



World Petroleum Council

1ST RUSSIAN PETROLEUM FORUM

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Speaking Notes

- We have heard many interesting presentations on the modernization of the Russian oil and gas sector over the last few days. Innovative technologies, large-scale investments and international cooperation have been identified as the key drivers for these developments. This is the same all over the world.
- It is the role of the petroleum industry in society to provide an affordable, reliable, sustainable, environmentally sound and socially responsible supply of our products for all consumers, but how will we meet the growing demand for oil and gas?
- I believe that there are three key drivers that will provide the supply to meet future demand, in Russia as well as globally.
- These drivers are:
 - Investment
 - Innovation
 - Cooperation

- First, investment in new infrastructure.
 - The global economic meltdown has resulted in a major cutback in investing, particularly in mega projects in the industry. The International Energy Agency (IEA) estimates global demand for oil to rise from 85 million barrels per day in 2007 to 106 mb/d in 2030. Much of the increase in supply will be coming from unconventional oil and gas which will require higher sustained prices.
 - These trends call for energy related infrastructure investment of \$26.3 trillion to 2030, which equals just over \$1 trillion/year. About half of that will be required by the oil and gas sector. According to the IEA, 64 mb/d of gross capacity needs to be installed between 2007 and 2030 – six times the current capacity of Saudi Arabia – to meet demand growth and offset decline. In the current economic downturn it is uncertain that these levels of investment will be met. Those that are cash rich and have access to credit will be able to pursue new opportunities but it will be difficult to sustain that level of investment in the near term. So sustained investment in both the short and long term is critical to avoid potential supply shortages.
- Second, technological innovation
 - Conventional reserves of oil and gas that are easy to access and inexpensive to produce are largely gone.
 - Accordingly industry is exploring in ever more challenging new frontiers where large oil and gas discoveries are being made. The development of such new discoveries will require deployment of cutting edge technologies. Some examples include the pre-salt huge discoveries recently announced offshore Brazil, at water depths of 2,000m to 3,000m, total reservoir depth of approximately 5,000m to 6,000m, located over 300 km from the shore. Other very challenging environments include Lower Tertiary of the Gulf of Mexico, also in ultra deep waters, the deep gas bearing reservoirs of Siberia and the sedimentary basins of the Circum Arctic.
 - Enhanced oil recovery is still one of the more promising areas to increase in a fairly short term, the reserve and production of existing field. The development of new technologies are significantly increasing recovery factors and prolonging the life of mature oil and gas fields.

- Unconventional oil and gas resources, such as the oil sands of Canada and Venezuela, and the gas bearing Barnett shale of Texas, are quickly becoming technically feasible and economically very attractive. Advanced technologies, particularly in the completion of gas bearing shale, steam assisted gravity drainage of heavy oils and minimization of environmental impact of oil sands mining and processing are key to the further development of these resources.
- In terms of cooperation:
 - As we are coming out of the global economic crisis new opportunities open up for independent oil companies (IOC's) to partner with national oil companies (NOC's) on a long term, sustainable basis. Those NOCs that have been affected most by lower prices and the economic recession may now welcome IOC's technological and operational expertise and access to capital. The downturn can therefore be a good time to focus on forming and strengthening strategic alliances, particularly with NOC's.
 - Although cooperation between IOC's and NOC's is not without its challenges, the potential rewards of enhanced cooperation are significant for both parties and indeed, there are many examples of successful partnerships. The World Petroleum Council (WPC) can facilitate the building of important bridges for the two sides to find ways to work together.
 - Cooperation also incorporates enhancing relationships with governments, non-government organizations, academia, international institutions and the public. For critical issues such as climate change, no one sector of society can provide the answers on its own, but will require cooperation among all sectors.
 - So the future for the oil and gas industry is looking quite bright.
 - However, we will need a dedicated and experienced workforce to deliver these increases in our energy supply.
- This requires a large number of young people to join the industry and related areas to ensure the industry's long-term ability to operate, especially with respect to major exploration and production projects.

- This challenge is particularly significant in the context of the world's rapidly growing demands for energy and calls for greater adherence to responsible social and environmental practices.
- It was refreshing to see the innovative and highly creative approaches promoted by young people in the industry during the youth programme this week. With young people like these our industry will continue to thrive and provide the necessary energy for generations to come.
- The global petroleum industry represents a major part of the solution in meeting the world's future energy demand. We must respond to this challenge in a way that is economically viable, environmentally sound and socially responsible. In order to maximize our contribution to this challenge we need to build trusting relationships with our stakeholders. We also must level the playing field within our industry, so that all companies recognize and respond to pressing global issues in a clear and consistent manner.
- In order to earn a societal license to operate and to be profitable, the industry must invest responsibly and ensure the sustainability of the environment for the next generations. Companies that adopt corporate social responsibility as part of their core business strategy and adhere to principles of transparency, business ethics and respect for human rights will gain the license to prosper and be profitable for the long term.
- At WPC we have identified these challenges as the topic for our 20th World Petroleum Congress which will be held in Qatar in 2011. Under its theme of **'Energy Solutions for All – Promoting Cooperation, Innovation and Investment'** the 20th World Petroleum Congress will focus the debate on solutions aimed at providing all humanity with access to reliable, affordable and sustainable energy in both the near and long-term future.
- In order to achieve this goal, all stakeholders, including the energy producers, consumers, governments and civil society need to work in close cooperation to develop innovative ways to find and develop new oil, gas and alternative energy resources, as well as set higher standards for wiser, more efficient and cleaner energy consumption. I am confident that we are up to the challenge.
- The World Petroleum Council plays an important part in bringing all these stakeholders to the table. Let me give you a bit of background on our association:

- Founded in London in 1933, the World Petroleum Council or WPC is an international, unbiased, non-political organisation that provides a forum for discussing world issues facing the oil and gas industry. The WPC is dedicated to scientific advances in the oil and gas industries, technology transfer and the promotion of the management of the world's petroleum resources for the benefit of all.
- To this end the WPC provides an open platform for exchange for all its members from over 65 countries so far, representing over 95% of the world's oil and gas production and consumption drawn from IEA and OPEC, NOCs and IOCs, government and industry. All are part of the WPC family.
- We are governed by the WPC Council with representation from all National Committees, led by the Executive Committee and supported by the WPC Secretariat in London.
- Our members can nominate representatives to the Congress Programme Committee and the WPC Youth Committee, which provides a valuable youth perspective of our industry.
- Every three years, the World Petroleum Council hosts an international oil and gas congress hosted by one of its member countries. The 20th World Petroleum Congress will be the first one to take place in the Middle East and is being held in Doha, Qatar from the 4-8 December 2011.
- Trends and outlooks integral to the future success of the industry are the focus of discussions, forums and presentations. Delegates explore international business opportunities, exchange ideas on global issues, network and share the latest information on technology, business management and industry developments. High-level government delegations from member countries and thousands of delegates usually attend the congresses.
- As a not for profit organization all of our surplus from Congresses and other activities goes into educational and legacy projects.
- In 2014 it will be Russia's turn to host the World Petroleum Congress here in Moscow.
- Today we will be signing the Memorandum of Understanding between the World Petroleum Council and the Russian National Committee for the WPC for the organization of the 21st World Petroleum Congress.

- This will be the second time in WPC's history that Russia is hosting the World Petroleum Congress and we are delighted to sign the formal agreement between Russia and the WPC on the fortieth anniversary of the last WPC in Moscow.
- We look forward to working with you on what promises to be one of the most important events for the Russian and global petroleum sector in the years to come. We wish you all the best over the next four years in delivering a truly world-class Congress here in Moscow!
- Many thanks!