

JX Nippon Oil & Gas Exploration Corp. (JX) selected Gas-EOR and Deepwater field development technologies as the key technologies and is striving to acquire the technologies.

• Gas EOR

Following CO₂-EOR pilot test with JOGMEC in Vietnam, HCG-EOR has been carried out since 2014 in Vietnam. JX also has been participating in the CCUS project in Texas, USA since 2014. This CCUS project is a collection of 5,000 tons of CO₂ from exhaust gas of the power plant and carrying out CO₂-EOR at the onshore oil field. Incremental oil production from the field has started this year. For the CCS plant, there was a challenge to expand the scale from the test plant to one of the world's largest plants, but we were able to achieve stable operation. Since it is useful for countermeasures against global warming, the project is subsidized by the US Department of Energy, and it is positioned as a part of environmental contribution in our business. EOR effect is confirmed in both projects, and JX is continuing its efforts to optimize production.

• Deepwater field Development

JX has found deep-water oil field, where the company holds operatorship. Various studies to select optimum field development options have been conducted with JOGMEC.

While the use of proven, standardized technologies is dominant for optimization, we are also investigating new technologies to be available near future. This is with the aim to assess practicability and impacts, both positive and negative; of new technologies those could be considered for future projects.

JX石油開発では重点技術としてGas EOR、深海油ガス田開発技術の獲得に取り組んでいます。

Gas EORではJOGMEC殿との共同研究として実施したCO₂-EORパイロットテストを経て、ベトナムのHCG-EOR、米国のCCUSプロジェクトを実施し、両EORプロジェクトにおいて増産効果を確認しています。CCUSプロジェクトは発電所の排気からCO₂を回収し、油田にCO₂-EORを行うもので、本年、油田からの増産を開始しました。CCSプラントはテストプラントの規模を拡大、世界最大級のプラントを導入するチャレンジがありましたが、現在までに安定運転を達成できています。本プロジェクトは地球温暖化対策にも役立つため、米国エネルギー省の補助金対象事業となっており、当社の環境貢献事業としても位置付けています。

深海油ガス田開発技術については、当社がオペレーターとして取り組んでいる深海油田に関しJOGMEC殿の協力を得つつ、開発作業の最適化についてスタディを重ねています。すでに実用化され、標準化された技術を用いた開発最適化が中心ですが、一方で近い将来利用可能と予想される新しい技術についても調査し、さらなる最適化の可能性を評価しています。