

MIEF-2011

MOSCOW INTERNATIONAL ENERGY FORUM

«RUSSIAN ENERGY AND FUEL COMPLEX IN THE XXI CENTURY»

Russia, Moscow, Central Exhibition Hall «Manege»







To Participants and Guests
of the Moscow International Energy Forum
«Russian Fuel and Energy Complex in the
XXI Century»

I greet the participants and the guests of the Forum «Russian Fuel and Energy Complex in the XXI Century».

I am glad that MIEF has proven its vitality and established itself as a needed authoritative discussion platform to concern the development and modernization problems of the Russian fuel and energy complex, as well as fortifying the positions of our country as one of the main participants in the world energy conversation. The Forum agenda includes such urgent questions as forming the

global energy security system and elaborating consolidated approaches in this strategic direction of the international interaction.

I am certain that the Forum will be conducted in constructive and creative atmosphere and its participants will prepare recommendations that will find practical applications.

I wish you successful and fruitful work.



V. V. Putin



I am genuinely glad to greet the participants and guests of the Moscow International Energy Forum (MIEF) «Russian Fuel and Energy Complex in the XXI Century» in the name of the Organizing Committee.

The MIEF is one of the few Russian public projects in the energy sphere. Year after year, the Forum have been participated by representatives of the Russian Federation's state structures, distinguished guests, men of business; the initiative of the Forum's conduct and concept formation belongs to the public and scientific expert circles.

Recent years, the problems, caused by the increasing globalization of economics and other spheres of human

activity, have been more and more insistent. The energy challenges are one of the main factors determining the ways of the development in the international cooperation. On the one hand, a technological breakthrough in a number of the power industry sectors is observed; on the other hand, the risks related to natural, anthropogenic and social disasters are growing. In these conditions, the role of the states, being reliable energy resource suppliers, including Russia, increases inevitably.

The discussion of energy issues within the Moscow International Energy Forum participated by leading Russian and international experts will promote active search for the ways to overcome the existing difficulties and for the development priorities of the Russian fuel and energy complex within the international context.

As Co-Chairman of the Organizing Committee of the Moscow International Energy Forum «Russian Fuel and Energy Complex in the XXI Century», I express confidence in productivity of your future work at the Forum and usefulness of the Forum resulting materials for the world energy decision-makers.

I wish creative work and success in implementation of good initiatives for all the Forum participants!



Yu.A. Lipatov







I sincerely greet the participants and guests of the Moscow International Energy Forum «Russian Fuel and Energy Complex in the XXI Century».

It is the second year the Forum has the new, international format; within its framework, political and public figures, scientists and experts from various countries meet in Moscow to discuss complex issues of the world power industry, the energy and climatic security.

Undoubtedly, the current increased attention to the fuel and energy themes is easy to explain: whether it regards acts of nature, such as the natural disaster in Japan, or «manmade» cataclysms, such as those in North Africa – the energy

question are always of first priority. They are the questions which answers can literally influence the choice of how the world power industry and even all the global economy will develop for years and even decades. Realizing the scale and complexity of the problems faced by the world community in this sphere means, among other things, necessity of internationally coordinating efforts and developing cooperative approaches to their resolution.

The Moscow International Energy Forum «Russian Fuel and Energy Complex in the XXI Century» is one of the most convenient work platforms for discussing the key energy sector themes openly and competently, and for generating high-quality ideas: the ideas which are becoming more and more demanded by the world economy as well as by the international policies of individual countries.

To this end, I wish that the participants of these Moscow meetings will have the productive and creative work, mutual understanding and team spirit that tend to become a specific feature of the Forum and its good tradition.





Dear Forum Participants!

On behalf of the Organizing Committee, I welcome everyone who is ready, within the Forum, to contribute to developing approaches to resolution of numerous problems indicated in the contemporary power industry.

A natural disaster in Japan followed by a severe anthropogenic accident and disturbances in several countries of North Africa and the Middle East have revealed the problem of vulnerability of the world power industry to social upheavals, natural and anthropogenic disasters, as well as to resulting sharp changes of the financial and economic conditions. The international agenda faces increasingly urgent necessity to promptly establish a fundamentally

different integrated system of international interaction to provide global environmental, climatic and energy security.

I hope that broad public-expert discussion of this matter within the Moscow International Energy Forum «Russian Fuel and Energy Complex in the XXI Century» can make a valuable contribution to overcoming the existing difficulties and assess the development trends in the world power industry. I am sure that the Forum participants will take interest in the theme of Russia's place in the international community and the role of the Russian fuel and energy complex in creation of the global power industry of tomorrow.

The Forum's public format will encourage atmosphere of creative and constructive dialog between representatives of the state, the business, the science and the public; it should allow discovering many interesting ideas and elaborating substantial proposals to be included in the Forum resulting documents.

I wish productive work and further successes for all the Forum participants!

4. Louise

N.I. Ryzhkov





I am sincerely glad to welcome the participants of the Moscow International Energy Forum «Russian Fuel and Energy Complex in the XXI century» - MIEF- 2011!

On behalf of the Executive Direction of the Forum I want to express my deep appreciation to the Organizing Committee, Program Committee, our partners, sponsors, speakers and all Forum participants for their support of our social project.

Forum assembles again in difficult times. Geopolitical, natural and social disasters make the world community choose the future of the world's largest

economies as well as the global economic order in general.

This choice should be based on a thorough understanding of the contemporary world processes. Our Forum provides an excellent opportunity to the international experts and representatives of business and government for the presentation of new ideas, concepts, research results and constructive suggestions for those who make strategic decisions, both on national and international levels.

I hope that our cooperation will not end after the plenary sessions and conferences. We look forward on your participation in the upcoming work on compiling and analyzing the results of the Forum.

I wish the participants of the Forum fruitful work, new interesting meetings and all the best.



A.P. Epishov

The Program of the MIEF-2011 included the Plenary Discussion «Russian Fuel and Energy Complex in the XXI Century: International Dimension», 7 international conferences and 4 round tables:

- «Foreign Investments in the Russian Fuel and Energy Complex: Current State and Prospects»;
 - «New Energy Strategy of the EU: Aftereffects for Russia»;
- «Forecasts of the World and Russian Energy Sector Development»;
 - «Eastern Vector in the Russian Energy Strategy»;
- «Russian-Chinese Strategic Energy Partnership: Potential and Ways of Implementation»;
 - «Global Energy Safety: New Agenda»;
- «Modernization of Facilities in Electric Power Industry:
 Problems and Solutions»;
- «Human Resourcing of the Russian Fuel and Energy Complex Modernization: High School in Focus»;
- «Updated Legal Mechanisms of Stimulating Investments in the Heat Power Industry: First Results and Assessments by Market Players»;
- «Smart Electric Grids: World Experience and Prospects of Russia»;
- «Modernization of Russian Oil and Gas Complex: Concepts and Strategies».

Between 6 and 8 April the Forum has been participated by more than 1200 delegates including experts, politicians, businessmen and representatives of legations from 33 countries, official delegations from 40 Russian Federation constituent entities and 300 journalists from 70 Russian and foreign media.

The international status of the Forum was fully proved by wide participation of foreign countries' representatives. The MIEF-2011 was participated by experts, businessmen and politicians from Austria, Azerbaijan, Algeria, Armenia, Belarus, Bolivia, Brazil, Great Britain, Germany, Iran, Italy, Kazakhstan, Canada, China, Korea, Kuwait, Lithuania, Malaysia, Mexico, Netherlands, Norway, Poland, Russia, Saudi Arabia, Slovakia, Slovenia, USA, Ukraine, Finland, France, Czech Republic, Switzerland, Sweden, Japan.

The produced reports and presentations, adopted resulting documents and wide media coverage by the Forum media-partners have confirmed the status of MIEF as one of the most prominent and important public events in the Russian power industry's life. MIEF has securely established its reputation as an international discussion platform for the most acute and urgent issues of modern power industry to be discussed on the highest expert and representation level.



Valeriy Golubev, Deputy Chairman of the Board of the OJSC «Gazprom» gives an interview



the Chairman of Committee of the State Duma
On the international affairs, gets acquainted with
participants of conferences and exhibitions



Yuriy Lipatov, chairman of the State Duma Energy Committee is getting acquainted with the participants of conferences and exhibition



Meeting at the Forum of the General director on Russia and CIS Enel of D.Fasha and General director MIEF A.Epishova





«Russia possesses incontestable competitive advantages, since it is one of the world's leading suppliers of primary energy resources. Meanwhile, our strong positions on the world energy market should not become a systemic obstacle for sound and progressive technological structurally diverse development of the national economy, including implementation of the resource-innovative scenario of the energy sector's development».

Yuriy Lipatov, Chairman of the Energy Committee of the State Duma of the Federal Assembly of the Russian Federation



«We have a very long and very detailed exploration program today. «Gazprom» realizes the largest in its history, mega-project «Yamal» which includes not only the arrangement of these major fields and construction of transport infrastructure to service the region but also the creation of completely new technological solutions for the gas pipeline «Bovanenkovo - Ukhta – Torzhok» which already use a different level of pressure, other grades of steel and other equipment. Eight of the largest construction projects provide synchronous activation of production, transport and export in order to be absolutely reliable partner for the implementation of our international contracts».

Valeriy A. Golubev,
Deputy Chairman of the Board of the OJSC «Gazprom»



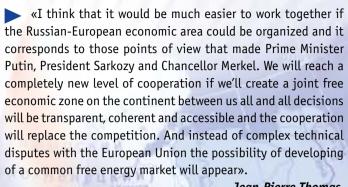
««Fukushima» will even increase the package of orders for building new reactors. Because those stress tests which will be held in the coming years will make some countries and some operators to close outdated reactors (energy and research) but the new construction would require instead because it is easier to use new and safe nuclear power reactors, reactors with natural safety in the energy balance of nuclear power. And that's why the innovation activities that are ongoing at the site of IAEA are very important».

Alexander Bychkov, Deputy General Director,
International Atomic Energy Agency



«We leave the era of cheap energy. Everyone should understand this. It's everywhere. For example, there are debates about tariffs in France today. And everybody understands that everything will be more expensive. When Mr. Golubev is speaking about «Gazprom» he knows that all the conditions of gas extraction become more and more expensive every day. The technology requires investment, environmental protection requires investment and reliability requires investment. Energy will be more and more expensive. And we need to prepare for it and prepare people for it. I think that populism is not good. We must clearly explain to people that they'll have to pay more and more»

Domininque Fache, Country Manager in Russia and CIS, Enel S.p.A, Chairman of the Board of Directors, OJSC «Enel OGK-5»



Jean-Pierre Thomas, Special Representative of the President of the French Republic for French-Russian business relations development



Reiner Hartmann,
Head of the Representative Office, E.ON Ruhrgas AG,
Chairman of the Executive Board, Chairman of the Energy
Committee, Association of European Businesses in the
Russian Federation



«When we talk about long-term forecasting, we must understand that besides the quantity and quality there is still the principle of construction of the global energy system and of its organization. What would it be - the global energy system with advanced volume of international trade in which we lived in recent years or it will still be a system based on regional energy self-sufficiency? What would it be - a centralized energy system, when the large-scale, large-capacity energy determines the production or more and more decentralized energy system?»

Vitaliy Bushuyev , Directo<mark>r Gen</mark>eral, <mark>State</mark> Institute for Energy Strategy







«I would suggest to form a global corporate forum on sustainable development with two chambers: one chamber of the transnational corporations and the second chamber of representatives of small and medium-sized businesses. There are associations of small businesses in every country. I think it is important to create a global scientific council on climate, environmental and energy problems so that these three things were considered in the complex. There should be geologists, oceanologists, climatologists and energy specialists».

Alexander Epishov, MIEF Principle Analyst



«Europe is trying to find answers how to ensure energy security when she is forced to import a substantial share of energy by virtue of the resource base and consumption. On the basis of the European Union foundation it appears that some regions in the EU are not ready to create this common energy market, neither for electricity nor for gas or oil. There are not enough internal communications. So the formation of a common energy market in the EU is hand in hand due to the completion of the internal jumpers, completion of infrastructure. That is one of the main goals which was highlighted during the EU summit in February 2011».

Urban Rusnak, Ambassador, Leader of the Slovakian External Energy Security Project of the Ministry of Foreign Affairs of the Slovak Republic



«The main problem of our economy in the XXI century is that we have not reinvested oil and gas revenues in modernization before. We're going to do that now in other, more severe conditions. We have taken out a huge amount of savings; we made a phenomenal financial absurd trick: got a huge amount of money and took them away.

The world can not save the climate and increase emissions at the same time. The issue of climate protection at nuclear power plants can not be solved in the short term. This is a complex problem. You can not solve problems of the FEC separately. This is one problem with different sides of it».

Leonid Grigoryev, Professor, Higher School of Economics

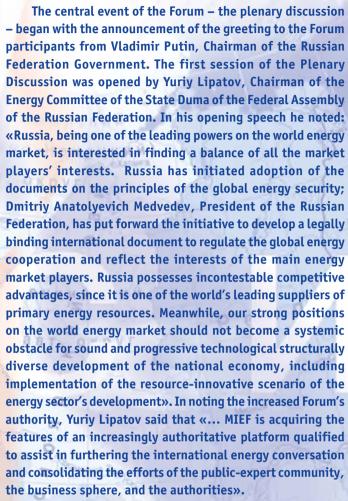


«It is necessary to increase the coal preparation; we must not haul waste rock. It is necessary to develop production, deep chemical processing of coal. There are opportunities for this. It is imperative to raise wages in the coal industry, especially for the miners.

There is a need in the government programs, government regulation in the implementation of system of complex, multidisciplinary, science-intensive energy projects. The final results will certainly be worth the costs».

Aleksey Kontoro<mark>vich,</mark> Research Supervisor of Trofimuk Institute of Petro<mark>leum</mark> Geology and Geophysics SB RAS





The second session of the Plenary Discussion «Energy Challenges of the XXI Century: Scenarios of Tomorrow» was moderated by Vitaliy Bushuyev, Director General of the State Institution «Institute for Energy Strategy; Anatoliy Dmitrievskiy, Director of the Institute of Oil and Gas Problems of the Russian Academy of Science, conducted the third session «World Power Industry: Legal framework and Global Energy Security».

The experts - participants of the discussion settled on the podium and had the opportunity to ask questions to each other, give short answers, share remarks and comments.

This form of communication helped to create a free and creative atmosphere on the Forum what adjusted the participants to a constructive dialogue.

Outside the official program at the site of the Forum and the Exhibition very interesting and useful informal meetings took place, there was an active exchanging of views and impressions on the Forum, tying useful acquaintances, establishing new contacts. This informal and «invisible» side of the Forum however was exceptionally useful to participants.









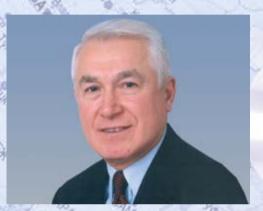






«I am here for two reasons: firstly, I have the honor to cochair the Organizing Committee of the «Russian Fuel and Energy Complex in the XXI century» Forum. I think that the topic of energy, the topic of energy security is one of the main elements of the development strategy of our country for years and decades ahead. And, secondly, it gives me great pleasure to participate in one of the sections of the Forum in MGIMO-university and I am delighted that the University and the Institute of Energy Policy and Diplomacy are integrated part of the Forum for many years and one of the most energetic and creative sites for relevant discussions. Of course, I wish all of us has the same constructive and creative work aimed at further progress in the XXI century».

Konstantin Kosachev, Chairman, State Duma Committee on International Affairs, Co-Chairman of the Forum Organizing Committee



«The issues of international energy cooperation, the usage of innovative technologies, issues of physical security of infrastructure, marine communications has great importance counting the global challenges of coping with natural disasters and the need to ensure energy security. It is very important for us today to conduct a serious analysis of the problems that exist in international energy cooperation and in energy supplies to world energy markets».

Valeriy Salygin, Director, International Institute of Energy Policy and Diplomacy of MGIMO (University) in MFA of Russia, RAS Corresponding Member



«On the part of Gazprom, the solution of improvement of the energy security is the diversification of gas transportation routes. From this perspective, special attention should be paid to the Chinese direction. We consider two pipeline projects that will deliver up to 68 billion m3 in China and it is not the competition with the supply to Europe since the resource base used for deliveries to China differs from the resource base focused on gas supply to Europe. However, the implementation of this large Chinese project will significantly increase our stability in terms of gas supplies and export earnings. In general, China is a huge market with enormous potential».

Pavel Oderov, Head, International Business Department, Gazprom



«The States-members of the Energy Charter Treaty concluded that it is necessary to consider its modernization because there is agreement but it is not moving forward; there are some problems in translating its provisions into practice. It is enough to see how it acted during the Russia - Ukraine energy crisis. It made us think twice about the reliability of such tools, about the reliability of our partners and about the reliability of all the agreements on energy security which existed and worked within the European Union at that time».

Jan Kubis, Executive Secretary, UN European Economic Commission



«I think that Norway and Russia have a good basis for establishing a practical and mutually beneficial energy union. In Russia development occurs on land and deep into the sea as a rule while in Norway we have technologies that allow you to do the opposite thing. Norwegian oil and gas industry has developed in very close collaboration with government, research institutions and universities that deal with these issues. I think it might be a good model for cooperation in the Arctic region».

Jan Helge Skogen, President, Statoil Russia



«We are aware that Russian Federation is not just a resource state but an energy superpower, economic and political powerhouse with a favorable humanitarian situation, highly qualified technical personnel and perfecting legal system. The Sinopec Company has advanced technologies in the development, exploration and refining of oil and gas resources, a considerable financial strength, solid manufacturing and operational capabilities, extensive managerial experience and is able to contribute to economic development and energy construction in Russia, to the mutually beneficial cooperation based on borrowing the positive experience between enterprises in our countries».

Liang Yanji, General Director of the Russian Branch «SINOPEC»



SUMMARY

Co-Chairmen:

Konstantin Kosachev – Chairman, State Duma Committee on International Affairs

Valeriy Salygin – Director, International Institute of Energy Policy and Diplomacy of MGIMO (University) in

MFA of Russia

MFA of Russia
Speakers:
Stanislav Gorevalov – Senior Expert and Analyst, Institute for Energy Strategy

Leonid Grigoryev – Professor, Higher School of Economics

Togrul Bagirov – Executive Vice-President, Moscow International Oil Club

Alexander Vylegzhanin – Head of the Chair, MIEP MGIMO (University) in MFA of Russia

Jean-Pierre Thomas - Special Representative of the President of the French Republic for French-Russian business relations development

Ruben Indzhikyan – Executive Director UNCTAD, UNCTAD Global Commodities Forum

Liang Yanji, General Director of the Russian Branch «SINOPEC»

Mar a Luisa Ramos Ursagaste - Ambassador of the Republic of Bolivia

Tatyana Mitrova – Head, Center for World Energy Markets Studies of the Energy

Nikolay Mironov - Counselor, Department of Economic Cooperation, Ministry of Foreign Affairs

Pavel Oderov - Head, International Business Department, Gazprom

Konstantin Simonov - Head of National Energy Security Fund

PetrTolmachev - Professor, Diplomatic Academy of the Russian Ministry of Foreign Affairs

Urban Rusn k – Ambassador, Leader of the Slovakian External Energy Security Project of the Ministry of Foreign Affairs of the Slovak Republic

Yury Sherbanin - Head of the Chair, Diplomatic Academy of the Russian Ministry of Foreign Affairs

Alastair Maxwell - Managing Director, «Goldman Sachs»

Jan Kubis – Executive Secretary, UN European Economic Commission

Jan Helge Skogen - President, Statoil Russia

INTERNATIONAL CONFERENCE «FOREIGN INVESTMENTS IN THE RUSSIAN FUEL AND ENERGY COMPLEX: CURRENT STATE AND PROSPECTS»

INTERNATIONAL CONFERENCE «FOREIGN INVESTMENTS IN THE RUSSIAN FUEL AND ENERGY COMPLEX: CURRENT STATE AND PROSPECTS»





«A few words about how it is necessary to act in our opinion, in particular, in the direction of the link between education and the work of future suppliers. There is a close relationship because young people - university graduates, hired to work by suppliers, which should still have good understanding of the work in the marine environment and thereby provides an increase in the Russian contribution to such projects. I have already said that we have several programs; we have provided scholarship to successful students and sent them to the research centers of our company in Norway. In addition we have purchased new equipment because it was old in theirs universities. This is at least some of the tools that we used for training a new generation of specialists focused on marine development».

Benedikt Henriksen, Director for Operations in North-West Russia, Statoil ASA



«Despite the fact that many people are still arguing that the Nord Stream is built on the basis of political motivations; we are still insisting on the fact that this project has a strictly economic reason and the analysis conducted by our parent company «BASF» shows the same. The route through the Baltic Sea will save enormous money compared to other options that would provide the land route from both environmental and economic points of view».

Margarita Hoffmann, Managing Director, Wintershall Russland GmbH



«We will be able to use the LNG with the new scheme of distribution on vessels operating on the Rhine and to ensure transport links between Russia and northwest Europe and organize the network of gas-filling stations for refueling of trucks along the corridor from Russia to Rotterdam and back».

> Piet Kage<mark>r,</mark> Senior Project Manager, «Gasunie»



«Now let's talk about the specifics of the Russian market of energy efficient solutions. Naturally, the market is very interesting because it has a lot to do in terms of energy efficiency. We see that a contract for energy efficiency does not have clear legal definitions and descriptions in the Russian laws. We can talk about Energy Contract, we can talk about the Service Contract but it is very difficult to talk about the contract on energy efficiency. I think this is one of the major issues that require resolution and I think that through such kind of discussions we may finally achieve a resolution of this particular problem».

Vincent de Rul, Director General, LLC «Fenice Rus», EDF Group «Russia could receive from 12 to 18 billion dollars of additional revenue annually if she effectively utilized its potential in energy efficiency. But you must invest about \$ 400 billion till 2020 to realize this potential and this money should be invested in renewable energy sources and in efficiency increase of the operating plants in order to achieve the 40% increase in energy efficiency».

Jeroen Ketting, Managing Director, Lighthouse Russia BV, AEB Energy-Efficiency Committee Chairman



SUMMARY

First Session: «Foreign Investments in the Russian Fuel and Energy Complex» Chairman:

Reiner Hartmann – Head of the Representative Office, E.ON Ruhrgas AG, Chairman of the Executive Board,
Chairman of the Energy Committee, Association of European Businesses in the Russian Federation
Speakers:

John Hammond - Head of Representative Office, CMS International

Mikhail Subbotin - General Director, SRP Expertiza

Total Company Chair Chall Donais

Benedikt Henriksen - Director for Operations in North-West Russia, Statoil ASA

Igor Ignatiev - Deputy Country Chair, Shell Russia

Margarita Hoffmann – Managing Director, Wintershall Russland GmbH

Piet Kager - Senior Project Manager, «Gasunie»

Igor Kozhukhovski - Managing Director, JSC «Energy Forecasting Agency»

Second Session: «Energy Service Companies and Energy Efficiency Contracts as Instruments for Investment in Energy-Efficient Economy of Russia – Opportunities and Obstacles»

Chairman:

Jeroen Ketting,

Managing Director, Lighthouse Russia BV, AEB Energy-Efficiency Committee Chairman

Speakers:

Vincent de Rul - Director General, LLC «Fenice Rus», EDF Group

Herbert Arents - Managing Director, RMG Regel + Messtechnik GmbH

Thilo Cunz – Senior Manager, LUWOGE BASF Group

Peter Hobson – Senior Banker and Coordinator, Energy Efficiency and Climate Change Team, the European

Bank for Reconstruction and Development







«We are ready to consider proposals on energy development strategy in an easterly direction so that it will be a priority for the State and comfortable for business and international cooperation».

Bato-Zhargal Zhambalnimbuyev, Chairman, Subcommittee for Oil and Gas Sector Development, Main Pipeline Transport and Terminals, Federal Counsil Committee for Natural Monopolies



«The production of oil is started today and the first tons of oil, millions of tons of oil were exported. There are a lot of talks about our country that will be largely focused on the implementation of raw materials for export for a long time, decades in the difficult situation in which the world is today. And eastern vector of our policies, our energy strategy is one way of diversifying markets in order to make our economy less vulnerable to the whims of the market or individual States».

Aleksey Kontorovich, Research Supervisor of Trofimuk Institute of Petroleum Geology and Geophysics SB RAS



- ««Fukushima» acutely highlighted the challenges and threats associated with the development of nuclear energy. This puts on the agenda the task of developing the Asia-Pacific Partnership of energy security. Partnership aimed to ensure:
- 1) The energy needs of the region both in hydrocarbons and electricity, fuel for nuclear power plants, etc. in the conjunction with environmental protection;
- 2) The security of nuclear reactor facilities, emergency response, protection, rehabilitation of territories and populations under radiation events which acquires special importance in light of recent occasions in Japan;
- The security of land and sea supply routes of energy resources».

Gleb Ivashentsov, Ambassador Extraordinary and Plenipotentiary of the Russian Federation



«Russia is called to become one of the new reliable sources to supply natural gas to the Asia-Pacific region. And a unified system of gas supply will be the basis for these supplies. We plan that it will integrate various gas production centers in the east of Russia and will become the basis for gas supplies to Russian consumers as well as our neighbors in the Asia-Pacific countries in the period up to 2020-25».

Viktor Tomoshi<mark>lov,</mark> Head, Eastern Projects Coordination Department, Gaz<mark>prom</mark> «Today we have managed to carry on very successful negotiations with the Energy Minister, mr. Shmatko. We would like to operate in Russia so we create a joint venture which will be engaged in coal mining and building of thermal power stations and railways. I hope that the Russian authorities will support our investment plans, as it would be the largest Chinese investment project in Russia».

Zhang Xiwu, Chairman «Shenhua Group Corporation Limited»



«There are no answers to questions about the market, about the way the supply of gas or oil to this market, there is no choice of list of manufactured products, there is no definition of the location of processing facilities, there is no choice of location of facilities for the preparation of natural gas. Eastern Siberia is very important because gas is delicate and contains a large amount of helium and nitrogen. Without a definition of pricing models for natural gas and natural gas industry development it is impossible to talk about any serious breakthrough and major changes of the situation».

Alexander Klementiev, General Director, East-Siberian Gas Processing Company



SUMMARY

Chairman:

Aleksey Kontorovich – Research Supervisor of Trofimuk Institute of Petroleum Geology and Geophysics SB RAS Bato-Zhargal Zhambalnimbuyev – Chairman, Subcommittee for Oil and Gas Sector Development, Main Pipeline Transport and Terminals, Federal Counsil Committee for Natural Monopolies

Speakers:

Aleksey Gromov - Deputy Director for Science GU IES

Arkadii Efimov - General Director, Siberian Research Institute of Geology, Geophysics and Mineral Resources
Gleb Ivashentsov - Ambassador Extraordinary and Plenipotentiary of the Russian Federation

Alexander Klementiev – General Director, East-Siberian Gas Processing Company

Valery Krukov - Deputy Director for Science, Institute of Economics and Industrial Engineering

Vladimir Matveyev – Leading Researcher, Center for Strategic Problems of the North-Eastern Asia and SCO of the Far East Institute of RAS

Leontiy Eder – Senior Specialist, Trofimuk Institute of Petroleum Geology and Geophysics SB RAS

Artyom Semyonov – President, Association of National Companies for Promoting Trade and Economic Relations with the People's Republic of China (NCTC Association)

Ksenia Kushkina – Deputy Director, , Center for World Energy Markets Studies of the Energy Research Institute (CWEMS ERIRAS)

Tatyana Mitrova – Head, Center for World Energy Markets Studies of the Energy Research Institute (CWEMS ERIRAS)

Viktor Tomoshilov – Head, Eastern Projects Coordination Department, Gazprom

Zhang Xiwu - Chairman «Shenhua Group Corporation Limited»

Zhou Liqun - General Director «IPC» Corporation







«Government and parliamentarians are taking steps to mitigate the negative effect of market changes in the energy sector. First of all, it's the law «On Energy Saving» because this is one of the mechanisms that should protect consumers from price rises. Everybody knows that the tariffs will not fall because they can not fall on the backdrop of relatively high inflation, they can not fall on the backdrop of rising fuel costs and the cost of all components. Rates will rise. The tempo they will grow with is important. It is important how these rates will be economically justified and how they will affect the update of the energy funds and energy infrastructure».

Valentin Mezhevich, First Deputy Chairman, Federation Council Commission on Natural Monopolies



«I want to emphasize that the attempt of holistic strategic vision of the power industry is carried out apart from similar processes in the country's economy and unfortunately in isolation from similar processes at the corporate level. There was no a single case that a strategy document in the energy sector was developed in the presence of similar document of socio-economic development. There is a need to improve forecasting and planning of the electricity industry in close conjunction with the corporate, strategic planning of companies with market mechanisms, with a competitive PTO. This system with all the inaccuracies and mistakes of each document will allow accommodating that in the next cycles and bringing electricity to the path of sustainable development».

Igor Kozhukhovski, Managing Director, JSC «Energy Forecasting Agency»



«If we will look at the forecasts of the Ministry of Economic Development we will see that the government is trying to find a middle way: the exact level of the investment in power generation maintaining the competitiveness of industry. But everything is exactly the opposite! That is the golden mean is the level that is not enough for efficient investments for energy sector and that does not let industry go on a competitive level. And the question is: how to deal with that?»

Yury Saakyan,
Director General of the Autonomous Non-Commercial
Organization «Institute of the Natural Monopolies
Problems»



«The most basic problem is a problem of modernization. The new blocks are 5% of the problem for everyone. 95% of the problem is everything else; all the equipment that is necessary to upgrade. This coal generation is in very poor condition in Russia today by any measure: the effectiveness, the technical state, the environment. By all measures there is plenty of work. Therefore it is necessary to find mechanisms to ensure the return of investment for modernization or there will be no modernization. It is very important. This is a key issue».

Domininque Fache, Country Manager in Russia and CIS, Enel S.p.A, Chai<mark>rman</mark> of the Board of Directors, OJSC «Enel O<mark>GK-5</mark>» «The significant responsibility should be introduced for not providing of metering data by obligated persons (like turnover fines in antitrust law, for example). The burden of proving the reliability of data metering should be carried out by obligated person. The data obtained from consumers should be recognized as valid until the responsible company for commercial accounting proves the opposite. Accordingly to that the idea that is being discussed but is not implemented so far - is the creation of a specialized system of operators of commercial accounting».

Alexander Sitnikov, Managing Director, VEGAS LEX



«There is an accounts receivable management practice. We use it now particularly with our energy customers. But it is not carried on in the sales companies. There is no systematic approach. It's not their business. They are sales; they sells electricity and thermal energy and do not collect for her. Pre-trial work is undervalued. And yet, sales companies continue to go to court instead of collecting this debt in the pretrial order as the international practice and the practice of banks shows».

Anton Dianov,
Managing Partner «MORGAN & STOUT»



► SUMMARY

Chairman:

Vladimir Demkov – General Director, Stolitsa JSC

Valentin Mezhevich – First Deputy Chairman, Federation Council Commission on Natural Monopolies

Dominingue Fache – Country Manager in Russia and CIS, Enel S.p.A, Chairman of the Board of Directors, OJSC

«Enel OGK-5»

Speakers:

Maksim Kalmykov – Deputy Director, ORGRES

Igor Kozhukhovski - Managing Director, JSC «Energy Forecasting Agency»

Oleg Barkin - Deputy Director, Non-Commercial Partnership «Market Council for Organization of Efficient System of Wholesale and Retail Trade in Electric Energy and Power» («Market Council»)

Yury Saakyan - Director General of the Autonomous Non-Commercial Organization «Institute of the Natural Monopolies Problems»

Alexander Sitnikov – Managing Director, VEGAS LEX

Anton Dianov, Managing Partner «MORGAN & STOUT»





«Technology platform is a communication tool that aims to unite stakeholders in the promotion of a specific task; in our case that is smart energy technologies. As part of the «Concept of innovative development of Russia until 2020» technology platform is considered as the main instrument for the implementation of innovation policy».

Aleksey Konev,

Energy Agency (REA) under the Ministry of Energy of Russia



«We fully got rid of competition in the electricity market, in the investment market and in the development of capacities. What for then did we reorganize the Power industry? What for did we reform the electricity industry? When we said: you need to ensure competition in production, free access to investments in this sector on a competitive basis and on this basis the right to consumer choice for cheap energy. Today's long-term power market is fully transferred all the risks to the consumer».

Georgiy Kutovoy, President Advisor, United Metallurgical Company



«Electrical networks are binding the electricity infrastructure; and a qualitatively new level of development is only possible with implementing of innovative solutions. And this level will largely determine the speed of network economic development. Coordination of the subjects of power, members of the technological platform, the efforts of the state require to achieve these objectives. The intellectualization of all subjects of power, coalitions are required today to maximize the multiplier effect of creating such a system».

Yuriy Dementev, Head of Department OJSC «Federal Grid Company of Unified Energy System»



«What allows us to implement smart grids? At the state level it is power consumption decrease and energy consumption mix transparency. As for energy production it is potential decrease in volumes of new capacities and power consumption peaks smoothing. When it comes to network, on the one hand, it is reduction of energy losses and, on the other hand, operating costs lowering at the expense of regular staff cutdown».

Evgeny Mitkin,
Deputy Director General on technical questions - chief
engineer



Irina Volkova, Head of the Chair, Higher School of Economics



«The weakest link in the energy systems is ill-prepared people as shown by recent experience. This is an operator who either does not understand what is happening or act on instructions instead of taking the initiative or is functioning wrong because of time pressure and psychological stress».

Andrey Korneev, Head, Centre For Energy Security Problems, USA and Canada Institute



SUMMARY

Chairman:

Yuriy Lipatov – Chairman, Energy Committee, State Duma, Co-Chairman of the Forum Organizing Committee
Aleksey Konev - Energy Agency (REA) under the Ministry of Energy of Russia

Speakers:

Fedor Veselov – Head of Department, Energy Research Institute of Russian Academy of Sciences

Irina Volkova – Head of the Chair, Higher School of Economics

Yury Dementiev – Head of Department for Technology Development and Innovations, UES

Georgiy Kutovoy – President Advisor, United Metallurgical Company

Evgeny Mitkin - Deputy Director General on technical questions - chief engineer

Andrey Korneev – Head, Centre For Energy Security Problems, USA and Canada Institute

Igor Yadykin - Head of Department, Management Problems Institute, Russian Academy of Sciences









«Talking about the issues of modernization, I think that we should be very concerned with you about the integrated use of raw materials that we produce. In connection with this associated gas, which we'll burn 15-17 billion m3, although no one knows – no one can count how many are producing and how much burn. Out of the 1841 flare the third part do not have meters and the accuracy of the rest is put under great doubt. It is 7-10 billion dollars which would come in handy in our economy».

Gennadiy Shmal, President, Union of Oil and Gas Producers of Russia



«There has become more acute need for minimally affecting the environment technology in the light of the deteriorating global environment. Such technologies exist but for all their environmental appeal they have one major drawback: low efficiency. Consequently, it is necessary to encourage the implementation of technologies to significantly improve the recoverability of hydrocarbons serving the natural geological conditions without chemicals and without disruption of the natural geological structure of the collector».

Pyotr Ageev,
Deputy General Director, Novas Energy Services



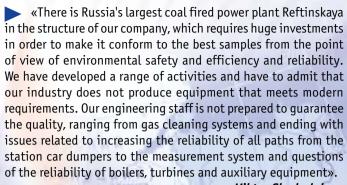
«We have 160 thousand kilometers of gas pipelines, 50 thousand of oil pipelines and 20 thousand of product pipelines. We have seen how the functioning of the oil and gas industry affects the environment. It turns out that if we take into account the geodynamics, fluid dynamics, an emanation of deep corrosive gas, magnetic and other physical fields, we can extend the life of 70% of pipelines (oil, gas and product) in the half. We can not establish 45-50-years normative term instead of 33-years. This is hundreds of billions of dollars in terms of their current course».

Anatoly Dmitriyevskiy,
Director, Institute of Oil and Gas Problems of RAS

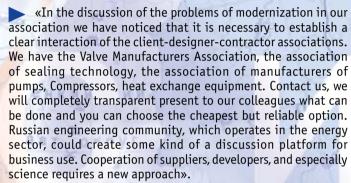


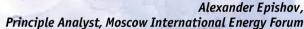
«What does the computer system «Nedra» give in addition to the forecast? It allows you to provide geologists with all necessary information and enable them to make informed decisions about the choice of sites for the exploration and choose the areas with more favorable conditions for the formation of deposits. Economic effect of the proposed technology can reach 1 trillion dollars».

Nikolay Alexeenko, General Director, «GEOPROEKTIZYSKANIA»



Viktor Shedrolubov, Chief Engineer, Enel OGK-5





«We do not just have the desire to produce the modernization of industries. We do not upgrade the energy; we do not modernize the industry, which provide this upgrade. We have complex design work at the construction of generating facilities. It's hard to complement with the high quality equipment. We simply do not have it. Modification of the turbines in the west is once per 7-10 years. Modification of the turbines in Russia is tied to the life cycle of the manufacturer. Therefore, if we will postpone upgrading for ten years or fifteen we can forget about the steel industry because casting the turbine in Russia is no longer manufactured today. Stagnation in the energy sector generates stagnation in related industries».

Denis Bashuk , Chief Operating Officer, Gazprom Energoholding LLC















«The world community considers unusually high forcing energy conservation as a very serious parameters in a pursuit of sustainable development. Parameters which are associated with a massive, large-scale development of all immature technologies such as solar power and atomic energy for power generation. As well as biofuels and super-accumulators, large batteries for transport. Predictions of the future are built through such a hypothesis».

> Aleksey Makarov, Director, Energy Research Institute of the Russian Academy of Sciences (ERIRAS)



«For a short period of time Russia wins due to the fact that while world energy is not rebuilt, it will focus on imports of Russian energy resources: oil and gas. But such an orientation is not long term orientation. And, of course, it will change on the processes of localization and regionalization after 2020. And the Russian export resources may remain unused. This problem is dangerous, this problem calls for a different way to approach the building of our own energy strategy; that what we are trying to lay in the work on the 2050-Strategy».

> Vitaliy Bushuyev, Director General, Institute for Energy Strategy



«European forecasts show that one of the centers of the implementation of environmentally oriented scenarios of energy development in Europe is a radical change in the structure of generating capacities with the transition to other types of energy resources. There are a lot of different technologies which produce the same electricity and heat. And there is multi-level work on the preliminary assessment of the comparative effectiveness of these technologies, systematic assessment of the balance of power in the optimization of energy together with balances of fuel and the subsequent withdrawal of these investment strategies to the financial feasibility of the plans for the sector of specific activities of individual companies. This allows us to speak about the long-and ultra-long forecasts in the structure of generating capacities, volumes of replacement of existing stations with the stations with new technology and about the volume changes in the fuel basket in the electricity sector».

> Head of Department, The Energy Research Institute of the Russian Academy of Sciences



«We offered the market a tool to develop 3-4 alternative global energy scenarios which are equally probable. None of these scenarios will ever appear on the market. But these scenarios are define the boundaries of market dynamics in some way, and you can make certain decisions in terms of corporate planning and see how the strategy adopted by companies that meet all of these scenarios or at least most of these scenarios. The main scenarios are built on three fundamental principles. These are the environment and environmental policy; economic principles, security and reliability of supply».

> Armen Badalov, Head of Russia Office, Pace Global Energy Services



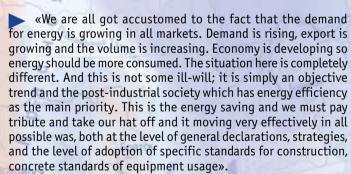
«On what basis will the cooperation in energy and power supplies in the European Union develop? The European Union acknowledges that the consumption of energy sources of oil and gas will grow and that Russia will continue to serve as the main supplier. And for example gas consumption and its supplies from Russia is a trend that is present and will be present in the European Union plan for the next period until 2030 - 2050».

Jan Kubis, Executive Secretary, UN European Economic Commission

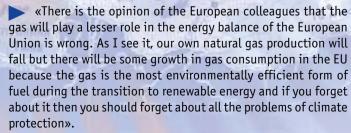


«By some approaches related to the consequences of the third energy package for Russia I titled my remarks that way: «How to balance the sovereign right of EU countries with the economic viability for all participants in cross-border supply chains in Europe?» because it seems correct to me to say that Europe today is not the European Union. Energy Europe today is all that connects consumers within the EU with suppliers outside the EU. From this perspective that includes North Africa and the entire geographical Europe including transit countries of Central and Eastern Europe and CIS countries and parts of Asia because all of our supplies come from Siberia and Central Asia».

Andrey Konoplyanik, Advisor to the Gazprombank Executive Board, Professor, Gubkin Russian State University of Oil and Gas



Tatyana Mitrova, Head, Center for World Energy Markets Studies of the Energy Research Institute (CWEMS ERIRAS)



Vladimir Feygin, Chief Director, Head of Energy Department, Institute for **Energy and Finance**











We, the Participants of the Ninth Moscow International Energy Forum «Russian Fuel and Energy Complex in the XXI Century»,

- take into account the common energy-, environment- and climate-related challenges, faced by the international community, and express our belief in necessity of strengthening cooperation among the civil institutions all over the world, for the purpose of elaborating concerted responses to those challenges;
- seek to make a feasible contribution to establishing a firm basis for developing the international and regional cooperation on the public-expert level, considered as an important and needed instrument for solving the global problems of the XXI century;
 - confirm our commitment to:
- the principles of sustainable development, adopted by the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992;
- the United Nations Millennium Declaration, adopted by Resolution 55/2 of the General
 Assembly on 8 September 2000;
- recognize positive effect of the international cooperation processes in sustainable social
 and economic development, their importance for comprehending and understanding the realities
 of the modern world, the threats to its existence and the ways to solve the global problems of
 today;
- express our will to render public-expert assistance in preparing the United Nations Conference on Sustainable Development «RIO+20» to be held in Brazil in 2012, as another stage of the international process, aimed at achieving the sustainable development that implies consideration of the interconnection between the economic, environmental and social factors







of public life;

• realize the necessity of developing and consolidating constructive conversation between states, international organizations, business, and civil society institutions.

and declare as follows:

We note with anxiety and concern that the globalization of the international economic relations, and the geopolitical, natural and social cataclysms force the world community to make the hard choice concerning the future multipolar world; they demand strengthening the foundation of the world economic order and seeking for a renewed model of sustainable financial and economic development that would correspond to the realities of changing world.

We realize the seriousness and complexity of the international crisis' deep influence on the development of the world economy. The fundamentals of the post-crisis restoration are not completely formed yet; this process shows disbalance in several points as well as uncertainty factors; the systemic and structural risks are still high too.

We call the leaders of the G20 member-states, the international intergovernmental organizations, and the international expert and business community for counteracting the consequences of the recession more intensively, consistently and comprehensively.

We support the coordinated efforts of the world community, with the Group of Twenty's leading role, in reforming the international financial institutions, aimed at providing dynamic, sustainable and balanced growth of the world economy, financial stability and sustainable development.

We focus attention on recognizing the importance of the interconnection in the energy-, environment-, and climate-related security for sustainable development of the communities and









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for improving people's social and economic welfare.

We are concerned about the contradictory processes, observed in the world power industry. The global markets of energy resources are still hard to predict. The financially speculative and geopolitical components still keep their dominating role in the system of the factors influencing the world prices.

We are anxious that the world oil prices, primarily influencing the world economy's growth rate, are less and less respondent to control and adjustment by the specialized international intergovernmental organizations.

We regard the lack of an efficient international institutional-legal instrument for oil price regulation that would be oriented on consideration of the fundamental market mechanisms, as a negative and destabilizing factor which threatens the global energy security and the international energy stability.

We note that the world energy scenery has been dramatically changed in recent years; however, the current institutional-legal framework of the global energy security fails to reflect those changes in full.

We note that achieving a stable energy future demands insistent common efforts on the basis of a fair and long-term balance among the interests of all the world energy interaction participants. The balance should rely on energy security, respect to people's interest, and environment protection.

We note the important steadying role of Russia as a country meeting a significant part of the world economy's energy requirements; we also welcome Russia's initiatives for strengthening the legal base of the international energy cooperation.







We are certain that pursuing the course to economic modernization will help Russia to fulfill its staff- and resource-related potential to a greater extent. Therewith, we note the necessity of more decisive steps towards creating favorable conditions for developing the domestic business, attracting foreign investment to the new science intensive and energy efficient technologies of the energy sector.

We note that the new directions in the sphere of the unconventional hydrocarbon production and the renewal of the energy strategies pursued by the countries, being the world's leading energy resources consumers, will cause reformatting the oil and gas market seriously and increasing the competition.

We note the expediency of correcting several provisions of the Russian Energy Strategy. In particular, it appears topical to provide for promotion of the investment to the centralized power industry and intensive development of the distributed and renewable power industry. It is appropriate to examine the possibility of simplified access of foreign investors to the strategic sectors of the Russian fuel and energy complex, with due consideration of the complex interests of Russia.

We are certain that the platform of the Moscow International Energy Forum «Russian Fuel and Energy Complex in the XXI Century» is an effective instrument for mobilizing the creative and intellectual potential of the public-expert community, a place to discuss new approaches to the energy problems of today.

We voice the hope that MIEF will make a positive contribution to the further development of the international cooperation on the public-expert level and that it will facilitate building greater confidence and consolidating different countries' efforts to reach sustainable energy development.



















EXHIBITION «RUSSIAN FUEL AND ENERGY COMPLEX IN THE XXI CENTURY»

The official Exhibition opening was held on April 7 at 10:00 AM in the CEH «Manege». Members of the Organizing Committee and Forum Partners greeted the participants of the Forum and Exhibition «Russian Fuel and Energy Complex in the XXI century». The opening ceremony was attended by:

Herbert Arents - Managing Director of RMG Group of Companies;

Valeriy Golubev - Deputy Chairman of OJSC «Gazprom»

Andrey Epishov - Director General of MIEF;

Konstantin Kosachev - Chairman of the Committee on Foreign Affairs of the State Duma of the Federal Assembly of the Russian Federation, Co-Chairman of the MIEF-2011 Organizing Committee

Yuriy Lipatov - Chairman of the Energy Committee of the State Duma of the Federal Assembly of the Russian Federation, Co-Chairman of the MIEF-2011 Organizing Committee:

Valentin Mezhevich - First Deputy Chairman of the Federation Council Committee on Natural Monopolies, Member of the MIEF-2011 Organizing Committee;

Jean Pierre Thomas - Special Representative of the President of the French Republic for French-Russian Business Relations Development.

The main competitive advantage of the Exhibition «Russian Fuel and Energy Complex in the XXI Century» over other numerous energy exhibitions was an extremely high participants' presentation layer, and appearance of the first persons of the biggest energy companies in Russia and in the world. The total area of the exposition was about 1,000 square meters. The compact and convenient arrangement of the display stands in CEH «Manege»'s territory enabled the participants of the Forum and of the Exhibition to examine the exposition in detail and establish interesting business contacts. It was traditional that the exhibition was looked round by representatives of the federal and regional, legislative and executive authorities, the top managers of the world's leading energy companies, major experts of public associations and scientific organizations.

This year's exhibition displayed the stands of such companies as Honeywell, Klinger, RMG, Gazprom, Zarubezhneft, Ilma, Nizhnekamskneftekhim, LOESK, MOEK, MOESK, IDGC of Siberia, IDGC of Ural, Russian Railways, Tatneft, TMK, Energy Center «President-Neva», State Company «EFESk» and other companies of the energy sector as well as the stands of the universities training engineers and specialists for the fuel and energy complex. The exhibitors' stands represented the newest innovative designs and products, and technologies, as well as the projects for increasing production environmental friendliness.



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MOSCOW INTERNATIONAL ENERGY FORUM

«RUSSIAN ENERGY AND FUEL COMPLEX IN THE XXI CENTURY»

Russia, Moscow, Central Exhibition Hall «Manege»

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