

Japan-Russia Energy and Environment Dialogue in Niigata - 2009

Trends in developing of natural gas resources in Eastern Siberia and on Sakhalin Island (what is already done and what is commencing within the frameworks of realization of The Eastern Gas



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Macroeconomic indicators of the Far East development according to various projected scenarios, average annual growth rates by period, %

	2008-2011		2012-2015		2016-2020		2008-2020	
	1	2	1	2	1	2	1	2
GRP production	6,3	6,3	5,9	6,9	5,3	7,4	5,8	6,9
Final consumption	8,8	8,8	6,3	7,5	5,2	6,7	6,6	7,6
Investments	14,8	14,8	5,1	7,2	7,2	10,7	9,0	10,9
Overall fuel and energy consumption	8,5	8,4	7,2	6,9	6,7	6,0	7,2	6,8
Overall electric power consumption	8,3	8,3	7,0	6,7	6,6	6,0	6,9	6,7

1 – Energy-feedstock scenario as per a draft version of the SOCIOECONOMIC DEVELOPMENT FORECAST FOR THE RUSSIAN FEDERATION TO 2020-2030.

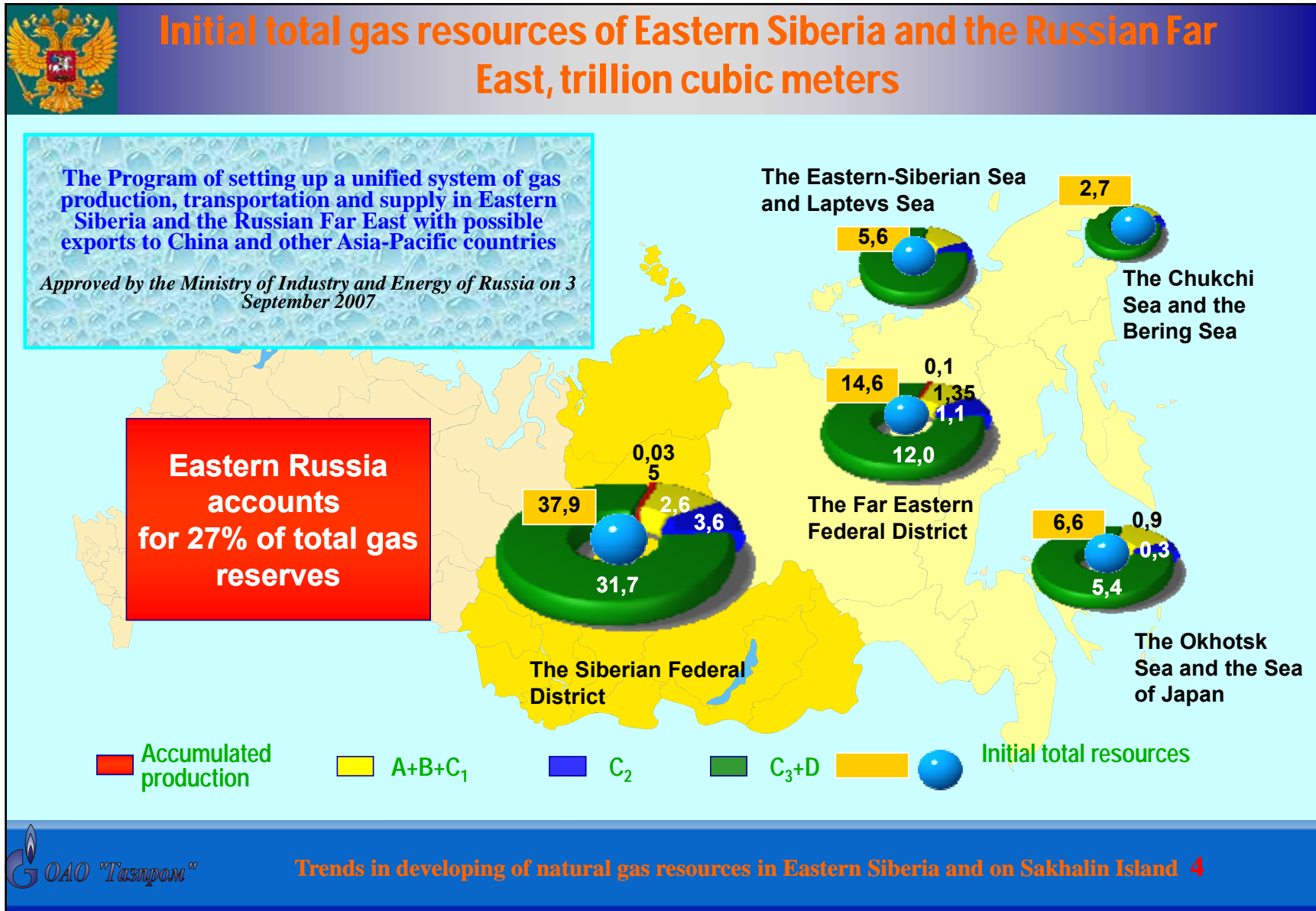
2 – Innovative scenario as per a draft version of the SOCIOECONOMIC DEVELOPMENT FORECAST FOR THE RUSSIAN FEDERATION TO 2020-2030.



Gazprom Investment Activities in the Eastern Regions of Russian Federation

billion. rubl.

Capital Investments in 2009:	
According to the Capital Investments Plan	34,5
Actual fulfillment/Expected fulfillment	67,0
Investment Plan for the Year 2010	100,0





New Basic Gas Production Centers in the Eastern regions of Russia

Krasnoyarskiy Center - on the basis of the Sobinsko-Payginskoye and Yurubcheno-Tohomskoye oil and gas fields with further production expansion by developing of Omorinskoye, Kuyumbinskoye and other fields

Yakutskiy Center – on the basis of the Chayandinskoye oil and gas-condensate field with further gas production expansion by developing of Srednebotuobinskoye, Tas-Yurahskoye, Verhneviluchanskoye and other oil and gas fields

Irkutskiy Center - on the basis of Kovuktinskoye gas condensate field as well as South-Kovuktinskoya licensed area and other fields located in northern areas of Irkutskaya oblast

Sakhalinskiy Center – on the basis of shelf fields of the Sakhalin Island (Projects Sakhalin-1 and Sakhalin-2 with further production expansion by developing of Sakhalin-3, 4, 5 and 6 Projects)

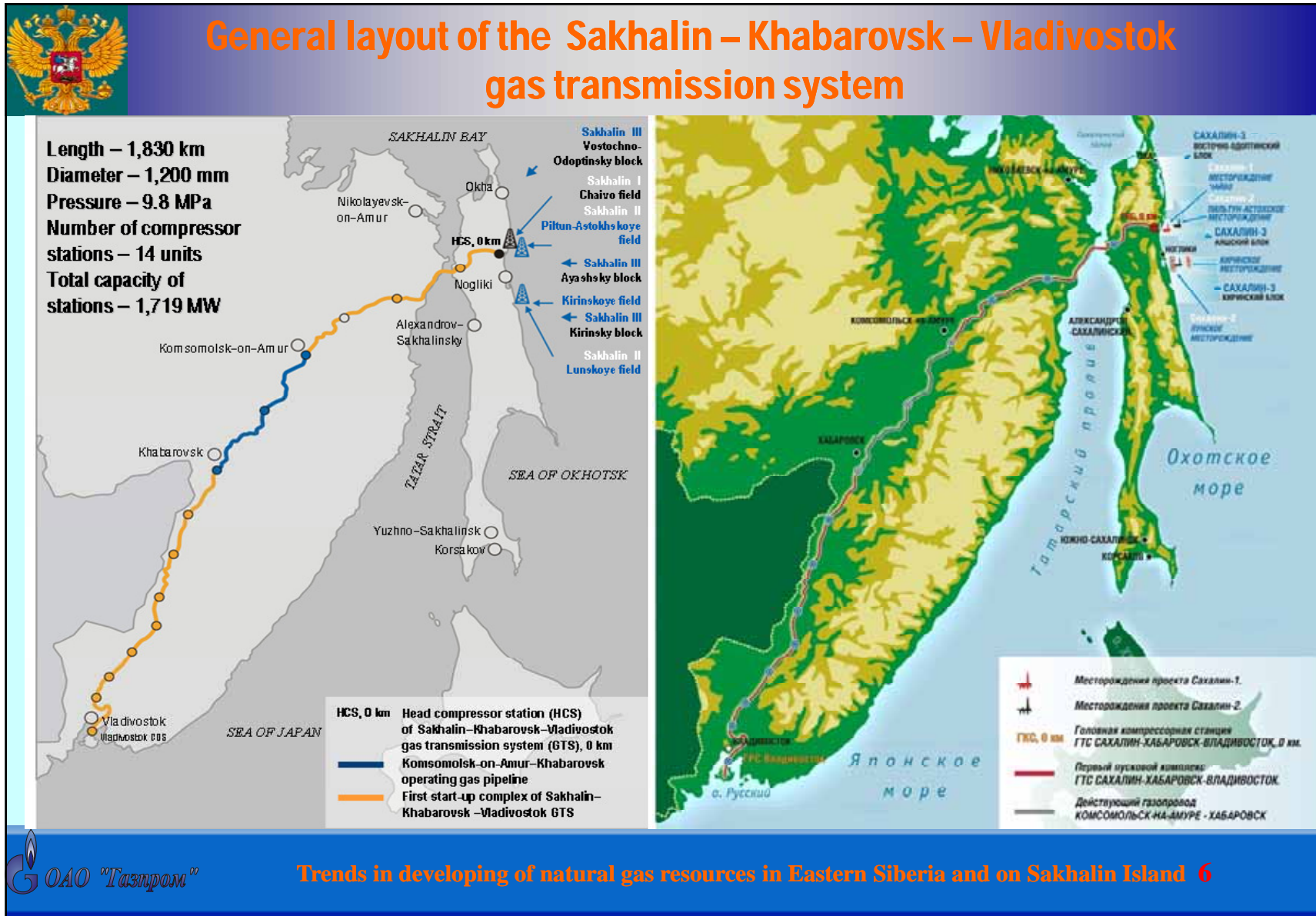
Условные обозначения:



- Центры газодобычи



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Sakhalin - Khabarovsk - Vladivostok gas trunk pipeline



GAO "Газпром"

Trends in developing of natural gas resources in Eastern Siberia and on Sakhalin Island 7



Sakhalin - Khabarovsk - Vladivostok gas trunk pipeline



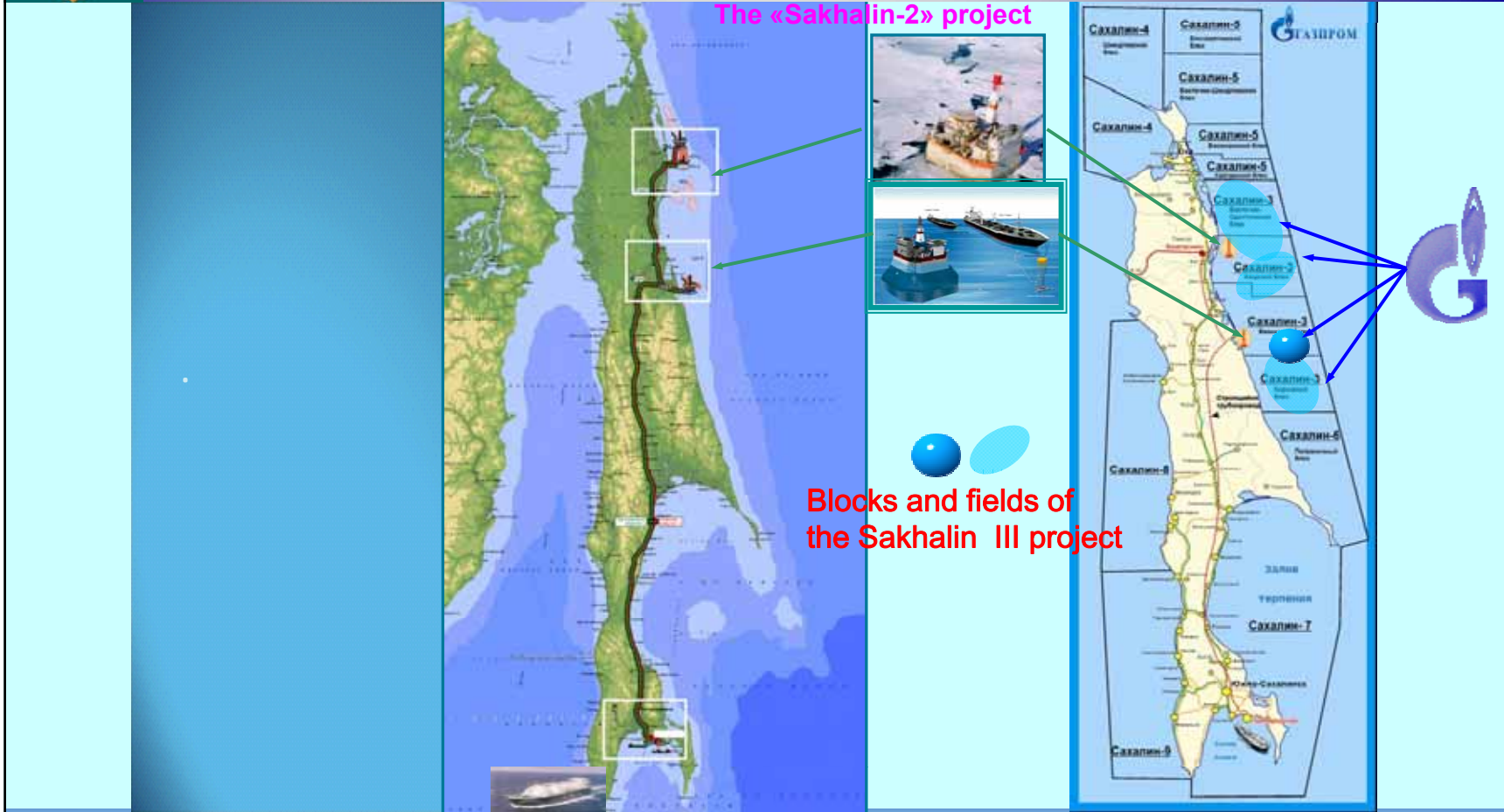


Sakhalin - Khabarovsk - Vladivostok gas trunk pipeline





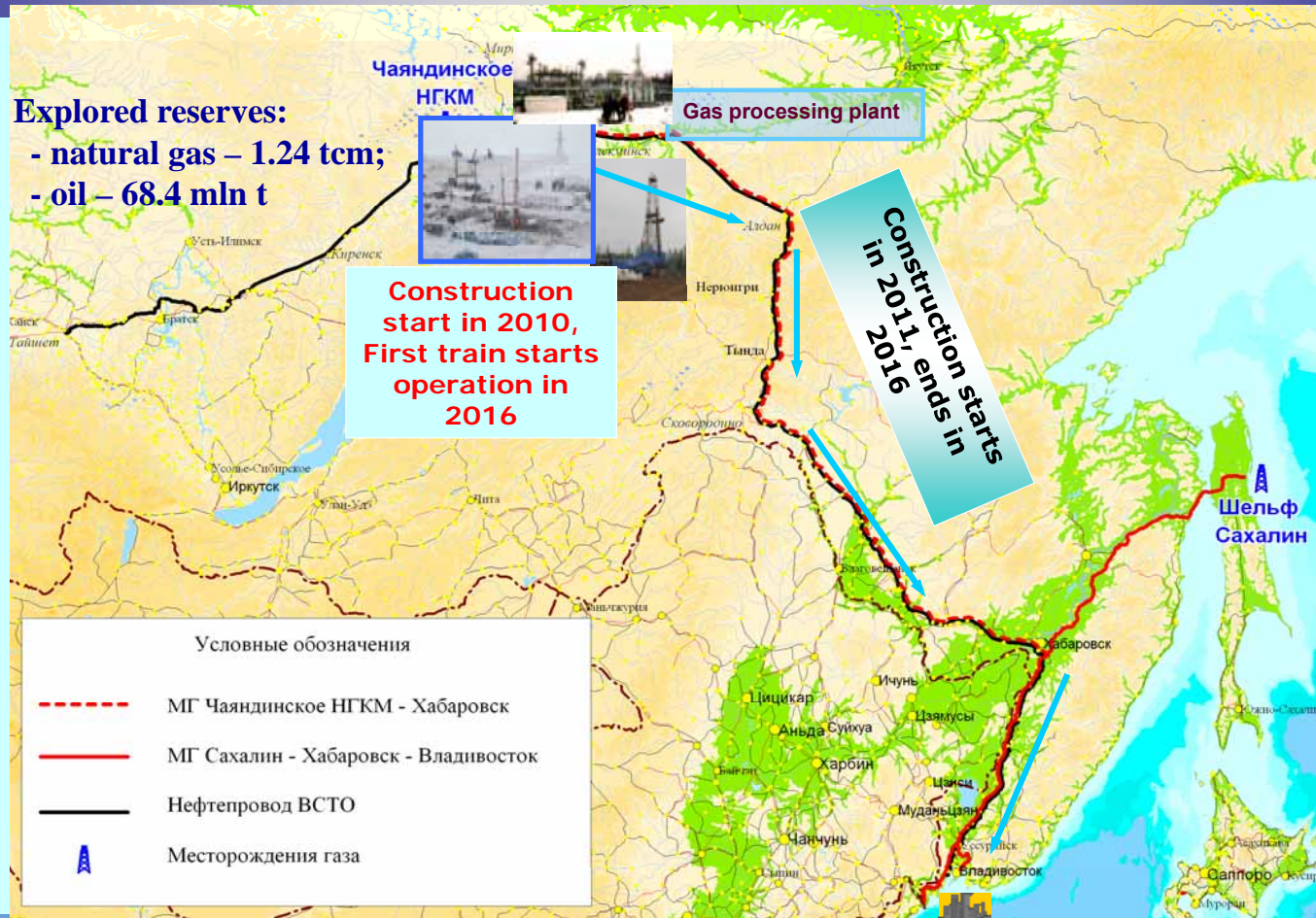
Sakhalin gas production center



Trends in developing of natural gas resources in Eastern Siberia and on Sakhalin Island 10



Yakutsk gas production center



Trends in developing of natural gas resources in Eastern Siberia and on Sakhalin Island 11



Kamchatsky Krai gas supply system formation





The construction of a pipeline from Sobolevo to Petropavlovsk-na-Kamchatke





The construction of a pipeline from Sobolevo to Petropavlovsk-na-Kamchatke





Kamchatsky Krai





Krasnoyarsk and Irkutsk gas production centers formation

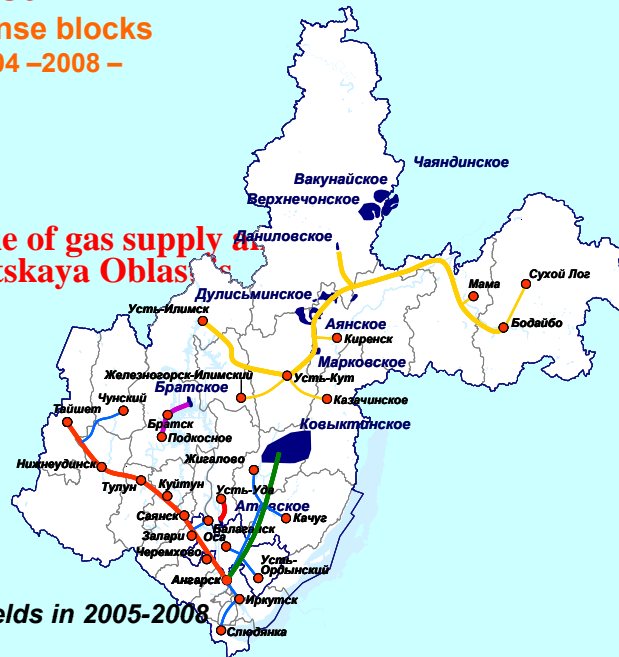
Krasnoyarsky Krai

Exploration at 18 license blocks
 Total expenditure in 2002 – 2008 –
 USD 485 million

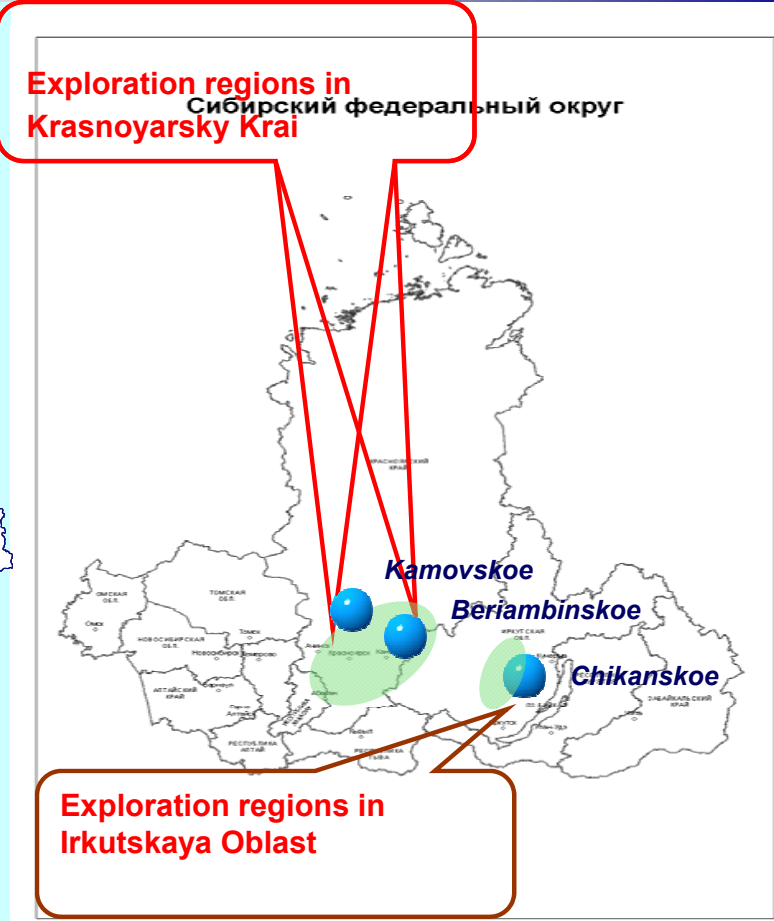
Irkutskaya Oblast

Exploration at 5 license blocks
 Total expenditure in 2004 –2008 –
 USD 83 million

The General Scheme of gas supply and gasification of Irkutskaya Oblast implemented



Newly discovered fields in 2005-2008





The Eastern Gas Program: the recommended development option – gas processing and chemical industry



The results of the Program's realization (by the year 2030):
 production of petroleum products – 4.5 mln t/year;
 Production of chemical products – 9.1 mln t/year



Main Marketable Products to be Effectively Made on the Basis of Raw Materials from Eastern Regions of Russia

Raw material: – Hydrocarbons C₂+

Polypropylene

Polyethylene

Polystyrene and styrene mixed polymers

Vinyl chloride polymer (PVC) and vinyl chloride mixed polymers

Ethylene glycol

Polyethylene terephthalate

Raw material - Methane

Ammonium hydrate


Carbamide

Methanol

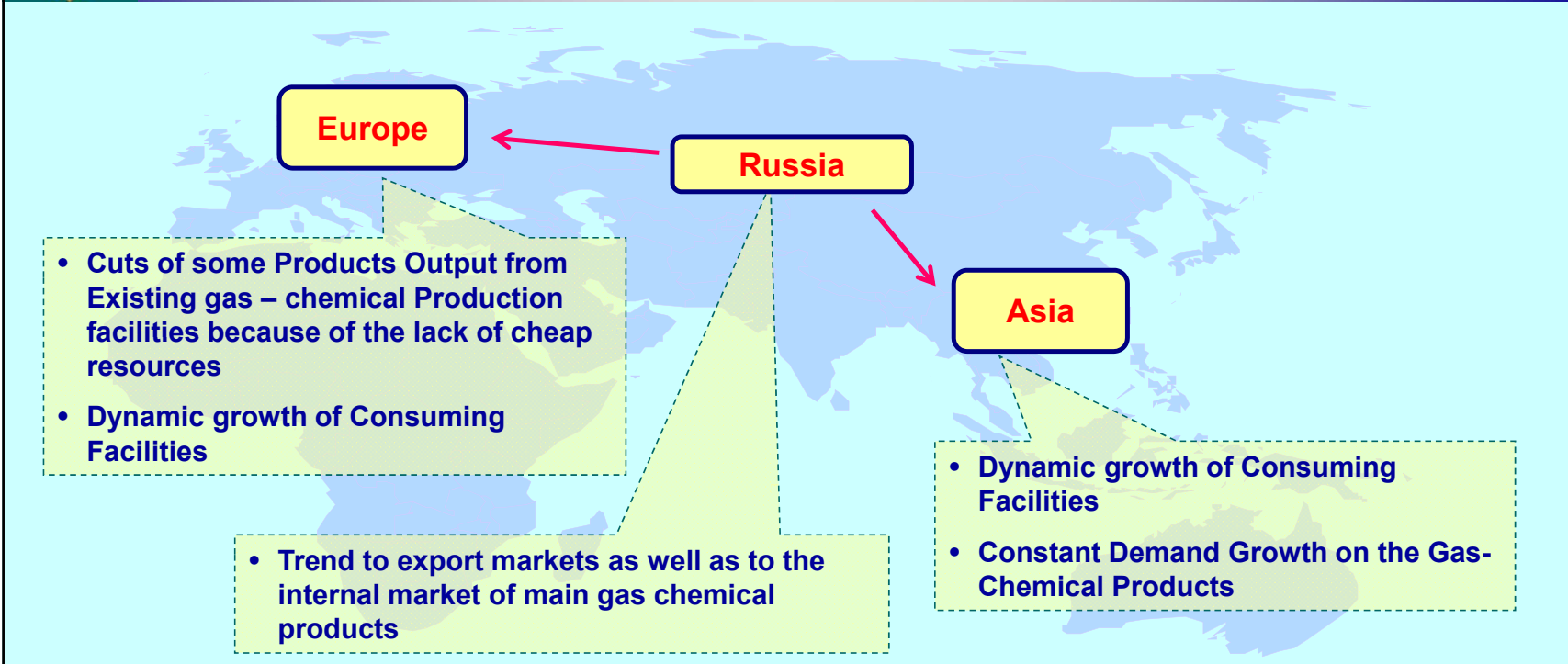
DME

Acetic acid

Synthetic liquid fuel



Trends of gas chemical products sale




- Cuts of some Products Output from Existing gas – chemical Production facilities because of the lack of cheap resources
- Dynamic growth of Consuming Facilities

- Trend to export markets as well as to the internal market of main gas chemical products

- Dynamic growth of Consuming Facilities
- Constant Demand Growth on the Gas-Chemical Products

Realization of projects providing price competitiveness for the products made in Russian Federation on world markets is the necessary thing for the long term commodity supply contracts



Trends in developing of natural gas resources in Eastern Siberia and on Sakhalin Island 19

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