Speech of Rosneft Chairman of the Management Board Igor Sechin at the Conference "Power bridge Russia – Japan"

Dear colleagues, ladies and gentlemen,

First of all, let me thank Mr. Yōhei Sasakawa and Mr. Nobuo Tanaka for the opportunity to speak at the first conference on the Russia-Japan energy bridge.

Our conference organically flows from the Eastern Economic Forum, which took place in Vladivostok in early September, where we discussed energy partnership between Russia and the APAC. Today, we have an opportunity to continue the dialogue with this cooperation between Russia and Japan.

I should warn you though that the presentation contains some contentious views and preliminary judgments the company accepts no liability for.

MARKET ANALYSIS

Energy resource markets analysis is extremely important to review in such kind of discussions.

The key feature that determines the condition of all other energy markets today is the situation in the oil market, which has changed dramatically over the past year and a half.

These changes are associated primarily with the phenomenon of shale oil production and the fact that the balancing policies used to be pursued by the OPEC countries have, in fact, switched to a regional US market which has become the most important regulator worldwide.

Interestingly, this comes after the oil shale mining has increased dramatically and due to the fact that in the United States, there is a whole set of factors shaping the development of a competitive oil market. Those include financial sources, financial derivatives, stock exchanges, a well-developed system of oil and gas pipelines, and a large number of contractors multiplying the effects of the industry on the economy.

In this context, trends in the global oil market are most likely to be determined by the US market in the short- and medium-term, specifically by the hedging process of oil shale production in the coming months and years as it is a source of substantial financial support.

The current **aggregate debt of twenty-five shale producers** alone **totals** about **USD150 bln**. Available estimates suggest that amid low prices, existing hedging mechanisms and extendable reserve-based loans might persist throughout 2017, albeit on a lower scale.

Technologic advance is the most important factor determining the stability of shale oil production and influencing the prospects of the global oil market. At the same time, there is

uncertainty in its impact on production volumes primarily due to the quality of the resource base.

Shale oil companies are actively restructuring their budgets selling non-core or non-operating assets, cutting investment and dividend payment programs to optimize the costs.

In September 2015, the excess of supply over demand in the global oil market dropped by more than 1.2 mb/d, but it is still more than 1 mb/d and is expected to persist until the end of 2016.

As a result, the situation in the oil market is characterized by the continued imbalance in supply and demand, dramatically low price indicators, as well as greatly increased uncertainty, high risks and growing competition.

SAUDI ARABIA'S POLITICS AND ISSUES

Saudi Arabia, among other things, continues to implement its market share increase strategy by

augmenting the output in the low price environment.

In this regard, it is worth mentioning that the U.S. oil imports from the Middle East has declined considerably over the past decade, from 125 mln mt in 2005 to 82 mln mt as of late 2015. Meanwhile, despite all current issues of the region, the Middle East output has upped 114 mln mt over the same period. Therefore, we are witnessing the Middle East embarking on new sales markets' very active development.

For instance, Százhalombatta-based Dunabe Refinery, Hungary, has started importing alternative crude oil from Kurdistan recently. We can find a similar example in Poland. After Polish PM's visit to Saudi Arabia in April 2015, the two countries agreed on the Arabian oil deliveries for its follow-up refining at Płock-based and Gdańsk-based refineries.

It is noteworthy that the strategy pursued by Saudi Arabia fails to bring any significant gains, rather on the contrary. Low prices force the

country to spend tens of billions from sovereign wealth funds and resort to foreign borrowing.

Lately, there has been a strong need for fiscal austerity. The **Ministry of Finance of Saudi Arabia encouraged other ministries of the country** to cut spending, namely not to buy new cars or furniture, not to rent new premises, and not to increase staff by the end of 2015.

OPEC countries are still unwilling to act as a regulator, despite huge financial losses. The recent OPEC meeting has produced no results.

The main long-term factor to define the future oil market is the resource base condition. The existing assessment proves that the expected growth of global oil consumption may be ensured only through the production from fields with sufficient level of net cost.

Net cost analysis of about 75% of new production by 2030 (about 33 million barrel/day) shows that **the last 3 million barrels/day will be expensive oil with net cost of \$85-98/barrel** measured in 2015 dollars. The net cost of about 28

million barrel/day of new production will not exceed \$75/barrel measured in 2015 dollars.

At that, by 2030 about 30 million barrel/day of existing production capacities will be decommissioned. We are already witnessing the reduction in oil production in Holland and in the North Sea.

ENERGY SUPPLIES STRUCTURE AND ENERGY SECURITY

In recent years, Japan has been importing around 170-180 mln tons of oil. Surprisingly, the Persian Gulf countries account for 83% of oil supplies, although this is a remote region with high logistics risks. At that, suppliers from Asia-Pacific region account for no more than 13%, despite the wide geographical diversity of imports.

In China, dependence on supplies from the Persian Gulf is much smaller (51%); and **in India**, which is only 1,500 km away from the major fields of the Persian Gulf, **this figure is 58%**.

In the US, this metric is even lower (25%), as energy is provided by domestic production and supplies from the nearby countries of Canada and Mexico.

Our colleagues from Japan have been making comprehensive and meticulous efforts to solve the energy security issue for many years, with entering equities of promising production projects across the globe being their primary focus. Let us look at the result, though. **Out of 140** international projects, almost a **half** are geographically close. The remaining projects have characteristically extreme challenging economic, natural and technological conditions; they are exposed to military conflicts and political risks.

Today, Japanese companies that participate in overseas projects secure some 23% of the country's hydrocarbon needs. This is a good result; however, in terms of securing long-term energy security of Japan, it is probably insufficient yet.

It seems strange that Japanese companies pay that little attention to Russia, their nearest neighbor. We only have two current partnership projects: those are Sakhalin 1 and Sakhalin 2. To compare, in the U.S. and Canada, Japan's companies participate in 19 projects developing extremely capital-intensive deposits: oil sands and shale oil. Moreover, the projects offer rather dubious possibility to obtain permits to export the oil.

Often, the **efficiency** of Japanese investors' infusions in Russian alternatives is **rather low**. As far as we know *(from City Bank's estimates)*, over the **past three years**, Japanese firms had to **write off** about JPY600 bln (nearly **USD6 bln**) due to bad investments in tough oil and gas projects in the U.S. and Canada, as well as in oil assets in the North Sea. **The result is for the period of high oil prices!** Actual **IRR** on overseas upstream projects of INPEX in 2014 was **3.1%** (according to Wood Mackenzie). This means it is **four times less than the standard rate of return**.

RUSSIAN ENERGY MARKET AND INTERTRADE

At the same time, in the Russian energy industry, the volumes of energy resource extraction are holding steady and even increasing; the export is growing.

Despite decreasing trade value between Russia and Japan in the current year, Russia's oil exports to Japan increased by 20% in January-August 2015 in comparison with the relevant period of 2014. In 2014, Russia's oil imports to Japan totaled 13.5 million tons to provide for 8.2% of the total oil consumption of 168 million tons in Japan.

Still, the growth potential of our trade and economic relations remains largely untapped. I believe we have a possibility to step up our trade. For this purpose, we need to expand our joint projects in the energy sector. The Russia - Japan Power Bridge Conference may get the process going. As the old Japanese saying goes, "a long journey begins with a single step."

GROUNDS FOR PRICE CHANGES IN ENERGY MARKETS

For energy consumers (and Japan imports over 90% of the consumed primary energy resources) today's price situation in the energy market is both an advantage and an important factor for cutting economic costs. At the same time, a reference to Henry Hub prices fell short of expectations: in the context of the oil market price dynamics, LNG pricing with a customary "oil reference" proves to be more attractive to Japan's consumers than the Henry Hub base.

Growing LNG supplies from Australia have inherent restrictions, as Australian project operators, including the Gorgon gas project, deal with the so-called acid gases with abnormally high content of carbon dioxide of 20% or more, which challenges development and may cause negative environmental effects.

We always need to address the **operating and full cost** level. Oil price should exceed the level of operating material costs of so-called "marginal" suppliers.

Of course, **the equilibrium market** suggests that the oil price should cover **full costs** of production.

Oversupply may bring the price down to **operating costs**, and this is what we see in the market today. At the same time, this price rate will not remain at a balance as no new oil fields requiring full-cycle costs will be developed.

The prices are bound to get back to the long-term equilibrium of the full-cycle costs.

Today's oversupply in the oil market results to a large extent from the massive investments of the previous years. No secret that the global oil producers invested heavily in new oil and gas projects in 2010-2014 significantly expanding their range: bitumen sands in Canada, shale oil in America, deep-sea projects in Western Africa and the North Sea, etc. With a 3 to 4 year time lag from commencement of investments to commissioning of the oil fields, the production growth from new projects may have an effect within several years. Chevron, for example, expects to grow its liquid hydrocarbon production to 97

million tons by 2017 (85.1 million tons in 2014) on account of its earlier investments. Similarly, BP expects to grow oil production to 104 million tons by 2017 from 96 million tons in 2014. Total also expects a steady growth in its own hydrocarbon production in all key business regions in 2015-2019.

However, we have to bear in mind that, first, oil production by transnational corporations (TNC) hardly dominates the global supply and, second, the expected TNC's supply growth is only temporary with a view to current decrease in investments.

<u>DECLINE</u> IN <u>PRODUCTION</u> <u>INVESTMENT</u>

Low 2015 prices caused a substantial decline in oil companies' profits, making most investment projects unprofitable. The resulting cost cutting affected budgets of most companies. Many investment projects at the decision-making stage were either cancelled or deferred. According to Wood Mackenzie, liquid hydrocarbon production in the framework of projects deferred almost for a

year in 2015 would reach 7 million barrels per day by 2025.

Currently, the oil sector faces the upfront decline in the investment activity. According to Wood Mackenzie, 2015 confirmed a decline in global capital upstream investment by US \$220 billion down from the last year. However, this can be a rather optimistic view, as, most probably, the global investment decline in oil production will total \$300 billion.

Gradually, the effect of previous investments which I mentioned above will fade, and according to some estimates, we may expect the net reduction in oil production in 2016, which will drive the market balancing.

POWER BRIDGE CONCEPT

The term power bridge usually refers to power networks and capacities that form a "bridge" of power systems. In our case by involving the construction of aa powerbridge, we mean not only power grids, but also a communication channel based on the primary energy supply such as the supply of oil, oil products, LNG and other energy sources, counter deliveries of machinery and even assets swap. This is how I suggest we understand the notion of a powerbridge, as I see great opportunities to expand our business cooperation.

This energy bridge involves significant interdependency of energy systems and the economies of both countries, i.e., in fact, forms a framework for strategic partnership between the two states.

OUR SUGGESTIONS FOR THR UPSTREAM AREA

We believe that the move towards a strategic partnership should be vigorous. Rosneft has offered its Japanese partners over a dozen upstream projects at various stages of preparation: from the exploration stage to the level of industrial production.

All of these projects have the following unique features:

- **created in elaborated legal environment** and, in this view, are absolutely competitive in the world market;
- offered on standardized and approved terms of capital participation, that is, do not require any special review on the political and administrative levels;
- may go hand in hand with unique business offers.

Our Japanese colleagues are familiar with most of the projects proposed by Rosneft. We **held numerous talks** but the result is very modest, as the projects are still being considered.

Meanwhile, I must say that your colleagues from China and India are already joining the projects offered by us.

It is worth noting that today we are putting up for discussion a range of projects significantly expanding our standard portfolio.

For example, projects on the Sakhalin shelf near Sakhalin-1 fields: **the Astrahanovskoe Sea-Nekrasovsky, Kaigansko-Vasyukanskoye-**Sea, **Deryuginsky** deposits with proven **oil reserves of 40.2 mmt** and **44 bcm in gas reserves** and the total resource potential amounting to 231 mln tons of oil and condensate and 21 bcm of gas.

We offer you to enter equities of operating and future fields in Eastern Siberia and the Far East, particularly the Verkhnechonskoye field, the Srednebotuobinskoye field, the Tagulskoye field, the Russkoye field and others. The production expansion to over 30 mln mt of oil and 16 bcm of natural gas annually is in the company's near-term plan here.

Our offer also includes special projects. Those are production expansion at operating fields through enhanced oil recovery methods and gas field development (the Kharampur, KynskoChaselskoye and Russko-Rechenskoye fields), as well as future gas project Pechora LNG.

The total gas reserves in the continental East of Russia make up 8.7 tcm, and the resource potential is more than 33 tcm. This means that the potential for gas exports from Russia to the Asia-Pacific region is estimated to be 300 or more bcm of gas per year.

Today, Rosneft invites its Japanese partners to join upstream projects with total reserves of 6 bln barrels and a resource base of 100 bln barrels of oil equivalent.

OUR DOWNSTREAM OFFERS

Another area of development of the Russia-Japan energy bridge is related to the oil and gas processing and supply of petroleum products.

Currently, Japan imports roughly 25-30 mln tons of petroleum products a year, mainly naphtha, for further processing. This is kind of an

alternative to core raw material supplies. As far as I can see, you have no plans to boost these volumes. Nevertheless, we call on our colleagues to mull over the possibilities available.

Specifically, think about joining the Far East Petrochemical Company, Rosneft's largest investment project to build an oil refining and petrochemical complex in the Far East of Russia. The project envisages both the possibility of supplying equipment and a reasonable division of labor and specialization when developing the petrochemical sector.

The idea of joining efforts for a bunker fuel project is of particular interest here.

Let me remind you of the somewhat forgotten concept of 'global enterprise', which spells a simple formula: buy raw materials where they are cheap, produce where the wages are lowest and sell where prices are highest.

Today, from the global enterprise point of view, Russia's East is one of the best areas, at least in terms of oil processing and petrochemical effort, for it has the raw materials, cheap and qualified workforce, while also being adjacent to large markets of Russia and APR, which have huge demand for such products. Plus, Russian territories offer recreational opportunities.

I want to emphasize that the **investment** attractiveness of Russia's energy sector is formed, among other things, through the mechanism of the flexible exchange rate. Amid a significant decline in global prices for hydrocarbons, this creates certain advantages to the Russian oil and gas sector in terms of costs and ensures the competitiveness of its new projects.

Our Japanese colleagues may also find interesting the idea of joining mining projects as another area of oil refining. Acquiring a share in an upstream project could mean hedging price fluctuations in oil prices, more sustainable business amid volatile prices in commodity markets. I know that owners of Japanese refineries are practicing this model a lot.

Together we could think of making such hedging more available.

SHIPBUILDING - ZVEZDA

Long-term plans to develop the resource base on the Russian shelf require reliable supply of vessels and equipment. In turn, the Far East is a priority area of development in Russia in the 21st century and it requires new high-tech industries.

Zvezda, a new **shipbuilding complex** being built near Vladivostok, is to be one of the key facilities of this kind, as it will include marine engineering companies as well as equipment and component producing facilities.

The shipyard's first shops have already been commissioned. The production venue will major in the manufacture of service fleet and complicated marine equipment, to a total number of **over 150 different kinds**, for shelf projects.

Rosneft and other major client companies have already signed agreements to have their orders placed in a centralized manner through Zvezda.

Russia's Ministry of Industry and Trade expects that by 2030, the possible order portfolio of this complex will be **about 1,400 vessels of different types** and items of marine equipment. The project, which has a substantial anchor order, is open to new partners and investors. The first such agreements have already been signed. **At the forum in Vladivostok, we inked an agreement with The Netherlands-based Damen** Shipyards Group to employ their shipbuilding technologies. We have also reached an agreement with Singapore. We invite all interested companies to cooperate with us.

Despite being traditionally reserved when it comes to expansion outside their country, Japanese shipbuilding corporation have quite actively invested in shipyards in China, Vietnam, Brazil, and the Philippines over the past decade.

We believe the situation with Russian commercial shipbuilding mirrors that of Brazil 15 years back, when Brazil only started producing oil across its shelf.

Today, Japanese shipbuilders such as Mitsui Engineering & Shipbuilding, Sumitomo Heavy Industries, Kawasaki Shipbuilding and marine equipment manufacturers are free to join any Russian shipbuilding project, including Zvezda. In the future, they will be able to actively take part in projects to develop fields on the Russian shelf, including the Arctic, as our major technology partners supplying ships and marine equipment.

METALS INDUSTRY

Major new shipbuilding facilities in Russia's Far East, as well as a large-scale construction program in the region create significant additional demand for flat products and high-quality steel products. In this context, an issue related to building a new up-to-date wide strip rolling mill complex in the region is becoming relevant. I think a project like this could be of interest to many Japanese companies.

ROSNEFT'S INVESTMENT PROGRAM AND THE ANCHOR ORDER Today, Rosneft has one of the biggest investment programs among all oil and gas producers worldwide. In 2015, the **material and technical resources**, as well as services and work to be purchased by the Company should total **at least USD24.3 bln**. The green-lighted plans through 2017 and the 2018 plan spell out an increase in total purchases **to USD25-26 bln a year**.

The scale of Rosneft's investment program suggests one of the world's largest anchor orders, primarily for engineering and chemical industry products, of about USD5.1 bln annually.

Pursuant to its Business plan, **Rosneft's** demand for material assets and equipment is to total **USD17.6** bln in 2016-2018. The facilities required are as follows:

- over **2.5 mmt of casing, pump and compressor pipes** to a total value exceeding RUB145 bln (USD2.4 bln);

- over **800 thousand mt of chemical products** to a total value of over RUB41.7 bln (USD700 mln);
- over **47,000 km of oil submersible cable** to a total value of over RUB18 bln (USD300 mln);
- over **17,000 bottom hole pumps** for production, to a total worth of more than RUB16 bln (USD270 mln);
- over **2800 transformer substations** to a total value of over RUB13 bln (USD210 mln).

I would like to point out that **Japanese companies** now have an insignificant share in the Company's order servicing structure: **less than 0.46% of the total imports**.

Possibilities of technological cooperation, which I have just described, are much wider in practice, since Japanese partners can become our top-priority suppliers of materials and equipment as part of our investment program.

POWER BRIDGE

As you know, Russian and Japanese companies have been developing different patterns of electric energy supply from Russia to Hokkaido island since the 1990s. Our Russian colleagues will tell more about the existing options of organization of this energy bridge within a special subpanel. It's about the modernization of old power plants and the construction of new ones on Sakhalin island, with overall capacity of 3 GW, with the possibility of further export of produced electric power to Japan through an underground cable at 20 bln kWh. In the long term, this capacity may be significantly enhanced by combining energetic systems of Sakhalin and Eastern Integrated Power Systems.

As far as I understand, the specific project business configuration depends on needs and requests of the Japanese party. We are looking forward to your initiative in this matter. For my part, I would like to point out one very important circumstance: today, Japanese law does not provide any possibility of electric energy import to Japan. So, if we really want to implement such

an infrastructure project, we should try to find solutions.

Of course, we know that HEPCO, local Hokkaido utility, has been recently developing power on renewable energy sources, and is going to build a new large-scale gas power plant. But these efforts are aimed at substitution of Hokkaido old coal power plants to be disposed of by 2020s, rather than at increasing the region electric power.

Electric energy supply from Sakhalin to Hokkaido could increase electric supply stability of the northernmost Japanese island, as well as reduce electric energy costs for end consumers.

And another important advantage is that such a scheme will help to reduce carbon dioxide emission into the atmosphere in Japan and allow you to produce clean power.

I think, the long-term agenda may also include an even more high-flying project, that is, energy supplies from Russian Far East to the most populated and industrialized island of Honshu. The collaboration in the field of electric energy may also involve building of small power plants by Japanese companies on our new deposits, such as Suzun, Tagul, Lodochnoye. We are ready to immediately sign a long-term energy procurement contract.

ABOUT OPPORTUNITY FOR GROWTH

In one of his books, Kenichi Omae, an outstanding Japanese strategist and a business management guru, warned of the danger of "sustainable sluggish growth", sort of soft economic stagnation. He wrote that it "significantly enlarges the ground for errors in management decisions, aggravates consequences and reduces time limits for corrections". As a solution, he suggests international expansion and penetration to foreign markets.

Cooperation with Russia may drive this area of expansion and give a strong impetus to Japan's development. Natural reserves of Japan and its proximity to Russia give us this opportunity, in the first place, by expanding our relations in the energy sector and building up the "buttress" for the future Energy Bridge between Russia and Japan.

In effect, Russia has already started this work. Driven by the idea of diversifying our key trade partners, we are actively expanding out production assets and transport infrastructure to cover Siberia and Russian Far East. Oil supplies from Russia to APR went up by 47.4 million tons during 2005-2014. In 2014, Russia supplied 30 million tons to China, 11.7 million tons to Japan and 10.1 million tons to South Korea.

We see a good potential to grow Russia's oil supplies to APR up to 80 million tons by 2020 by developing the resources and transport infrastructure in West Siberia and Far East. Most supplies will account for China, but we intend to expand our energy supplies also to other APR states, primarily to Japan.

We are ready to pursue our cooperation based on the principles of duration and predictability of our relations, trust and good neighborliness and giving a priority to economic reason over political cliches and assumptions. In some ways, we just have to get up the nerve to do things. I recall one good example of our recent history. JDC (Japan Drilling Company), a small Japanese company, was involved in development of the north-western Sakhalin oil fields under the 1976 Russian-Japanese agreement. In 1977-1983, it contributed to discovery of such oil fields as Chaivo, Arkutun-Dagi and Odoptu, which later were included in the Sakhalin-1 project. With assistance of JDC, Sodeco partnered with the Sakhalin-1 project, which produced over 75 million tons of oil during the decade. Most of this oil was supplied to Japan.

CONCLUSION

In one of his books, Kenichi Omae warned that the international environment faces fundamental changes, which cannot be described in terms of opposition between the East and the West or the North and the South or any other simple-put concepts, so we need to abandon our illusions and visions of the past to challenge efficient economic restrictions.

As the head of a large-scale public oil corporation, I support expansion of efficient cooperation for our mutual future benefit.

"Unsown seeds never spring," as the Japanese saying goes. To get a strong economic return in future, we have to get started right now.

Let me finish my speech at this point.

Thank you for your time!