Gazprom in Global LNG Industry

Elena Burmistrova,
Deputy Director General
Oil and Gas Products, LNG and New Markets
Gazprom Export LLC

17th International Conference & Exhibition on LNG
Houston, April 18
Gazprom – a Global Energy Major

Achievements for 20 years

- One of the leading energy companies
  - 11 tcm of gas produced
  - 447mm tons of oil and gas condensate produced
  - 7.2 tcm of new gas reserves discovered
  - 856 mm tons of oil and gas condensate reserves discovered

- Owner of the largest gas transportation system
  - 31 thousand km of new pipelines built

- The major natural gas supplier to Russian, FSU and European markets
  - 6 tcm of gas sold on domestic market
  - 4 tcm of gas exported

Gazprom Activity in Russia and Abroad
LNG - Expanding to New Markets

...we see LNG as the most flexible tool to diversify sales and access new gas markets unreachable for pipeline supplies.

Being an established pipeline gas supplier to Europe and FSU and promising supplier to Asia-Pacific.

* Amount of ABC1 reserves - explored reserves according to the Russian standards of classification. Explored gas reserves (categories ABC1) are considered fully recoverable.
LNG Business Growth

Gazprom Marketing & Trading
Global LNG marketing, shipping and trading company operating from London, Singapore, Zug and Houston

Gazprom Export
Single export channel for Russian gas and LNG*

Gazprom
World's largest gas producer

Cumulative # of LNG cargos delivered

*except Sakhalin-1 and Sakhalin-2 projects operated under Product Sharing Agreements
Recent Achievements

Marketing

Recent Sales

- Long term 2.5 mtpa SPA executed with GAIL
- Mid term 0.5 mtpa sale to KOGAS (for 2013-2014)

Recent Purchases

- HOA with Levant LNG Marketing Co. for off-take of up to 3 mtpa from Tamar Floating LNG Project (Israel) for 20 year period
- Ongoing negotiations on off-take from various LNG projects globally

LNG Shipping

The world’s first LNG vessel passage through the Northern Sea Route carried out by ‘Ob River’ in November 2012
Gazprom Group LNG Fleet

LNG shipping position – key to security of supply and portfolio optimization

Shipping & Logistics established in 2008, based in London with support from Singapore
Top HSSE performance and full functional capability experience in fleet procurement and operations in international LNG projects

Current Fleet

**Stena Blue Sky**
- Owner: Stena LNG
- Yard: DSME
- Capacity: 146,000 cbm
- Ice Class: 1C (DNV)
- Charter period (end): 2013

**Ob River**
- Owner: Dynagas
- Yard: HHI
- Capacity: 149,000 cbm
- Ice Class: 1A (LR)
- Charter period (end): 2018*
  *subchartered to SEIC

**LNG Pioneer**
- Owner: MCL
- Yard: DSME
- Capacity: 138,000 cbm
- Ice Class: no
- Charter period (end): 2014

Future Expansion

**Yenisei River & Lena River**
- Owner: Dynagas
- Yard: HHI
- Capacity: 155,000 cbm
- Ice Class: 1A (BV)
- Constr. year: 2013
- Charter period (end): 2018+

**Velikiy Novgorod**
- Owner: SCF Group
- Yard: STX
- Capacity: 170,000 cbm
- Ice Class: Arc2 (RS)
- Constr. year: 2013
- Charter period (end): 2028+

**Pskov**
- Owner: SCF Group
- Yard: STX
- Capacity: 170,000 cbm
- Ice Class: Arc2 (RS)
- Constr. year: 2014
- Charter period (end): 2029+
Sakhalin II Project –
the First LNG Project in Russia

Key Project Features

Successful partnership of Gazprom, Shell, Mitsui
and Mitsubishi

Integrated Oil & Gas project
- Year-round oil production from 2008
- LNG plant startup — February 18, 2009
- LNG ramp-up ahead of schedule, exceeded project
design capacity (9.6 mtpa) in 2010

Sales in 2012: 10.8 mt LNG, 5.5 mt oil

Key markets – Japan, Korea, China and other
Asia-Pacific growing importers
Opportunity to leverage the existing LNG plant infrastructure

Sakhalin Energy is undertaking a pre-FEED analysis of a third LNG train of a similar size to the existing trains ~5mtpa. Completion of pre-FEED is expected in July 2013.

Decision to allocate feedstock for the expansion of Sakhalin II LNG project could be made by Gazprom in Q3 2013, after analyzing results of the Pre-FEED.
Vladivostok Project – increasing Gazprom LNG production in Asia Pacific

**LNG Plant** – 2 trains x 5 mtpa with further expansion possible (+1 train)

**LNG Storage** – 4 x 160 000 m³

**Start Up:** T1 – late 2018, T2 – mid 2020

**Status:**
- Dec 2012  pre-FEED completed
- Feb 2013  investment decision taken
- Apr 2013  marketing process kick-off
LNG plant location recommended by the Pre-FEED – Lomonosov peninsula, south from Vladivostok on the west coast of Amur bay.

- Distance to Vladivostok 150 km
- Developed infrastructure – direct railway, road access
- Relatively mild climate
- Sea depth – up to 20m (no dredging needed)
- 365 day/year access to the established navigation channel
- Favorable ice and wind conditions – no ice in jetty area
- Location supported by local authorities
- Proximity to the NEA markets
Sakhalin III
estimated gas resources –
- 1.4 tcm (49 tcf)

Sakhalin III reserves:
Proven (C1) – 323 bcm
Possible (C2) – 417 bcm

East Siberia gas fields (Yakutia and Irkutsk regions)
estimated gas resources –
- 5 tcm (177 tcf)

Gazprom’s fields offshore Sakhalin are considered as
the main resource base for the Vladivostok LNG Project

East Siberia gas will be used to diversify Sakhalin supplies and as a feedstock for possible project extension
Vladivostok LNG key advantages

- Multi-source gas supply from Sakhalin and East Siberia (the project is backed up by 5 TCM of Siberian gas)
- Proximity to NEA markets (1,000nm to Tokyo, 500nm to Niigata, 950 nm to Incheon, 1,350 nm to Taichung)
- Proven technological and logistics solutions
- Full Russian Government support
- Commitment from Gazprom management (FID)
- Experienced LNG trading and shipping team
- Perfect track record of Sakhalin-2 project
Thank you for your attention