

SPIEF 2016

Igor Sechin's Keynote Speech

at the Summit of Energy Companies

“Global oil markets at the crossroads: reducing investments due to uncertainty or managing risks?”

Dear colleagues, Summit participants and guests,

On behalf of Rosneft, one of the organizers and sponsors of the Forum, I would like to welcome the participants of the Summit and wish success to all of us.

Our Summit is different from many other events, including those held within the framework of the Saint Petersburg Forum. Here today we have the true leaders of the oil and gas business that take substantial efforts across this industry and play key roles in supplying energy to the world economy.

In this regard, sharing our opinions about the situation in the world oil market is especially important.

Disclaimer

Please note that my liability is limited due to a deliberative nature of this presentation.

I. Developments over the year since the previous Summit and short-term prospects

Volatility and oil market price dynamics

The current oil market situation is far more complicated and mosaic than what it used to be during the balanced market years. We can say that this industry market tools have changed. The underlying reasons are the notorious sanctions, as well as reliance on short-term financial market instruments and manipulation with market institutions to the detriment of long-term relationship between consumers and hydrocarbon

producers as well as fundamental development factors. Different players are testing the industry and market tools, looking for an opportunity to secure their interests, often to the detriment of the fundamentals of its development.

Even statistics is no longer a reliable benchmark for analysis. Reference points for making strategic and investment decisions are disappearing.

The market is experiencing **unprecedented high volatility**. Today, the prices have almost reached the level of last year, although in January-February this year, they plummeted down to USD 27/bbl. A number of large investment banks were testing the levels of USD 20 and below, predicting **severe downturns** in the global economy, including a “hard landing” for the Chinese economy and stagnation of the US economy.

Analytical agencies do not contribute to forming rational expectations among the market players. On the whole, this is not surprising. The International Energy Agency represents the interests of consumers who are happy with low prices; the American Energy Information Administration of the US Department of Energy published its forecasts without linking them to the price levels; the position of OPEC’s Secretariat is in conflict with the comments of its member countries’ representatives. It is obvious that **adequate information and well-balanced, substantiated market analysis have become one of most urgent issues**.

In the oil industry, price volatility **affects a long-term investment cycle** of capital expenditures, and the ability of oil companies to meet the global economy demand. Thus, lower oil prices and volatility have already resulted in the loss of approximately USD 350 billion in investments, which **will undoubtedly have mid-term consequences**. If previously the industry was based on implementation of long-term investment cycle objectives, now the balance is definitely upset.

Prospects for market rebalancing in 2H 2016

The oil market has started moving towards achieving the balance in the mid-term. In this regard our expectations are mostly with the year 2017, rather than with the second half of this year. A number of **uncertainty factors are certainly still in**

place; primarily it refers to some producers, who in their behavior have actually assumed the role of regulators in the oil market, as well as in the financial sector. Currently there is a clear positive trend; even though the balance is being searched for and it is quite obvious, there are so many risk factors that at any time we might lose the equilibrium.

Today, having passed the worst stage of this severe crisis, we can pay more attention to **analysis and discussion of fundamental factors decisive for the industry development, and in some sense we need to ‘get back to the roots’ to discuss whether a long-term investment cycle is needed for consumption, and how they are interrelated.**

II. Demand factor and anticipated price behavior

First of all, demand continues to demonstrate sustainable growth **in emerging economies.** We all know the relevant GDP growth statistics for such fast-growing economies as China – 6.5% per annum, India – more than 7%, Indonesia – 5% and Vietnam - 7%.

Therefore, in general, we believe that repeatedly articulated threats to development of the global economy and economies driving the energy demand growth have been **grossly exaggerated.** Even in OECD countries a decline in demand reversed with a growth of 1.1% in 2015. In these circumstances, along with this potential, the role of alternative energies is being presented in a distorted fashion. Not only it is the matter of construction of expensive infrastructure, but it also entails a loss in budget revenues in the countries that implement programs aimed at developing this sector.

Energy agencies expect gradual oil price recovery

I have already mentioned previously that such oil market short-term and mid-term development fundamentals as sustainable demand growth, including new growing markets of emerging economies, and decline in investment activity across the sector, within the next 4-5 years should result in a dramatic change in the market and its post **stabilization growth.**

In the medium-term perspective, we will see **some shortage of new oil supply**. It will hardly be the matter of physical deficit; most likely it will be the case of increased tension in the demand/supply balance. If financial market senses it and reflects it in the prices well in advance, we will be able to avoid a new turbulence and will succeed in restoring the investment process having ensured an adequate level of diversification of liquids supply sources.

Today, energy agencies at least are unanimously **confident in the oil price growth and consistent recovery** (in real terms). Thus, a few days ago, I discussed these matters with one of the most distinguished global energy expert and analyst Edward Morse, who used to be first to predict the US shale revolution. Today he is the Head of the Citi Group analytical service and this service optimistically favours rising oil prices in the next few years (50+USD this year, c.60 USD in 2017 and 64 USD in 2018). At the same time, he confirmed that **even these price levels fail to cover the full cycle costs for many projects that the industry needs, and, therefore, these investments are of high risks**. There are also alternative opinions, for example, many financial agencies are talking about a potential oil price decline. However in my opinion this estimate may be associated with the attempts to solve the task of creating financial reserves. Everybody pursues their own interests. **It is essential, though, that industry trend expectations should be articulated by industry-related agencies, thus helping ensure the required coordination and the unbiased balance of interests**.

On a separate note, I would like to say, that **the industry backbone has been “tested”** by this unprecedented price volatility. The recent years demonstrated that **the oil market paradigm essentially changed**: for a long time it has been a common belief that OPEC is regulating the oil market; then, owing to break-through technologies, a new regulator – US shale oil producer appeared. However, in our view, the new reality is that the market development is increasingly determined by a number of factors that include availability and quality of resources, impressive progress in development and application of cutting-edge physical market technology, plus development of financial instruments and financial technology and regulators’

activities. A special role is being played by regulators.

Resource potential of the largest oil producing countries

Objective differences in geology and resource base affect the role of certain countries in the world market. I would draw your attention to such countries with a unique resource potential as Venezuela, where our company is actively operating, and Iran, which has been building up its production following the lifted sanctions. Today, realization of this potential of course is complicated by a number of factors – infrastructural constraints, the amount of the capital required and political factors.

As I can see it, the current crisis will result in re-estimation of the current and future roles of the **three main oil producing countries**. They possess not only geological resource potential, but also a wide range of factors required to impact the markets. **The main market players are being crystallized.** These countries are Saudi Arabia, the USA and Russia. Each of them is addressing **these challenges** using its resource and technological potential, market structure and specifics of political and economical decision-making.

III. USA

Let us first look at the USA, the country where oil industry has been driving both the oil market changes in the previous years, and the current phase of the technological breakthrough across the industry.

US oil industry is one of the oldest in the world, and its onshore conventional resources are mostly depleted. Nevertheless, the US market is unique because of the domestic consumption size (more than 800 million tons per year), therefore, in many respects, the domestic market “absorbs” the fluctuations in the production level.

Nonetheless, future production trends will largely depend on the progress in development of shale resources and access to the offshore areas and federal lands. This issue is under discussion at the political level.

In any case, because of the US oil resource base quality, its full utilization will require high prices, despite the technological achievements.

US production forecasts to 2025 significantly differ

The US shale production prospects depend on intensive technological development and cost reduction across the entire production chain, and, apparently, the current **price levels will result in stabilization and even recovery**. However, contrary to expectations of the many, this growth will not be explosive, since there is no longer any euphoria about unlimited financing of this sector, and a better understanding of risks will lead to an improved balance in the financial policy.

US shale industry generates losses and debts

It is important that the US shale industry is commencing to “clear up the debris” resulting from the difficult situation in many companies that failed to adapt to the market downturn, companies heavily indebted and often operating at a loss (as of the end of 2015, the long-term debt of the companies in the sector exceeded USD350 billion). The companies across the industry demonstrate a big variation in efficiency parameters and performance indicators – as of today, 23% of most productive wells yield about 70% of shale production, while the remaining 77% of wells (major part) generate losses.

Unfortunately, it is possible to state that at least some part of the US oil industry has found itself in the existing situation because of moving ‘spot’-based, financial approaches towards the real sector. We believe that such approach is unsustainable. Volatility in the financial sector is too high, and long-term investment decisions cannot be made on the basis of daily dynamics of price quotations.

US production forecasts to 2040 significantly differ

The long-term outlook for the US production deserves our close attention, in particular, because shale production in the USA may prove to be a longer factor that it was viewed previously.

US elections a telling example of political uncertainty

Today the US energy is at the crossroads in view of major differences in the perception of its development, featured in the programs of Presidential candidates:

Senator Hillary Clinton and a famous businessman Donald Trump.

In fact:

- The Republicans already today are proposing measures aimed at development of domestic oil, gas and coal production and exports, while Hillary Clinton suggests enhancing support to renewable energies;
- Trump proposes lifting the ban introduced by President B. Obama on exploration and production of hydrocarbons on federal lands, while the Democratic candidate Clinton proposes keeping them;
- Trump's program contemplates development of market competition among different energy products, including renewables, while Clinton's program implies massive multi-billion subsidies, including budget subsidies to such sources as solar energy, with raising its generating capacities to 500 GW;
- Trump talks about a move away from domination of the climate and environmental agenda, up to and including potential withdrawal of the US from the Paris Climate Agreement, whereas Clinton gives priority to such ambitious goals as reduction of greenhouse emissions by 80% by the year 2050.

The list of essential differences between the two programs **can be continued**.

Considering the role played by the American economy, such uncertainties about development of the US oil and gas industry (technological, political and economic) **increase the global economy risks**.

IV. Dramatic shifts in Saudi Arabia

Saudi Arabia - Changes in the new environment

Like in the US, where the recession has necessitated structural reorganization of the shale industry, in Saudi Arabia it highlighted the need for a change in the oil and gas industry and economy as a whole. Unlike the US, Saudi Arabia has no sizable domestic consumption market, therefore, the success of the Saudi oil and gas industry will depend, among other things, on the Saudis' ability to enter new consumption markets and ability to create integral partnerships. This ability has to be tested yet and

some questions still remain.

I would put it more straight forwardly: having caused the shocks in the world market, the US market could afford the risks only with Saudi Arabia standing behind its back, with its richest conventional oil resource base, which, seemingly, could gain from some new approaches and technologies of the US market. But, as a result, this country did not avoid the shocks either.

In terms of production, Saudi Arabia attempted at **coming up with “its own response” to the shale revolution**. We can see this approach in reality for the last two years. This “response” has proved to be quite painful for Saudi Arabia as well: a dramatic fall in oil revenues and budget deficit of USD100 billion in 2015. The Kingdom has already taken serious steps aimed at changing the taxation system and pricing policy, but in 2016 the budget deficit will exceed USD85 billion anyway. Recently (I mean Vision 2030 initiative) unprecedented reforms have been declared both in the industry, including partial privatization of Saudi Aramco, and tax reforms of the oil industry related thereto, which are aimed at achieving market capitalization of the company, and in the economy in general, with the purpose of moving away from the “oil dependency” already in the near-term perspective.

As for privatization of Saudi Aramco, we believe that this process will help substantially improve transparency of the national oil industry, including publicly available data about oil reserves, which have not been updated for three decades already (over this period, information about Saudi Arabia’s reserves has not changed at all), the economic figures of this country’s major oil resources development. Furthermore, material changes in the technological and financial infrastructure of the country’s oil and gas sector will be required.

As for “moving away from oil dependency” as the goal of the declared in the plan Vision 2030, we know from our experience how complicated this path is, even considering Russia’s advantages as highly qualified research talent, advanced positions in a number of spheres of high technology machine building, favorable conditions for development of food and processing facilities. With interest we will be

watching Saudi Arabia moving along the chosen path.

V. Trends and fundamental changes in the energy sector

Before we discuss how Russia responded to these challenges, I would also like to comment on “cross-cutting trends” affecting the whole industry.

Today, a “**new technological format**” of petroleum industry is being formed, including entry of **technologies for fast processing of large arrays of geological data** in the industry, which, given **visualization** and analysis technologies, enable us to speak about **a new round in development of the industry’s abilities** to use the resource potential.

Under the new price environment and in view of technology development, the **role of oil field service changes and the requirements thereto increase**. Oil field services should be at the forefront of mastering new technologies and offer most efficient solutions to operators. Competition in this area is growing. As we see it, only the oil field service companies leading in innovations will succeed.

Forecasts indicate that the role of transportation and petro-chemistry will remain dominant in liquids consumption.

In the future, development of our industry will be increasingly determined by expansion of transportation sector and increased demand for petrochemical products, in emerging economies first of all.

According to the forecasts, the **gas industry** will be growing faster than the oil industry. We are actively developing this business and are interested in its growth. Here of course the drivers are the increased importance of gas for the power industry – a fundamental yet a low-margin sector, and growth of production and use of ‘gas liquids’ in petro-chemistry.

For the gas industry it is distinctive to have an expanding competition in the key export markets and to conduct policy of ‘diversification of gas sources and gas supply routes’. Including entry of LNG from the US. In the super-low price environment, the ‘global market decay is impending and before we tackle these issues it is impossible

to implement major infrastructural projects. In the current medium-price environment we can see lower margins across the industry. We can see **the need for an efficient ‘Russian gas response’** first of all by providing equal conditions in the global markets.

Other energy sectors also keep developing. The nuclear energy sector is an important alternative and destination for diversification in power generation. It's a high-tech industry, and in its development we see a move to technology-based solutions for the use of nuclear technologies in the civil sector. The nuclear energy sector is at its maturity stage and it makes it very important to obtain experience in ‘full cycle costs’, which include decommissioning of expired service life facilities, and a follow-up accounting for relevant costs in implementation of new facilities. It is important to find the right place for the nuclear sector in the balance of regional energy in order to avoid putting some extra burden on the consumers from lengthy implementation period and high CAPEX.

Renewable energy is also being actively discussed, and here we believe it is critically important to achieve progress in creation of such important components of renewable energy development as invention of powerful and low cost power accumulation and storage means, development of fuel stations network infrastructure, and a number of other opportunities including the above-mentioned budget revenues.

On a separate note, I would like to draw your attention to the lack of clarity in the energy sector information. All market participants need to cooperate and communicate, since development of efficient regulation for global and regional markets is ‘spinning the wheel’. I hope that development of interaction, including at this Summit of Energy Companies will fill-in or fix this gap.

VI. Russian petroleum industry. Strengths, opportunities for development and risks

Russia – sustainable position in the international oil trade

As you know Russia is one of the top oil producing countries and it is also among the

leaders as related to the volumes of its oil supplies to the global market.

As we have seen, major oil producers significantly differ in their resource potential, infrastructure in place, technology and competencies, as well as in the structure of their regional supply and demand balance. As for the supplies to the global market, **Russia has important advantages** vs. other countries: well-developed export infrastructure including pipelines, a fairly low leverage, sales system tested for decades and **successfully supplemented by long-term contracts**, integration into emerging sales market in the East as well as stable Western sales markets. This model provides for **consistency, efficiency and stability** of the Russian oil **exports**.

Well-balanced supply and demand in Russia is also important. In Russia, given the high level of domestic demand the existing capacities allow for exports to be diversified by directions and products. This distinguishes Russia's position in the global petroleum industry.

Within the last two years, Russian oil industry has been affected by the global challenges as well. However, this negative impact appeared to be limited, especially on the background of the response from many other players. It surprised many observers and analysts, who were not prepared for such development. **Against those thrills, the Russian oil industry seemed to be 'terra incognita' to those observers and analysts, but 'as a result, taking into account its resource base, the demonstrated performance, market institutions, available quality market channels, it is becoming 'terra fertilis', a fertile land.**

What is behind this phenomenon?

Russia has great resource potential and Russian oil projects are cost-efficient even in low price environment.

First, I would mention the **scale and high quality of Russian hydrocarbon resources**. In addition to it, a well-developed supply infrastructure, long established traditions in the industry staff training and a good engineering school. Using these prerequisites, Russian oil companies ensure **one of the world's lowest** per unit costs

of resource development. For Rosneft today it is **2.1 USD/bbl**.

There are **big new promising projects** in Russia, allowing us to maintain the oil output and investment level while the majority of foreign public and national companies are cutting their capital expenditures and are forced to revise their project portfolio due to the lack of attractive investment projects under the current price conditions.

Russian oil production has developed in a favourable scenario, however, below its full potential

Oil production in Russia was growing through a launch of new projects mostly prepared **prior to recession and supported by the government**. During the economic downturn the leading Russian oil companies **optimize expenditures and do not suspend implementation** of these projects. In accordance with the base case of the General Plan for Development of the Oil Industry up to 2035 (currently submitted for approval), Russian oil production will remain stable. However, in order to meet this target the **tax system should incorporate incentives**. This work should be accelerated for the discussions about pilot projects to be over before production starts following the downward trend.

In Russia the key parameter to determine oil production is its fiscal environment, not the oil prices. According to Ernst&Young official independent evaluation, in 2015 with the oil price of \$51 per barrel on average, Rosneft paid \$25 of taxes per each barrel of oil it produced. It is far more (in some cases 4 or 5 fold) than overseas companies paid. It should be noted that these tax payments have been stated as part of so-called 'big tax maneuver' that was developed and implemented for the oil price of above \$100 per barrel. Obviously it is required to adjust it as per the medium-term oil price reality. Even more so when literally yesterday we saw the Ministry of Finance's projections regarding the risks of further decline in oil prices.

In my opinion, the idea of taxation is quite simple: the oil price is \$50 per barrel; the cost of production is \$2 per barrel. Even if the full cost is a little higher than \$10 per barrel, including transportation and other costs, the target fiscal system is to

ensure incentivized investments in production till production of an additional barrel costs less than the market barrel price. If we talk about downstream, then cross-subsidies within vertically integrated systems cannot be viewed as economically appropriate method of business operations. All areas of operations in a company should be economically viable. That is why taxation in downstream should also be rational and incentivize investments.

There are two major sources of Russian oil development - Brownfield production and unconventional reserves

I can see a significant undeveloped potential in West Siberia fields, yet I would also like to mention that Russian non-conventional resources are **the largest in the world** and they exceed similar resources of the USA by 1/3 (as evaluated by Goldman Sachs). They include a whole range of geological formations, in particular the Tyumen suite, Bazhen, Domanik, Khadum etc. In order to develop each of them efficiently, certain technology modifications are required. Over the last years, Russian companies made a serious progress in these areas. Multistage hydraulic fracturing is being widely used as well as extended-reach directional drilling. You also know about our joint experience with Exxon when we drilled directional wells with a record extended reach of more than 12 km.

For such capital-intensive industries as oil and gas production, it is important to account for **multiplier effects** indicating how the investment and operational expenditures in this sector increase production and revenues, and as a consequence growth rates of throughout the economy via cross-industry relations. From our company experience with investment projects, we know that additional growth of production in the economy during the project lifetime sometimes **exceeds the initial costs by tens**.

We believe that in the nearest decade the maximum potential is coming from efficient use of our **unique conventional oil resource base**, including the areas of West Siberia with well developed infrastructure. Rosneft alone has the proved reserves of 29.8 billion barrels. This ensures our development for a 20-years horizon even with

no further expansion of this base.

In the Russian oil industry, which has been operating for many decades by now, we have lots of fields at a mature development stage. Some incentives have been put in place to enhance oil recovery and the recent years have demonstrated higher production from these fields. Yet, with appropriate tax incentives, the current oil recovery factors slightly exceeding 20%, may easily go beyond 40-50%, which is the level demonstrated by best global projects over the last years.

Such development will be followed by a more efficient use of the established infrastructure and in the mid-term it will ensure beneficial cooperation between the state and business, development of most efficient resources and consequently, sufficient revenues to the budget.

All of this of course means that **efficient regulation of our industry is becoming more important.**

When planning the pace of changes in the Russian oil industry, one should account for the fact that under worsened operational conditions such countries as Saudi Arabia, Iran and Mexico already have taken measures aimed at improved investment attractiveness of the industry and its projects. This is not to mention the USA, where without a significant governmental support, the shale oil industry would not have even come to life under the high price environment during the shale oil industry evolution.

VII. Rosneft's development

Let me make a few final comments on behalf of the Company. Today, Rosneft is **the world's biggest publicly traded oil company, taking a leading position in the global benchmarks** by a number of economic and its resource indicators.

We are focusing our efforts on development of new projects. Our role is to **combine Russian unique geology with our partners' capital and best practices.**

In September 2014, Rosneft and Exxon JV in the Kara Sea drilled the northernmost oil well in the world – Universitetskaya-1 and discovered the Pobeda field. **This was**

the biggest discovery in 2014 in the world. The field reserves amount to 130 Mt of oil and 396 bcm of non-associated gas. As a result, we **successfully created a new strategic area for offshore development.**

Pobeda is the northernmost project in the global oil and gas industry, unique both in terms of technology and interaction with partners. However, this is just the beginning. A successful discovery of the new field by drilling of the very first well confirmed justification of our geologists and our partner specialists' estimations. Essentially we are speaking **about a pearl in the global oil and gas industry.**

This discovery helped **confirm** the continuation of the largest West-Siberian oil province to the Kara Sea shelf. The experts say the scope of resources here is larger than in the Gulf of Mexico, the Brazilian shelf, the Arctic shelf of Alaska and Canada, and will be comparable to the whole of the existing resource base of Saudi Arabia. More than 30 structures are found on the three East-Prinovozemelskiy blocks of the Kara Sea alone. DeGolyer & MacNaughton estimates the resource base of these blocks at 87 billion barrels or ca. 12 billion toe.

Years of intensive work are ahead of us, billions of investments, application of most advanced and innovative technology, but most importantly what we already have in place is the richest region with high quality oil. Of course, the projects of this scale are better developed in cooperation. We are fully prepared for this cooperation.

In general I would like to note that we are prepared to open our resource base; we attract foreign investors both to share risks and to strengthen and develop technological competencies of the industry.

I would also like to mention investors entering the Vankor Project. In late May 2016, we closed the deal with ONGC on acquisition of 15% share in the Project. This is a landmark transaction for both companies and a symbol of a move to a new level of cooperation between Russia and India in the energy sector. ONGC will have a significant share and rights in one of Rosneft's largest projects of the past decade.

We **relentlessly improve efficiency** of our work in all areas and try to turn the Company into one of the leading transnational players, **responsible, open and**

determining the industry's image for the coming decades. The **efficient dialogue** with our dear colleagues and partners present here today will be the decisive factor of our success.

Thank you very much for your attention.