

## COUNTRY ANALYSIS BRIEFS

# Sakhalin Island

Last Updated: September 2005

## Sakhalin Island

**Sakhalin Island's oil and gas resources are being developed by international consortiums. Sakhalin I**

### General Background

Sakhalin Island, a former penal colony located off the east coast of Russia and to the north of Japan, holds International consortia of energy companies have entered into production sharing agreements (PSAs) to develop the area are estimated at around 14 billion barrels, and natural gas reserves at approximately 96 trillion cubic feet. International consortia have extensive export plans (including to the United States) via LNG terminals and export pipelines to little progress except on the first two parts of Sakhalin Island: Sakhalin 1 and Sakhalin 2. These lie to the south (left). For more detailed maps click on the project websites for Sakhalin 1 and Sakhalin II below.



### Sakhalin I

The [Sakhalin I](#) project is being led by Exxon Neftegas, in conjunction with consortium members Sakhalinmorneftegaz, and RN Astra. The [consortium](#) members started drilling in May 2003 and expect preliminary barrels per day (bbl/d) in October 2005. The project's oil output will be piped westward to the Russian port of I Russian system. The first phase of the project will entail development of the Chayvo field, and subsequent phase and Arkutun Dagi fields. Onshore processing facilities were completed to process the oil and natural gas from the and 800 million cubic feet per day (mmcf/d). The oil and natural gas will then be piped to the Russian main DeKastri. Planned exports of oil to world markets, with the assistance of ice-breaking vessels, is scheduled for 2005. The oil and natural gas is expected to be sent southward to Japan via a proposed pipeline. The partners are planning for natural gas export:

Sakhalin-1 will be the largest single foreign direct investment in Russia. Capital investment over the life of the project is estimated at \$12 billion. To date, the Consortium has spent over \$ 2.6 billion on various exploration activities, environmental studies, infrastructure improvements, taxes and other expenditures.

### Sakhalin II

The Sakhalin II project is being developed by Shell, Mitsubishi, and Mitsui, and entails the development of Russia on the southern tip of the island, near the town of Prigorodnoye (see map). Construction of the project's two-facility began in early 2003, with Shell expecting initial LNG production beginning in 2007. LNG exports are sched

[Sakhalin II](#) will also be used to supply natural gas to the United States. In late 2004, Sakhalin Energy signed a supply 1,800 billion cubic feet (bcf) of LNG over 20 years to a power plant on the border of California and Mexico tanker to the Energia Costa Azul terminal being constructed in Baja California, Mexico. In March 2004, Sakt 300,000 tons of LNG per year to Japan's Tokyo Gas and Tokyo Electric Power (TEPCO) starting in summer 2 operators announced a 20 year sales agreement of 1.6 million tons per year of LNG to Korea Natural Gas (KOGA

Some of these contracts have had to be renegotiated as the target start date for LNG exports has been delaye The delays are mainly due to environmental hurdles and to rising costs. A recent [report](#) by the [World Conserv](#) that a planned pipeline route from Sakhalin Island to Japan ([see map](#)) would harm Pacific gray whales. The cons around \$5 billion in loans through 2006, but with the LNG project's cost raised above \$20 billion, Sakhalin Energy loans would not be forthcoming as early as the project's operators had hoped. For these reasons, the LNG and ' been delayed until at least 2007.

Sakhalin II began crude oil production during 1999, averaging 80,000 bbl/d of production during July 2005. Con during late 2007) would increase daily production from Sakhalin II to around 180,000 bbl/d.

### Sakhalin III-VI

Areas of Sakhalin Island lying to the north and southeast of Sakhalin I and II are at various preliminary stages of on these projects' development and expected production levels can be found on the [summary table](#) page.

## Sakhalin Fact Sheet

*Detailed project specifications and status for Sakhalin Island's energy development. Click the picture to download the table in Excel format.*

<b>Sakhalin Fact Sheet</b>					
<i>Sakhalin Island, a former penal colony located off Russia's eastern shore (see map), is home to five oil and gas projects, each international consortium. The five projects are currently in different stages of development, and two of the projects, Sakhalin oil and natural gas production online in the near term. Both projects have targeted Asian markets. Three blocks after Sakha</i>					
Name	Sakhalin I	Sakhalin II	Sakhalin III	Sakhalin IV	Sakhalin V
<b>Primary Field/Block Names</b>	Odoptu [Northern and Southern] (onshore), Chayvo (onshore and offshore), Arkutun-Dagi	Sakhalin Energy Investment Company: Piltun-Astokskoye, Lunsokoye	Kirinskii, Vostochno-Odoptu, Aiyashkii	Pogranichny Block, Okruzhnoye fld	K V (s
<b>Oil/Gas Reserve Estimate</b>	2.3 billion barrels, 17.1 Tcf	1.0-1.2 billion barrels of oil, 17.6 Tcf of gas	4-5 billion barrels of oil, 27-38 Tcf of natural gas	880m barrels of oil, 19 Tcf of gas	4 o T
<b>Net Total Investment</b>	\$2.6 billion (\$12 billion expected)	Phase 1: \$4.5b, Phase 2: \$9-10b over next 4-5 yrs.	Exxon/Mobil: \$80m in geological studies	\$2.6 billion	\$ e
<b>Expected &amp; Current Prod'n Level</b>	Chayvo: 250,000 bbl/d (2005); Commercial gas prod'n expected in 2008	Current: 80,000 bbl/d for 6 months, Phase II: 180,000 bbl/d, year-round oil production expected in Dec. 2007, LNG prod'n expected in Summer 2008	n/a	n/a	n.
<b>Primary Project Developers</b>	Exxon Neftegaz (30%), in conjunction with consortium members SODECO (30%), ONGC Videsh (20%), Sakhalinmoneftegaz (11.5%), and RN Astra (8.5%)	Sakhalin Energy Investment Company: Shell (55%), Mitsui (25%), Mitsubishi (20%)	Tender awarded to ExxonMobil and Texaco in 1992 annuled in Feb 2004, Developers undetermined.	BP (49%), Rosneft (51%)	B R
<b>Current Status/Notes</b>	Gas pipeline currently under construction	Oil production began in 1999; Processing terminal under construction which will have cpy of 66,000 bbl/d of oil, 1.8 bcf/d of gas	Lukoil possibly in cooperation with Gazprom will probably take part in new tenders for Kirinskii and Vostochno blocks.	Geological studies of reserves still being carried out	1 w ir
<i>Source: Project Homepages (see links section), Interfax, Russian Energy Monthly (www.easternblocenergy.com), FSU Oil and Gas Monitor, Pj</i>					

## Links

**EIA Links**

[EIA: Russia Country Analysis Brief](#)

**General Information**

[Sakhalin I Project Homepage](#)

[Sakhalin II Project Homepage](#)

[Sakhalin II Project Overview Presentation](#)

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