporation (Head office: Chiyoda-ku Tokyo, President & CEO: Takeshi Kunibe, hereinafter referred to as "SMBC").

JRI:	Manage the commissioned work
	Draft the policies related to the Joint Crediting Mechanism
	Establish the methodology of GHG emissions reduction
MHI:	Evaluate CO2 sources
	Review CCS-EOR facilities
INPEX:	Provide expertise related to CCS-EOR
	Evaluate applicability of CO2-EOR
SMBC:	Analyze financing and financial support programs related to CCS-EOR

*1 Global Warming Mitigation Technology Promotion Project

Its objectives are to demonstrate the effectiveness of JCM and Japanese low carbon technologies/products, to disseminate the low carbon technologies/products in the partner countries and to increase the number of JCM partner countries by recommending new policies and business schemes in the potential JCM partner countries (including existing JCM partner countries).

*2 CCS-EOR

CCS(Carbon dioxide Capture and Storage) is the set of technologies that separates/captures CO2 emitted from factories and power plants, and sequestrates CO2 underground, where CO2 can be stored stably for a long time. Through CCS, a large amount of CO2, one of the major greenhouse gases, can be reduced. The Intergovernmental Panel on Climate Change (IPCC), a scientific intergovernmental body under the auspices of the United Nations collecting and organizing scientific knowledge about climate change, nominates CCS-EOR as one of the most important actions against climate change. For the consideration of separation/capture of CO2 in the project, the feasibility study consortium will apply the KM CDR Process® (a kind of chemical absorption process), which uses the high-performance solvent "KS-1™" that MHI and the Kansai Electronic Power Company co-developed.

EOR(Enhanced Oil Recovery) is the technology that can increase the recovery of crude oil by injecting CO2 and/or chemicals into oil reservoirs. CCS-EOR is the combination of CCS and EOR.

*3 Mexico

The volume of oil production in Mexico is ranked 10th in the world, yet its production volume is rapidly decreasing after 2004 due to the maturity of major oil fields and the stagnation of new oil field development. Mexico addresses the reconstruction of oil industry as a prime task and the enhancement of oil production through EOR is equally as significant as the development of shale layers and deep water oil fields in the Gulf of Mexico.

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