

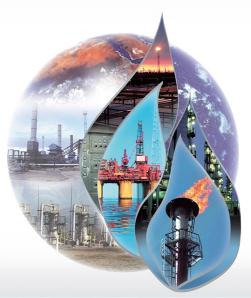
#### Projects of Russian-Japanese cooperation



- Sakhalin-1 is developed by Exxon Mobil (USA), Rosneft, Sodeco (Japan) and ONGC Videsh Ltd. (India). Produced oil is exported, in particular to Japan and Korea.
- **Sakhalin-2** is developed by Gazprom, Shell (UK/Netherland) as well as Mitsui and Mitsubishi (Japan): oil/gas production, gas liquefaction at the Russia's first LNG plant (start-up in 2009) and oil/gas export to Asian-Pacific countries (the majority of which to Japan).
- Since 2010 the Joint Implementation Project (in acc. with the Kyoto Protocol) concerning APG recovery has been carried out by Gazpromneft, Mitsubishi Corporation and Nippon Oil & Energy Corporation at Yety-Purovskoye field (YNAO).
  - In 2011 Gazprom and Japan's Agency of Natural Resources and Energy signed the agreement concerning cooperation in preparing a feasibility study on the options for natural gas use in Vladivostok area.
  - In 2011 Gazprom and Japan Far East Gas Co signed the agreement regarding a joint feasibility study for Vladivostok project (LNG plant).
  - **2013** Investment stage of project.







### Certified partner in **WinCC OA** solutions



#### Financial & Industrial Company KOSMOS-NEFT-GAS

GAZPROM's authorized supplier and partner for infrastructure development projects at oil & gas fields in the Far North, the Siberia and the south of Russia



### Comprehensive designing of different industrial facilities:



- CJSC Sibur-Khimprom:

   Upgrading of styrene production facility to increase its capacity and use new vacuum dehydrogenation technology.
   Ethylbenzene production.
- LLC Novy Urengoy Gas Chemicals Complex: LPG storage, flare facilities and loading/unloading terminal.
- JSC Kauchuk: Isobutylene dimer production.
- JSC Plastic: Upgrading of styrene production facility to increase its capacity.
- JSC Voronezhsintezkauchuk : Butadiene storage.

# Main categories of produced equipment

- Pipeline valve components
- Christmas trees
- Wellhead control panels
- Burner units and flare systems
- Gas and air heaters
- Pumping equipment
- Tanks, vessels and columns
- Automated process control systems

# Compiling of complete cycle diagrams for natural gas production, transportation and processing





**Processing** 

**Preparation for transportation** 

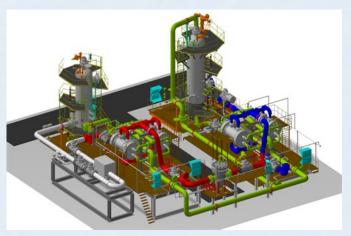
**Field** 



# Development of skid-mounted modular packages

Development, delivery, start-up of ready-to-operate gas processing skids

- Engineering
- Construction
- Commissioning and start-up





# Equipment and services proposed by FIC KOSMOS-NEFT-GAS for offshore field construction



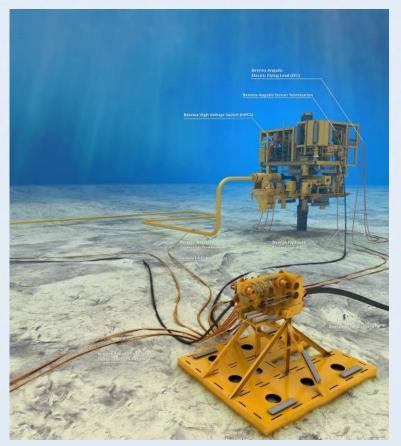
#### **Proposed equipment and services**

- Engineering of process lines
- Flare systems and burner units
- Automated process control systems
- Lightning protection systems
- Wellhead control panels
- Skid-mounted modular systems for gas processing (separators, plate heat exchangers), sampling systems, pumping and valve units etc.

## Localization of foreign advanced technologies. Experience

Partnership agreements in a research and development sphere to manufacture new equipment (including offshore production of hydrocarbons) with such companies as:

Siemens
FMC Technologies
Weatherford
Aker Solutions
Caloperm
Vetco Grey



#### THANK YOU!