RUSSIAN STEPS

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It has been almost a year since the passage of Law 213. Have investment procedures in the development of mature fields and hard-to-recover reserves changed? Has the law had a beneficial effect?

Certainly, the enactment of the law has been an important step for the development of new fields with hard-to-recover reserves. Most experts in this field also agree on the significance of the law for the oil industry, especially in that the document provides measures to support production in already-developed fields. Previously, the development of hard-to-recover reservoirs located within existing fields was economically unprofitable.

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Data on the hard-to-recover oil production index, which is being collected from the companies, will help to evaluate the efficiency of the new law.

How much oil and gas has been produced due to the enactment of this law?

According to experts' calculations, about 2 billion tonnes of oil will be included in development, and due to this law additional exploration and estimation of hard-to-recover oil reserves to the extent of 22 billion tonnes (in the Tyumen and Bazhenov formations and also oil with a permeability of less than 2 millidarcies) can be carried out.

Positive budgetary and multiplier effects are also expected. During the period of development of hard-to-recover oil until year 2032, state income is going to constitute about 2 trillion roubles with additional production of 326 million tonnes of oil.

Since investment into production of hard-to-recover oil has become profitable, companies are adjusting their investment policies and directing funds towards new projects aimed at the production of hard-to-recover oil reserves.

During the past few years, the European Union has been looking for alternative sources of hydrocarbons. With decreasing demand from European consumers, what other countries apart from South Asian countries is Russia looking at in terms of sales and what other markets is it planning to enter in the next five years?

We are not looking for an alternative to the European market. We are developing the new resource base located in the east of the country. The leaders of energy demand growth are Asian and Oceania countries. Correspondingly, our prospective export strategy is aimed at entering those markets. The biggest countries in this area are China, Japan, South Korea and India. Hydrocarbons producers from the Middle East, as well as from Russia, Canada, Australia and East Africa, are planning to reorient their production to the markets of Asia and Oceania. But the list of these consumers is much bigger. The first LNG project in Russia – Sakhalin II – has shown that the market in this area is very big and any quantities of gas will be in demand.

As the tanker fleet and facilities for LNG regasification grow, the gas market will gradually

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Estimated production for hard-to-recover sources until 2032 is **2.4 billion barrels**	Additional budget revenue over that period will be **almost $60 billion**	Full-scale production of Arctic oil is expected between **2027 and 2035**

transform into a unified global market. Respectively, in the oil market as well as in the natural gas market, we are expecting significant growth of competition, the appearance of new suppliers and bigger diversification of supplies.

The use of new technologies for shale gas and oil production can become widespread in the world, even though it is not a fast process. Everyone is aware of the various technological, legal, infrastructural, ecological and even political complications. However, in prospect it can also influence international energy flow, since the production process can get as close as possible to the places of consumption.

Therefore, in our policy we rely upon the principle of feasibility. We attentively monitor all the changes happening in the international energy market, including changes in the energy balance, infrastructure, routes of delivery and technological development in the industry. That is why decisions on the development strategy are taken with the consideration of key prospective markets and technological achievements.

Creating the incentives for work in an eastern direction will be our strategic priority in the following decades. We will be investing at a growing rate into the development of the resource base and realisation of infrastructural projects that will allow us to meet the requirements of those markets in hydrocarbons.

Eventually, all of this will contribute to the consolidation of global energy security, which both producers and consumers are interested in.

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Energy demand from China is growing and co-operation between Russia and China continues. How is Russia planning to satisfy Chinese requirements for energy?

As was already mentioned, infrastructure projects in the Far East are aimed not only at China but also at the rest of Asia and Oceania. China is only one sales market, even though it is a very big and important one. Oil and coal supplies to China are provided competitively. Electricity supplies from the Far East for now are very insignificant, but they allow us to fill our capacities and reduce the rate load for Far Eastern consumers. Pipeline gas is not being supplied yet because there is no infrastructure for this now. But negotiations between China and Gazprom over gas supplies are still ongoing. Potential quantities have been fixed and the only thing that is left is to regulate the issue of pricing where we are guided by market price markers.

What new projects are being created for the realisation of this objective?

In accordance with the agreement between the governments of the Russian Federation and the People’s Republic of China on co-operation in the area of oil from April 21, 2009, there was an oil pipeline constructed and commissioned from Skovorodino to the Russia-China border with transfer capacity of 15 million tonnes per year. The total cost of the construction is about 720 billion roubles.

An intergovernmental agreement with the People’s Republic of China, signed in March 2013 on the extension of co-operation in the area of crude oil trade, provides increased supplies through the Skovorodino-Mohe oil pipeline starting from 2018. It is planned to extend the oil pipeline’s transfer capacities in the sector up to Skovorodino up to 80 million tonnes per year and in the sector from Skovorodino to Kozmino up to 50 million tonnes a year. Currently, its capacity is 50 million and 30 million tonnes respectively. If required, a further extension of the projects is possible.

Increased oil supplies will allow Russia to both expand trading activities with China and its presence in the markets of Asia and Oceania.

How successful has the development of offshore fields and energy reserves of the Arctic been?

Regardless of the fact that this region has been under development for a long time, the production of an estimated 600 billion barrels of oil is still not up and running.

Hydrocarbons production on the Russian shelf will be crucial for Russia’s energy balance from the point of view of substituting production decline in existing oilfields, as well as from the retention of positions of Russia in conditions of growth of internal and external demand for oil and gas.

Over the past 10 years, more than two-thirds of hydrocarbons reserves have been discovered. The vast majority of new assets created for the exploration and development of oil and gas are going to the shelf. Oil, gas and condensate resources in the Arctic continental shelf are estimated at 83 billion tonnes of standard fuel.

According to the requirements of the Subsoil Law, an extraction licence for the Russian Federation continental shelf can be granted to companies that have not less than five years of experience of the Russian Federation continental shelf exploration; companies that have more than a 50-percent share of the Russian Federation in their authorised capital; and/or companies where the Russian Federation has the right to control directly or indirectly more than 50 percent of the total number of votes of the share capital. Currently, only Rosneft and Gazprom and their subsidiaries meet these requirements.

What current exploration efforts are being made in the Russian Arctic?

The base region for the exploration oil and gas potential in the Siberian Arctic zone is Yamal. It is the most explored region with developed infrastructure and unique reserves of oil and condensate.

The next Arctic gas province after Yamal's stage of production is the Gydanskiy Peninsula. The resource base will provide annual production of more than 60 bcm (2.12 tcf) and up to 4 million tonnes of gas condensate. At present, geological exploration of the Arctic shelf is the main activity in the development of mineral resources in the Arctic shelf. In accordance with the licence obligations, the development of offshore fields is scheduled to begin in 2019-2020. 3D-seismic exploration was the main type of geophysical surveys in 2013. The use of 2D-seismic profiles was planned mostly in the west Arctic and far eastern seas of the Russian Federation. Starting oil production in the Pechora Sea at oilfields the Varandey Sea and Medynskoye Sea is planned by oil and gas companies working in the Russian Arctic shelf.

At the end of 2013, plans to drill six prospect and exploration wells for oil and gas with total length of more than 16,000 metres were announced. As of September 30, 2013, two exploration wells were drilled in the shelf of the Sea of Okhotsk at the Kirinsky subsoil area. In 2015, it is planned to commission the Dolginsky oilfield.

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Gas production in the Severo-Kamennomysskoye, Kamennomysskoye-More and Semakovskoye fields in the Gulf of Ob and Tar Bay of the Kara Sea is planned to start in 2017-2020.

What challenges are faced in Russia's continental shelf?

Poor geological research is one of the factors that restrains more active continental shelf reserves exploration. The degree of exploration of initial recoverable resources of the Russian continental shelf is the following: oil 6.8 percent, gas 11.1 percent. Some seas have zero degree of exploration (Laptev Sea, East-Siberian Sea, the Sea of Chukotsk, Bering Sea, Black Sea and Pacific Ocean aquatory in Kamchatka and Kurily areas).

However, there has been a growth of the licensing area recently. The total area of the Russian sector of the continental shelf is about 6.6 million square kilometres the licensing area is 19 percent, last year saw just 5 percent.

As of October 2013, 131 licences for the geological survey, exploration and production of hydrocarbons in offshore zones of the Russian Federation were issued. Licence holders conduct work at their own expense in 110 zones.

In order to boost investment in offshore development, Federal Law of 30 September, 2013, No. 268-FZ on Amendments to Parts One and Two of the Tax Code of the Russian Federation and Certain Legislative Acts of the Russian Federation in Connection with the Provision of Tax and Customs Duty Incentives for Hydrocarbons Production on the Continental Shelf of the Russian Federation, which provides implementation of a package of measures to stimulate the development of offshore fields, was adopted.

Also, with the purpose of stimulation of the greenfield development, Federal Law of July 23, 2013, No.213-FZ, On Amending Chapters 25 and 26 of Part two of the RF Tax Code and Article Three of the Law, On the Customs Tariff, providing an application of reduced rates of the tax on natural resource production was adopted.

Russia plays a special role in maintaining the Earth's Arctic ecosystems and its unique diversity of species. As was already mentioned, a third of the entire area of the Arctic is Russian. These territories are the vivid embodiment of the typical features of the Arctic ecosystems.

In order to preserve the environment from possible oil spills during production in the territorial sea, in the exclusive economic zone and in the continental shelf of Russia Federal Law No. 287-FZ of December 30, 2012, on the Amendments to the Federal Law on the Continental Shelf of the Russian Federation and the Federal Law on Internal Seawaters, Territorial Seas and the Adjacent Zone of the Russian Federation, Prevention and Elimination of Oil spills in the Sea, was adopted on July 13, 2013.

Russia was also actively involved in the preparation of the second in the history legal binding

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Estimated oil, gas and condensates reserves in the Arctic shelf are **83 billion tonnes**

The Russian sector of the continental shelf is **6.6 million square kilometres**

The licencing area covers **19 percent**

pan-Arctic document – Agreement on Co-operation in the field of preparedness for marine oil spills in the Arctic and combating them, signed during the seventh ministerial session of the Arctic Council in Kirun on May 15, 2013.

Signing the agreement is further evidence of the high responsibility of the Arctic states for the situation in the region.

In your opinion, when will Russia reach peak resource production in the Arctic?

According to the updated quantitative assessment of oil, gas and gas condensate resources, the Barents, Pechora and Kara (including Ob and Taz Bay) seas have the most significant hydrocarbons reserves in the Arctic shelf of the Russian Federation, which comprises 80 percent of total hydrocarbons reserves in the entire Russian Arctic shelf, as well as the entire volume of parametric and exploratory drilling. At the present moment, all the discovered hydrocarbons deposits are located in the area of those seas.

In accordance with the commitments of licence holders, reaching project capacities for hydrocarbons fields in the most prospective areas of the Russian shelf is planned 2027-2035 for oil and 2035-2055 for gas.

So, large-scale oil and gas production is planned to start only after 2030, and before this time mainly geological surveys will be performed.

Can Iran become Russia's main competitor in the natural gas market if negotiations on the "nuclear problem" remove it from international isolation? What are the estimated natural gas reserves in Iran and Russia? Where is it more profitable to produce gas – Russia or Iran?

All producer and exporters can be called potential competitors. At the same time, there are organisations such as the Forum of Gas Exporting Countries where Iran is a member. In these areas we are co-operating with our partners but competition should not cross out one of the participants. We have a mutual understanding with Iran. I think we will be able to co-operate properly with this country.

In comparison, Russia has the largest gas reserves in the world, which are of 69 tcm. Gas reserves in Iran are estimated at 34 tcm. At present, Iran almost does not export gas. That is, Iran exports about 9 bcm per year while Russia exports 235 bcm.

If Iran's isolation is removed, the country will need to make decisions about the sales market in the first turn. Iran can enter European markets as well as markets in Asia and Oceania. But both options will require large-scale investments in infrastructure. Moreover, the contract conditions offered by Russia are rather attractive to foreign investors. ■

REFERENCE 1: *Construction of the ESPO (East Siberia-pacific ocean) pipeline was fulfilled in two stages: ESPO-1, including construction of the Tayshet-Skovorodino sector and the Kozmino oil port, and ESPO-2, including construction of pipeline Skovorodino-Khabarovsk- Kozmino port and development of the Kozmino oil port.*

REFERENCE 2: *In terms of oil and gas resources, the Russian Federation has the most extensive and promising marine periphery. The state balance of mineral resources on the continental shelf of the Russian Federation as of January 1, 2013, includes hydrocarbons reserves in 62 fields, including 15 underwater extensions of coastal fields.*

The total amount of recoverable hydrocarbons reserves in categories ABC1 + C2 is 13.4 billion tonnes of coal equivalent, while reserves of the higher category A on the continental shelf of the Russian Federation are not registered, and total reserves of categories B + C1 reserves of 8.9 billion tonnes of coal equivalent or 67 percent.

Russia's vast hydrocarbons reserves and geographic position makes it an important energy exporter