Energy Cooperation between Russia and Japan: pipeline and LNG

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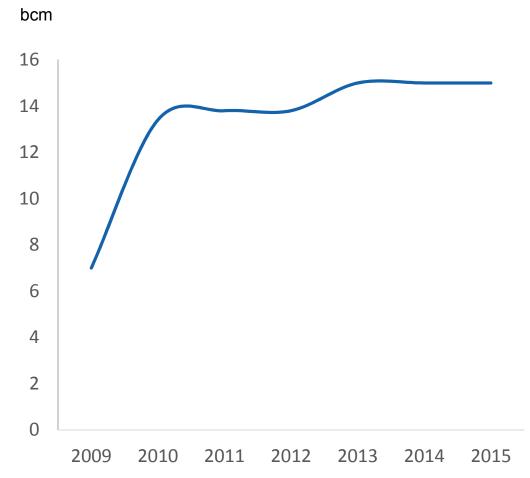
Russia and Japan are natural partners in the gas business

bcm

Russia and Japan rank #1 as gas exporter and importer

Net exporters	bcm	Net importers
Russian Federation	203	Japan
Qatar	121	Germany
Norway	103	Italy
Canada	54	Korea
Algeria	45	People's Rep. of China
Turkmenistan	45	Turkey
Netherlands	40	France
Indonesia	35	United Kingdom
Australia	26	United States
Nigeria	22	Spain
Others	156	Others
Total	850	Total

Buildup of the Russian LNG supplies to Japan

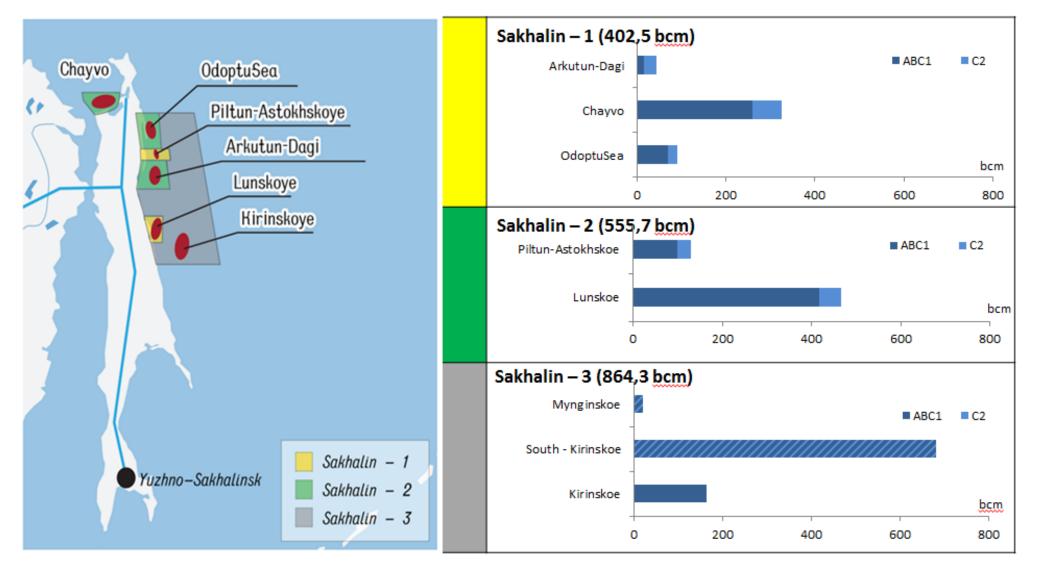


Sources: Key World Energy Statistics 2014, IEA, Rosstat

Eastern Gas Program still has many options, Chinese vector, sanctions and investment constraints pose new limitations



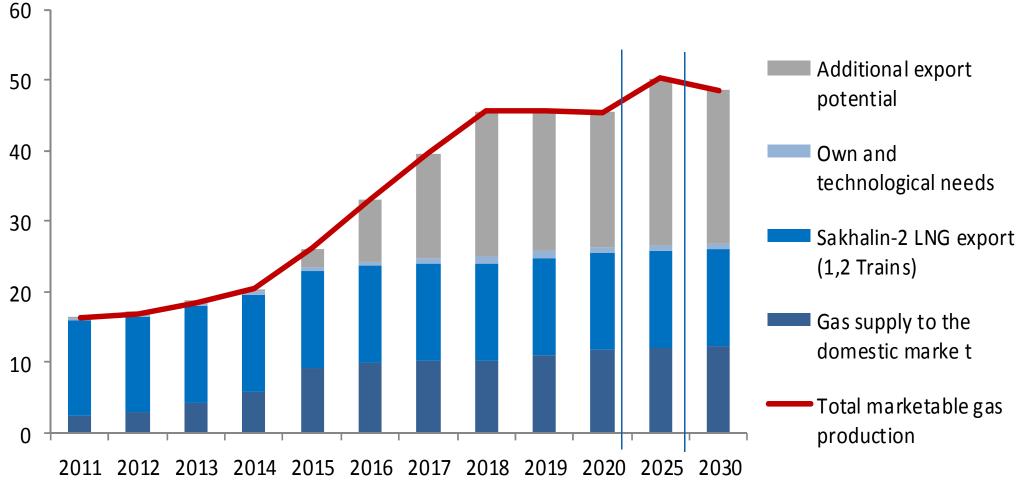
Sakhalin island resource base is limited and insufficient for all the projects under discussion



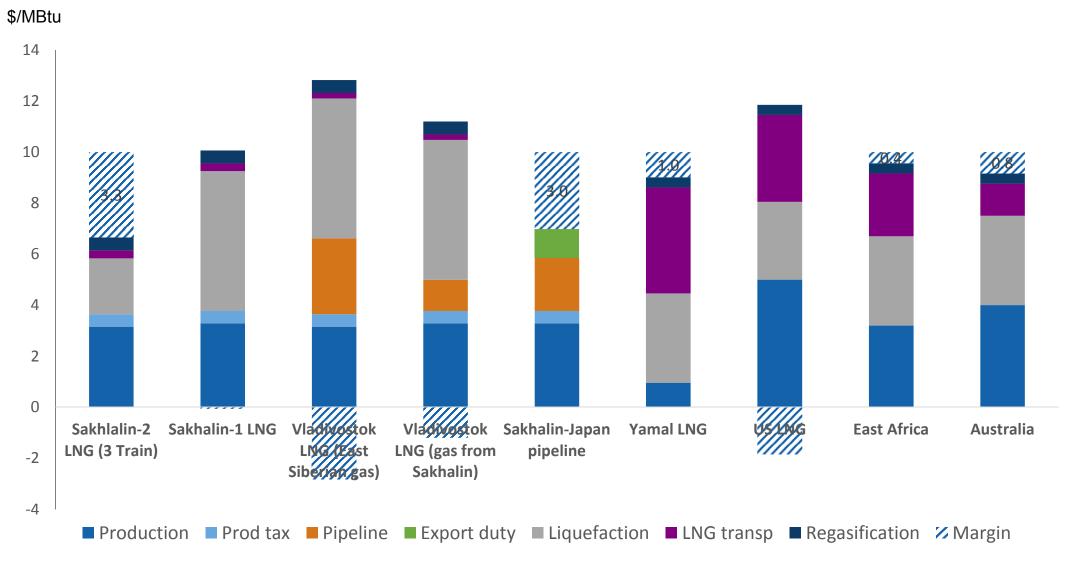
Source: ERI RAS

Sakhalin gas balance: total export potential (except Sakhalin-2) is below 22 bcm, with several projects competing for it

Marketable gas production in Sakhalin-1,2,3



Russian LNG and especially pipeline gas is more competitive at 10\$/Mbtu, some projects – even at 8\$/MBtu



Source: ERI RAS

Contacts

Energy Research Institute of the Russian Academy of Sciences "Global and Russian Energy Outlook up to 2040" <u>http://www.eriras.ru/files/2014/forecast_2040_en.pdf</u>

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