

## Who needs gas? Russia chooses LNG market outlet

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*Liquefied natural gas which is often called the fuel of the future asserts itself at the present time. The USA and the countries of Asian-Pacific Region (APR) are especially interested in LNG import. But whereas the States try to diversify the range of suppliers while increasing LNG purchases, this goal is not yet essential for Asia: the main thing is to get more fuel. Which of the two markets is more attractive for Russia?*

### USA diversify import

Increase of energy consumption in the USA is bound up of the boom the country enjoys now. After insufficient stagnation in 1998-2001 the rates of GDP growth increased, due to that annual average of the growth for the period 1998-2004 according to the Asia-Pacific Economic Cooperation (APEC) made 3,2%.

Moreover, believing the EIA forecasts, annual average growth GDP rate (in prices of 1997) can make 3% by 2005 year, so against 2001 when the minimum increase was observed, the GDP volume will increase 52% by 2025 year.

Economic growth leaded to the energy consumption growth in general and nature gas in particular. At that the LNG share in the structure of consumable volume of flue grows. It can be expected that the USA have already started diversification of imported energy products.

Intense interest in liquefied nature gas can be explained particularly by the fact that Canada is the biggest supplier of pipeline gas in the USA cannot guarantee regular supply and total need satisfaction of the country.

The gas consumption at the plants grows. Therefore according to the "Gasexport"t the USA will be able to import up to 104 billion m<sup>3</sup> of liquefied gas (75,3 million ton) by the 2020. So the volume of LNG import can increase 5,6 times against 2004 year by 2020.

The main supplier of LNG to the USA – is an island state Trinidad and Tobago which works in this direction since 1999. Moreover the biggest importers are Algeria, Qatar, Nigeria and Australia. In 2000-2004 years 96% of all LNG was supplied to these countries by the USA.

Being the biggest exporter of LNG to the USA, Trinidad and Tobago doesn't have big natural gas stores. Moreover this state has the minimum reserve among all the main suppliers. Middle East Qatar owns the biggest reserve; however the main target market for Qatar LNG is located in the Asian-Pacific Region.

### **China is interested in everything that burns**

Economic boom in China and increasing of the rates of growth in other countries in the region lead the heavy consumption both oil and nature gas. Asian region long ago became accelerator of the world economy growth. The biggest dynamics is observed in PRC. Annual average growth rate of Chinese GDP made 8,1% in 1998-2004. Recently other countries of APR also demonstrate acceleration in the rates of economic growth: corresponding figures in South Korea made 5,9%, in Taiwan – 3,75%, in Japan – 1,1%1.

According to the EIA forecast, GDP in the Asian countries will keep on growing at a rate not less than 5% per year.

Consumption of nature gas of PRC, Japan and South Korea by 2025 year will exceed the level of 1993 year fourfold.

Considering the structure of Asian-Pacific Region we should take into account that both Japan and Taiwan are island states and import only liquefied gas. So, speaking about increasing of LPG share in the structure of gas consumption is incorrect, however positive dynamics of import volume of raw materials shows the increase of the role it plays in those countries. In 1993-2002 years LNG import to Japan was averagely increasing by 3,8% per year, in Taiwan – by 10,8% per year. In South Korea the share of LNG in energy balance is essential and the index of growth appeared to be 15,3%. But in spite of priority rates of consumption the sizes of the economy of APR countries are not equal and Japan is still the biggest importer of LNG.

The main suppliers of raw materials to the Asia countries are the biggest world exporters - Malaysia and Indonesia. They are located closer to the LNG market than all other countries. Qatar, Australia and Brunei are also essential players on that market. In 2000-2004 years these countries owned 86% of total volume of liquefied gas consumed in ATR.

### **Finally Russia will give the dust to Africa**

It can be said without prejudice that the market of ATR countries as the American appears to be capacious and financially reliable. The only difference is in rules of the game set by importers. Whereas the USA aims first of all to receive logistic endurance, China concerns about volumes and cost of imported energy resources.

The stage of industrial development which now PRC is experiencing supposes increase of energy resources consumption but not their diversification. So the share of nature gas and the more so its liquefied equivalent will be widening unsteadily. Moreover Chinese corporation by exploitation of sea gas and oil resources supposes that plans of construction of 10 LNG terminals by 2010 year should be corrected in order to reduce due to the essential difference

between domestic and world prices on LNG. According to the member of company, this factor will hold on the development of energetics in this field. Concerning other consumers of LNG in the Asian-Pacific Region, for example Japan and South Korea will hardly suffer a shortage of suppliers. Instead of the USA these countries are located most closely to the exporters – Malaysia and Indonesia. By the way both Japan and South Korea already have signed contracts of LNG delivery with Russia (project Sakhalin-2”). That’s why within the next 20 years the market of liquefied natural gas in these two countries will be glittered. Opposite the market of USA is located far away from the main regions of gas recovery and LNG production, but economical growth in America allows supposing that Trinidad and Tobago will not be able to meet the needs of the country for a long time. Russia claims the free place (Stockman project). “Gazprom” already meets SWOP deliveries of LNG to American market. Not only reluctance of USA to mix unreliable Middle East with new importers plays into Russian gas hands but simply geographical location also does the same. Transporting from Barents Sea can appear cheaper than from Middle East region. And Stockman LNG can successfully compete even with Nigeria due to comparability of transport costs, which looms up to 25-30% in the structure of final price according to the Institute for Energy, Low & Enterprise.

#### **The project came to fruition: Stockman is 18 years old.**

By the end of March “Gazprom” will announce the final entry list of the project by development of Stockman gas condensate field and construction of a LNG plant on its base. The question is about 3-4 companies, including Russian monopoly. Now there are 5 potential partners of “Gazprom” in the short list. The cost of development and the fact that the Russia company lacks necessary experience of offshore production at Northern seas to the present day doesn’t allow to start developing reserves, in spite it was planned to receive the first gas at Stockman field in 2010. Let’s remind that Stockman field was discovered in 1998 year in the South part of Barents Sea. In 1993 technical and economic assessment was prepared which showed the following results:

Gas reserves, billion m3	3200
Condensate reserves, mln t	31
Development time, years	50
Volume of yearly output, billion m3	60
Time of constant output, years	7
Maximum level of output, billion \$	18,7
Investments in development, billion \$	8,7
Payback time, years	13

Source “Rosneft”

At least 3 reasons determined the necessity of LNG production for the import under that project:

1. Minefield is rather close to the market of West countries, including USA.
2. In order to develop it, foreign partners should be involved not only as co-investor but also as experts in off-shore production.
3. LNG business became more active during the last 10-20 years in comparison with other segments of energy market.

Orientation of the project to the liquefied natural gas will determine the choice of the partners concerning Stockman field. Co-investors experienced not only in off-shore production but also in liquefaction, transporting and regasification are needed. If Norwegian companies are the favourites due to the experience in drilling and development on the shelf of Barents Sea and also in the sphere of LNG business, American companies among other issues present the country, owing the market that is target for Stockman minefield. Finally the following companies turned out to be in short-list:

- ChevronTexaco (USA)
- ConocoPhillips (USA)
- StatOil (Norway)
- Total (France-Belgium)

LNG capacities are supposed to be constricted on the base of the project. They will be located in the Leningrad Region or in the Murmansk Region. In order to realize the project of "Gazprom" and "Sovkomflot" a joint venture Baltika LNG Ltd. has already been founded. The participant own 80% and 20% correspondingly. The capacity of the plant will be about 7-10 mln t of LNG per year, and investments in the phase 1 construction will be 2-1,5 billion \$. Duration of a project is till 2009. However the construction site of LNG plant is not defined yet.