

profile:

# Russia – Sakhalin-1



**ExxonMobil**

Taking on the world's toughest energy challenges.™



The challenges of developing the technically complex Sakhalin-1 Project offshore eastern Russia are complicated by the harsh Arctic environment. Understanding the local cultural, political and physical environments is critical to success.

Exxon Neftegas Limited (ENL), a subsidiary of Exxon Mobil Corporation, is operator of the Sakhalin-1 Project, which is located offshore Sakhalin Island. Our partners include the Japanese company Sakhalin Oil and Gas Development Co. Ltd.; affiliates of Rosneft, the Russian state-owned oil company, RN-Astra and Sakhalinmorneftegas-Shelf; and the Indian state-owned oil company ONGC Videsh Ltd.



Production of these fields is challenged by the presence of pack ice, one to 1.5 meters (three to five feet) thick six to seven months out of the year, and severe wave and earthquake activity year-round. Overcoming daunting weather-related barriers, coupled with the need to build a complete oil and gas infrastructure in such a remote location, has created unique challenges. After 10 years in development, first production flowed from the Chayvo field in early October 2005. Following the completion of the Onshore Processing Facility in late 2006, production reached 250,000 barrels of oil a day in February 2007.

Future phases will involve development of Chayvo gas reserves for export, as well as development of the Odoptu and Arkutun-Dagi fields. Lessons learned from the initial development phase will be incorporated to improve the economics and operation of future phases.

## application of advanced technology

The first phase of Sakhalin-1 comprises an onshore drilling rig with numerous extended-reach wells and an offshore drilling and production platform. Standing 230 feet tall (70 meters), the Chayvo land-based drilling rig, Yastreb ("Hawk"), is the largest and most powerful land rig in the industry, designed to withstand earthquakes and severe Arctic temperatures.

Yastreb drills down and then horizontally under the sea floor a total distance of more than seven miles (11 kilometers), making these extended-reach wells the longest in the world. Several record-breaking wells have already been drilled. Extended-reach wells reduce development costs and minimize marine impacts by avoiding the need for additional offshore structures. Using ExxonMobil's proprietary Fast Drill technology, Sakhalin-1 wells are the world's fastest-drilled extended-reach drilling wells.



## responsible and reliable operations

During the more than 68 million work hours of construction and drilling activities associated with the Sakhalin-1 Project, employees and contractors achieved a level of safety performance for lost-time injury rates significantly better than the average for the oil and gas industry. Diligent procedures and oversight are employed to ensure legal and regulatory standards are met.

Environmental protection measures are an integral part of project construction and operations activities, with specialized programs to protect native wildlife, including the western gray whale and Steller's sea eagle ("Orlan").

Close consultation with the indigenous people of Sakhalin Island has helped ENL understand important local issues. As a result, ENL regularly offers the use of its bridge over Chayvo Bay to local herders for the annual reindeer migration.

## national workforce development

More than 13,000 direct and indirect jobs were created for Russian nationals as part of the initial development. Hiring local employees builds capacity and contributes to local and national economic progress. At the same time, ENL utilizes new operational and safety standards and the latest construction, drilling, production, pipeline and other technologies.

ENL has recruited and hired more than 100 Russian operations technicians and engineers for its production facilities. Each of the technicians completes a multi-year training program. Some have been sent to ExxonMobil facilities in the United States and Canada for hands-on training.

## technical training

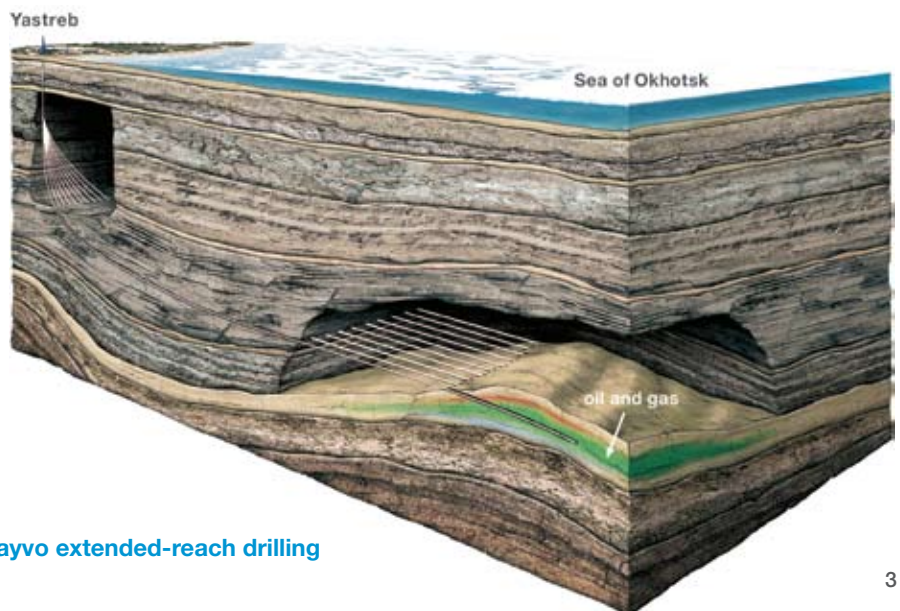
Our technical training programs for suppliers and contractors continue to reach more Sakhalin residents. Working with the United States Agency for International Development, we helped welders improve their skills through certified classes and granted microfinance loans that provide business training and encourage development of small- and medium-sized businesses on Sakhalin Island. The project consortium has contributed more than \$1 million to a loan fund that has already created or sustained more than 500 local jobs and 180 businesses. We expect the loan program to reach self-sufficiency so that it can continue to provide financing indefinitely.

## national content

We are committed to maximizing the participation of local suppliers and contractors. The entire project gains from the experience of regional companies that understand the local operating environment. The Russian content of contracts awarded for the Sakhalin-1 project has exceeded \$4 billion, or about two-thirds of the total.

## supporting community development

In addition to government revenues generated from production royalties, the project is creating sustainable infrastructure enhancements, including improved roads, bridges, air and sea port facilities, and public-use medical facilities. Other support programs include charitable contributions for education, health care and community capacity building.



Chayvo extended-reach drilling

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