INTERNATIONAL FORUM - ‘RUSSIAN ENERGY WEEK’ PROGRAMME

October 3–6, 2018, Moscow

Programme accurate as at October 8, 2018

October 3, 2018

09:00–10:15

Manege, –2nd floor conference hall A

Development Plans for the Russian Fuel and Energy Industry

Panel Session

The Global Gas Market in 2030

The consumption of gas will grow faster than that of other hydrocarbons, at a rate of around 2.5% per year for the next 15–20 years. The reasons for this growth lie in the fact that gas is an ecological, economically competitive fuel, and crucially, it is becoming more accessible thanks to LNG. The fact that gas is becoming more accessible worldwide also stimulates its increased use. As its advantages become more apparent, it becomes more competitive compared to other fuels – and more attractive to consumers. In addition, it is very difficult to achieve the Paris Agreement targets on climate change without an upturn in gas consumption. In recent years we have witnessed the far-reaching transformation of the gas market, in part through the increase in shale gas production, and advances in production and transportation technologies. But market globalization is the most important trend today. If previously a large proportion of gas sales and supply took place via pipeline, over the past decade LNG and gas pipelines now have an equal share. The number of LNG consumers has increased from 13 countries in 1990 to 36 countries in 2017, and is set to rise further. Today’s technologies enable us to create floating gas-fuelled power stations, and floating terminals for the liquefaction and regasification of gas. All this makes connecting it to on-shore infrastructure significantly easier and accelerates the development of LNG. Other factors in gas market globalization include increased supply from non-traditional sources, the transition from long-term contracts to spot prices, and a greater focus on the ecological aspect. Groups like the Gas Exporting Countries Forum (GECF) also facilitate the further transformation and globalization of the gas market by helping to develop a balanced approach to development and by protecting the interests of all market participants. Great hopes are pinned to gas as the fuel of the future, and Russia is the largest producer and has the largest proven reserves of this fuel. How do you view the prospects for gas? Should Russia accelerate its monetization in order to strengthen its position on the market, or will the market settle into place independently? Does the development of renewable energy sources threaten the gas market? In the oil sector we already have OPEC, with countries actively cooperating in order to deliver market equilibrium and sustainable development. Is a similar form of cooperation possible in the gas sector, given the geographical difficulties of the markets involved? What prospects are there for this kind of cooperation?

Moderator:

- **Geoff Cutmore**, Anchor, CNBC

Panellists:

- **H.E. Mohammed Bin Saleh Al-Sada**, Minister of Energy and Industry of the State of Qatar
- **Alexander Medvedev**, Deputy Chairman of the Management Board, Gazprom
- **Leonid Mikhelson**, Chairman of the Management Board, Member of the Board of Directors, NOVATEK
- **Alexander Novak**, Minister of Energy of the Russian Federation
- **Yury Sentyurin**, Secretary General, Gas Exporting Countries Forum (GECF)

Front row participant:

- **Keith Martin**, Chief Commercial Officer, Uniper

09:00–10:15

Manege, –2nd floor conference hall B

Development Plans for the Russian Fuel and Energy Industry

Panel Session

Nuclear Energy – the Basis of Global Partnership and Current Development

In partnership with ROSATOM State Atomic Energy Corporation

The last decade was marked by an important stage in power development that manifested in a gradual shift towards carbon free energy sources. The Paris Climate Change Summit has set a global trend to alter the world energy balance in favour of power generation with zero CO2 emissions.

This focus undoubtedly opens extensive possibilities for nuclear energy development. Today atom accounts for slightly more than 1/10 of world energy production, around 400 GW. The implementation of the Paris Climate Change Conference decisions and addressing global environmental problems require an essential increase of these figures by 2050.

The need for a transition to a new level of cooperation within the international atomic community, that could be called a global partnership, is pending today. Such partnerships, including in NPP construction as a key element of the modern nuclear energy, are of critical importance to solving systemic tasks of the atomic energy – ensuring energy safety, stability of supplies and environmentally-friendly generation.

Moderator:

- **Agneta Rising**, Director General, World Nuclear Association

Panellists:

- **Mikhail Chudakov**, Deputy Director General, Head of the Department of Nuclear Energy, International Atomic Energy Agency (IAEA)
- **Alexey Likhachev**, Chief Executive Officer, ROSATOM State Atomic Energy Corporation
- **Pekka Lundmark**, President, Chief Executive Officer, Fortum Corporation
- **Yeafesh Osman**, Minister of Science and Technology of the People's Republic of Bangladesh
- **Nenad Popovic**, Minister without Portfolio Responsible for Innovation and Technological Development of the Republic of Serbia
- **Peter Szijjarto**, Minister of Foreign Affairs and Trade of Hungary

09:00–10:15

Manege, –2nd floor conference hall C

Development Plans for the Russian Fuel and Energy Industry

Roundtable

Will the Coal Industry Remain a Driver of Economic Growth in Developing Countries?

Growth in the consumption of coal across the globe is slowing as a result of tougher environmental requirements in developed countries. Nevertheless, the low cost of coal makes it an irreplaceable fuel for developing countries, where around 1.5 billion people still do not have uninterrupted access to modern forms of energy. Can coal drive economic growth and improve living standards in these countries? What energy markets are the most promising in terms of demand for coal? Is it worth waiting for breakthrough technologies in coal transportation, processing and consumption, which will increase its competitiveness with natural gas and renewable energy sources? Can coal chemistry, metallurgy, construction and other industries compensate for falling power generation demand in developed countries?

Moderator:

- **Anatoly Yanovsky**, Deputy Minister of Energy of the Russian Federation

Panellists:

- **Gareth Carpenter**, Head of Coal Markets, S&P Global Platts
- **Mikhail Fedyaev**, President, Siberian Business Union
- **Alexander Grigoryev**, Deputy General Director, The Institute of Natural Monopolies Research (IPEM)
- **Aleksey Kontorovich**, Academic Advisor, Institute of Coal Chemistry and Material Science SB RAS; Academician, Russian Academy of Sciences
- **Alexander Kovalchuk**, General Director, Coal Marketing Research Institute Ltd.; Advisor to the General Director, Russian Coal
- **Georgy Krasnyansky**, Chairman of the Board of Directors, Karakan Invest
- **Vladimir Tuzov**, Chief Strategy Officer, SUEK

Front row participant:

- **Kirill Molodtsov**, Aide to the Chief of Staff, Presidential Executive Office

09:00–10:15

Manege, –2nd floor conference hall D

Development Plans for the Russian Fuel and Energy Industry

Panel Session

The Electric Power Industry: Challenges of the Fourth Industrial Revolution

In partnership with Rosseti

For companies – and indeed countries – to be competitive in the fourth industrial revolution, they will require expertise and best practices in digitalization, automation, and the industrial internet of things. Companies at the forefront, both in Russia and other technologically developed countries, are developing and implementing smart grids, smart energy distribution, new energy-storage technology, consumer services, and the energy internet. As well as changing market demands, companies also have to examine fast-growing technologies and drivers of disruption. Can the economic benefit from implementing new technologies already be felt? What technological and social problems do companies face in the process of digitalizing the electric power industry? Where will investment come from in order for plans to come to fruition? What government support do companies rely on?

Moderator:

- **Marcus Eul**, Partner, European Leader Digitization in Energy Industry, PwC

Panellists:

- **Petr Biryukov**, Deputy Mayor of Moscow for Housing and Utilities and Improvement
- **Christoph Frei**, Secretary General, Chief Executive Officer, World Energy Council
- **Atsuo Iiyoshi**, Chancellor, Chairman of the Board of Directors, Chubu University
- **Pavel Livinsky**, General Director, Rosseti
- **Matteo Marini**, Vice President, Division Manager, Europe, Power Grids Division, ABB
- **Willibald Meixner**, Chief Executive Officer of Power and Gas Division, Siemens AG
- **Simone Mori**, Head of Europe and North Africa, Head of European Affairs, Enel S.p.A.
- **Arto Räty**, Senior Vice President, Corporate Affairs and Communications, Fortum Corporation
- **Alexander Starchenko**, Chairman of the Supervisory Board, Energy Consumers Association (ECA)
- **Alexey Texler**, First Deputy Minister of Energy of the Russian Federation
- **Pavel Zavalny**, Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation; President, Russian Gas Society

10:45–12:00

Manege, 1st floor Presidium conference hall

Global Energy Agenda

Ministerial Meeting "The Effectiveness of Energy Regulation: General Approaches and Divergence between Countries"

The energy sectors of various countries need to respond to shared challenges arising from the climate agenda and the current technological revolution. Nations need to identify ways to limit greenhouse gas emissions, establish their position on the development of nuclear power, and solve issues caused by a deficit in infrastructure at a time marked by digitalization and a new wave of electrification. Naturally, when tackling these challenges, regulators consider aspects specific to each country: the structure of the economy, the availability of resources, environmental and social requirements, and others. At the same time, they need to strike a balance between the interests of consumers and producers with regards tariffs, and solve issues related to long-term energy security and environmental safety. Which of the regulators' solutions have proved to be the most effective from the point of view of investment attractiveness, energy security, and public spending? What other parameters can be used to assess the effectiveness of government policy in the energy sector? Which new factors (the spread of electric cars, trade wars, technological equality etc.) may influence a change in government policy? Could government policy be used to prepare for a potential sea change in global energy?

Moderator:

- **Christoph Frei**, Secretary General, Chief Executive Officer, World Energy Council

Panellists:

- **H.E. Mohammed Bin Saleh Al-Sada**, Minister of Energy and Industry of the State of Qatar
- **Aleksandar Antic**, Minister of Mining and Energy of the Republic of Serbia
- **Viktor Karankevich**, Minister of Energy of the Republic of Belarus
- **Alexander Novak**, Minister of Energy of the Russian Federation
- **Gabriel Mbaga Obian Lima**, Minister of Mines and Hydrocarbons of the Republic of Equatorial Guinea
- **Parviz Shahbazov**, Minister of Energy of the Republic of Azerbaijan
- **Peter Szijjarto**, Minister of Foreign Affairs and Trade of Hungary

10:45–12:00

Manege, –2nd floor conference hall A

Global Energy Agenda

Panel Session

Could Natural Gas Become a Popular Motor Fuel throughout the World?

The large-scale development of gas fields and the development of transportation technologies has enabled natural gas to make revolutionary changes in the global fuel market for the production of electric and thermal energy over the past 50 years. Natural gas continues to maintain its competitiveness in the long term, even amid the rapid growth of renewable energy sources. Another major consumer of energy resources is the transport sector. Could natural gas play the same revolutionary role in the motor fuel market against the background of the continuing development of traditional gasoline and diesel engines, and the emergence of electric and hydrogen vehicles?

Moderator:

- **Alexey Bobrovsky**, Head of the Economic Programme, Russia 24 TV Channel

Panellists:

- **H.E. Shaikh Mohammed bin Khalifa bin Ahmed Al Khalifa**, Minister of Oil of the Kingdom of Bahrain
- **Martin Fraenkel**, President, S&P Global Platts Inc.
- **Sergey Kogogin**, Director General, KAMAZ PTC
- **Shanqing Lin**, Deputy Administrator, National Energy Administration of the People's Republic of China
- **Dmitriy Pumpyanskiy**, Chairman of the Board of Directors, Tube Metallurgical Company (TMK); Chairman of the Board of Directors, Sinara Group
- **Nobuo Tanaka**, Chairman, Sasakawa Peace Foundation; Executive Director (2007–2011), International Energy Agency
- **Viktor Zubkov**, Chairman of the Board of Directors, Gazprom; Russian Special Presidential Representative for Cooperation with the Gas Exporting Countries Forum

10:45–12:00

Manege, –2nd floor conference hall B

Development Plans for the Russian Fuel and Energy Industry

Panel Session

Identifying a Strategy to Succeed on the Global Petrochemical Market

In cooperation with SIBUR

The petrochemical industry is growing apace – at twice the rate of global GDP. At the same time, this growth has a strongly pronounced regional differentiation in terms of raw materials and output. Countries without an extensive resource base, such as those in the EU as well as Japan and South Korea, are seeing growth in light-duty production with a considerable innovative component based on naphtha. In the Middle East, USA and several other countries, the sector's growth comes from major projects based on natural gas processing. In China, coal and coalbed methane are widely used in the petrochemical industry. Countries are applying various mechanisms to regulate and encourage growth of the industry, and are increasing their competitiveness in various product niches. Why is it that the strategies of countries with fewer resources bring greater economic results? What measures to foster growth of the industry will result in the greatest economic benefit from cheap commodities? What restrictions are hindering Russian producers from increasing their competitiveness in global petrochemical markets? What can the government do to help develop petrochemical clusters? What are the prospects of new projects in the East of Russia? What infrastructure do Russian petrochemical companies lack?

Moderator:

- **Darya Borisova**, Senior Partner, McKinsey & Company

Panellists:

- **Sergey Donskoy**, Member of the Board of Directors, Advisor to the General Director, Irkutsk Oil Company; Minister of Natural Resources and Environment of the Russian Federation (2012 - 2018)
- **Viktor Evtukhov**, State Secretary – Deputy Minister of Industry and Trade of the Russian Federation
- **Mikhail Karisalov**, Chairman of the Management Board, Chief Executive Officer, SIBUR
- **Rustam Minnikhanov**, President of the Republic of Tatarstan
- **Andrey Slepnev**, Chief Executive Officer, Russian Export Center
- **Pavel Sorokin**, Deputy Minister of Energy of the Russian Federation
- **Zou Wenzhi**, Deputy Director General, Foreign Cooperation Office, China Petrochemical Corporation (Sinopec Group)

10:45–12:00

Manege, –2nd floor conference hall C

Global Energy Agenda

Investing in Energy: New Opportunities

In partnership with Russian Direct Investment Fund (RDIF)

The historic OPEC+ agreement has brought energy prices back in line with their fundamentals and made the energy markets more predictable. As a result, the attractiveness of energy projects as an investment has increased. Middle Eastern countries are not only the leading producers of energy resources, but also the leading investors in the energy sector. They have accumulated vast experience, and the geographical locations of their investments have for a long time stretched beyond the borders of the Middle East region. Alongside RDIF, Middle Eastern investors have begun to invest in the Russian energy sector. What makes these investments attractive for them, how will these investments be implemented and what is required to ensure the successful implementation of joint projects?

Moderator:

- **Yermolai Solzhenitsyn**, Senior Partner, McKinsey & Company

Panellists:

- **Mohammed Al Qahtani**, Senior Vice President, Saudi Arabian Oil Company (Saudi Aramco)
- **Saad Alhajeri**, Vice President for Operations in Middle East, North Africa and Russia, Mubadala Petroleum
- **Kirill Dmitriev**, Chief Executive Officer, Russian Direct Investment Fund (RDIF)
- **Sergey Kudryashov**, General Director, Zarubezhneft
- **Vadim Yakovlev**, Fist Deputy General Director, Deputy Chairman of the Management Board, Gazprom Neft PJSC
- **Stephane Maurice Zweguintzow**, Chairman of the Board of Directors, Deputy General Director - Director for Personnel and Organizational Development, Enel Russia

10:45–12:00

Manege, –2nd floor conference hall D

Development Plans for the Russian Fuel and Energy Industry

Realizing Energy-Saving Potential to Ensure the Success of the Housing and Urban Environment National Project: Nationwide Meeting

In partnership with Housing and Utilities Reform Fund

The Assistance Fund for Housing and Municipal Service Reform is a Russian state corporation. It assists in resettling people residing in unfit housing, modernizing the utilities infrastructure, and implementing energy-efficient technologies in the housing and utilities sector. Through meeting these objectives, transparency and efficiency in the housing and utilities sector will be ensured, residents will have access to high-quality services, a modern living environment will be created, towns and settlements will develop, and the Housing and Urban Environment national project will be implemented. This nationwide meeting will focus on key issues related to the development of housing and utilities, and to the creation of a modern and pleasant urban environment in the context of the objectives set forth in Russian Presidential Decree No. 204, “On the Russian Federation’s national targets and strategic objectives for the period to 2024”. What are the aims and objectives of the national project? What needs to be done to implement the national project to bring about a steady reduction in unfit housing? How can accumulated experience be best employed, such as when implementing targeted programmes to relocate people residing in unfit housing in the Russian regions?

Moderator:

- **Svetlana Razvorotneva**, Executive Director, National Center for Public Control in the Field of Housing and Communal Services HCS Control

Panellists:

- **Arkadiy Chernetskiy**, First Deputy Chair of the Federation Council Committee of the Federal Assembly of the Russian Federation on Federal Structure, Regional Policy, Local Government and Northern Affairs
- **Ekaterina Levitanskaya**, Project Manager of Financial Markets of Europe and Central Asia Department, International Finance Corporation
- **Alexander Sidyakin**, First Deputy Chairman, State Duma of the Federal Assembly of the Russian Federation Committee on Housing Policy and Housing and Communal Services
- **Sergei Stepashin**, Chairman of the Supervisory Board, Housing and Utilities Reform Fund
- **Dmitry Vakhrukov**, Director of the Department of State Tariffs Regulation, Infrastructure Reforms and Energy Efficiency, Ministry of Economic Development of the Russian Federation
- **Vladimir Yakushev**, Minister of Construction, Housing, and Utilities of the Russian

Federation

Front row participants:

- **Anatoliy Kistenev**, Head of Urban Okrug Jhatay of the Republic of Sakha (Yakutia)
- **Andzhey Raykevich**, Vice President, National Energy Conservation Agency SA
- **Vladimir Talalykin**, First Deputy General Director, Housing and Utilities Reform Fund
- **Konstantin Tsytsyn**, General Director, Housing and Utilities Reform Fund

12:00–13:00

Manege, 1st floor
Rosseti stand, presentation area

Fourth Russian MediaTEK Competition for the Media and Press Offices of Energy Companies and Regional Governments

Entrants include national and regional media outlets, journalists, and the PR departments of energy companies and regional governments. The competition aims to improve communication between energy companies and the outside world, inform the public of development projects in energy, encourage projects aimed at popularizing the image of energy-industry professions, and raise the profile of workers in the energy, oil, and gas sectors. The results of the competition will be announced at the Russian Energy Week Energy Efficiency and Energy Development International Forum.

The awards ceremony for MediaTEK winners will continue on 4 and 5 October 2018 as per schedule.

Awards presented by:

- **Sergey Mikhaylov**, General Director, Russian News Agency TASS
- **Alexander Novak**, Minister of Energy of the Russian Federation
- **Dmitry Peskov**, Deputy Chief of the Presidential Executive Office of the Russian Federation, Press Secretary of the President of the Russian Federation

13:00–15:00

Manege, 1st floor
Plenary conference hall

Plenary Session

Sustainable Energy for a Changing World

Address by President of the Russian Federation **Vladimir Putin**

Moderator:

- **Ryan Chilcote**, TV Host, Special Correspondent, PBS NewsHour

Panellists:

- **H.E. Khalid A. Al-Falih**, Minister of Energy, Industry and Mineral Resources of the Kingdom of Saudi Arabia; Chairman of the Board of Directors, Saudi Arabian Oil Company (Saudi Aramco)
- **Pekka Lundmark**, President, Chief Executive Officer, Fortum Corporation
- **Patrick Pouyanne**, Chief Executive Officer, Chairman of the Board, Total
- **Francesco Starace**, Chief Executive Officer, General Manager, Enel S.p.A.
- **Ben van Beurden**, Chief Executive Officer, Royal Dutch Shell Plc

15:30–16:45

Manege, 1st floor
Presidium conference hall

Global Energy Agenda

Russia–Africa Energy Roundtable

Today infrastructure, energy, and housing construction are the most promising sectors for investment in Africa. In the past, development of the energy sector was not a priority for most African countries. That was because despite the fact that the majority of the population did not have sufficient access to electricity, there was enough energy to serve the mining and extraction industries developed by colonial powers. This issue remained a low-priority one for several years; however, today the energy agenda is beginning to play a key role on the continent. Even though Africa's energy sector is vital for development, it remains one of the least understood parts of the global energy system, and very few international energy research centres possess reliable information about a particular region, or indeed operate there. Solar energy is finally taking root in hot countries, which are beginning to fully exploit their most accessible form of green energy. South Africa is already among the top ten leading producers of solar energy, while Rwanda is home to the first solar power station, which opened in 2014. There are also plans to construct large power stations in Ghana and Uganda. Russia and African countries have the opportunity to examine a new area of mutually beneficial cooperation, based specifically on long-term strategies. Russia is an experienced player on the global energy market, offering huge potential in terms of developing, constructing, and commissioning energy facilities such as dams, nuclear power plants, grid operating companies etc., as well as in exporting and transporting energy. Russia offers a number of competitive advantages as a partner, including experience in implementing large-scale energy programmes across vast territories, and constructing grids (something the African continent is in particular need of).

Moderator:

- **Nataliya Zaiser**, Chair of the Board, Africa Business Initiative UNION; Executive Secretary, Russian National Committee, World Energy Council (WEC)

Panellists:

- **Georgy Kalamanov**, Deputy Minister of Industry and Trade of the Russian Federation
- **Andrey Kemarsky**, Director of the Department of Africa, Ministry of Foreign Affairs of the Russian Federation
- **Ezekiel Lol Gatkuoth**, Minister of Petroleum of the Republic of South Sudan
- **Mikhail Margelov**, Vice President, Transneft
- **Gabriel Mbaga Obian Lima**, Minister of Mines and Hydrocarbons of the Republic of Equatorial Guinea
- **Mustafa Sanalla**, Chairman of the Board of Directors, National Oil Corporation (NOC)
- **Alhaji Kanja Ibrahim Sesay**, Minister of Energy of the Republic of Sierra Leone
- **Anton Usachev**, Director, Russian Solar Energy Association

15:30–16:45

Manege, –2nd floor conference hall A

Global Energy Agenda

Panel Session

Energy-Efficient and Smart Cities: French and Russian Experience

A smart city – or ville du futur – is an urban environment boasting high living conditions not only today, but for future generations too. It is a city founded on principles of sustainable development. Accessible energy resources and sustainable consumption is widely accepted as a key requisite for urban development, with energy efficient technologies as integral components. Cities cover a mere 2% of the earth's surface, but account for 75% of energy consumption and 80% of CO2 emissions. The Trianon Dialogue, a Russian-French civil society forum initiated by the presidents of the two countries, has put forward several topics for discussion. These include questions concerning the development, construction, management and modernization of cities; and implementing digital technologies in the urban infrastructure, thereby developing the theme of the dialogue for 2018: "City of the Future". Experience has enabled French and Russian cities and energy companies to cite numerous successful examples in urban planning, automation, building security, electrical fixtures, and housing management systems, and all in environments where the urban population is growing apace, and where citizens' expectations are high. What needs to be done for a city to become smarter? How can energy efficiency be increased, and how can fast-developing digital technologies be integrated in the urban infrastructure? What results in optimizing electricity consumption and minimizing energy losses have Russian and French cities achieved? How can the environment be protected as urban spaces grow and new projects are implemented?

Welcoming address:

- **Sylvie-Agnes Bermann**, Ambassador Extraordinary and Plenipotentiary of the French Republic to the Russian Federation
- **Anatoly Torkunov**, Rector, MGIMO University

Moderators:

- **Artem Malgin**, Vice Rector, MGIMO University
- **Mikhail Shapiro**, Member of the Committee on Entrepreneurship in the Housing and Utilities Sector, Chamber of Commerce and Industry of the Russian Federation; General Director, Danfoss

Panellists:

- **Vardan Avakyan**, Head of the 'Smart Block' Working Group; General Director, Moslift
- **Dmitriy Berdnikov**, Mayor of Irkutsk
- **Dominique Fache**, Director, Sophia Antipolis Foundation; Chairman of the Board of Directors, Russian Technology Foundation (RTF); The Global Energy Prize Expert
- **Benoit Lebot**, Executive Director of the Secretariat, International Partnership for Energy Efficiency Cooperation (IPEEC)
- **Eduard Lysenko**, Minister of the Government of Moscow, Head of the Department of Information Technologies of Moscow
- **Alberto Pasanisi**, Group Manager "Smart and Sustainable Cities", European Institute for Energy Research (EIFER)
- **Anatoliy Tikhonov**, General Director, Russian Energy Center of the Ministry of Energy of the Russian Federation

15:30–16:45

Manege, –2nd floor conference hall B

Global Energy Agenda

Panel Session

Geopolitical Scenarios and the Fuel and Energy Complex: The New Reality

Geopolitics is beginning to play an increasingly important (and, unfortunately, not always constructive) role in the fuel and energy sector. This cannot but affect how predictable and controllable processes in the global energy markets are, further increasing the uncertainty of the future of energy, changing the conditions of basic scenarios and the expected trajectories of energy development, and, from time to time, highlighting geopolitical risks (conflicts, trade restrictions, transport and transit risks, etc.) of energy security requirements. Under such conditions, is it possible to demand sustainability in world energy development, or is that becoming a chimera? Do traditional sample scenario studies with point risks estimates help find the real pathways for this development, or is it necessary to transform the role of energy scenarios, and increase their importance for the development of responsible practical recommendations in the fuel and energy sector? Is it not time to discuss the creation of an early strategic warning system aimed at the timely detection and joint rebuttal of any threats to sustainable energy development, wherever they come from? How may an open, multilateral dialogue between leading international experts in the field of global energy forecasting and analysis help to address these issues?

Moderator:

- **Nobuo Tanaka**, Chairman, Sasakawa Peace Foundation; Executive Director (2007–2011), International Energy Agency

Panellists:

- **Vladimir Feigin**, President, Institute for Energy and Finance
- **Thomas Graham**, Managing Director, Kissinger Associates
- **Maksim Nechaev**, Director for Consulting, IHS Markit Russia
- **Aleksandr Shirov**, Deputy Director, Head of the Analysis, Production Potential Forecasting and Cross industry Cooperation Lab, Institute of Economic Forecasting of the Russian Academy of Sciences
- **Dmitriy Sokolov**, Head of the Department of Energy Economics and Forecasting, Gas Exporting Countries Forum (GECF)
- **Sergey Vakulenko**, Head of Strategy and Innovations Department, Gazprom Neft

15:30–16:45

Manege, –2nd floor conference hall C

Global Energy Agenda

Presentation of the OPEC World Oil Outlook 2018

The latest OPEC report – the World Oil Outlook (WOO) 2018 – will be presented during Russian Energy Week for the first time. The WOO report, which has been published since 2007, provides a detailed analysis of various factors affecting the global oil market with a medium- and long-term outlook until 2040. During the session, experts will present their view on the prospects for the industry's development, while considering changes in the world economic situation, the evolution of the balance of oil supply and demand, trends in the processing of raw materials, and specific aspects of state policy and technological challenges.

Welcoming address:

- **H.E. Mohammad Sanusi Barkindo**, Secretary General, Organization of the Petroleum Exporting Countries (OPEC)

Panellist:

- **Abderrezak Benyoucef**, Head of the Energy Studies Department, Organization of the Petroleum Exporting Countries (OPEC)

15:30–16:45

Manege, –2nd floor conference hall D

Global Energy Agenda

Panel Session

Unlocking Russia's Potential in the Global Renewables Industry

The global energy industry is undergoing a period of irreversible transformation. The concept of energy transition frequently appears in countries' political agendas. It is geared towards the large-scale use of green energy sources and renewables, the decentralization of markets, the introduction of smart infrastructure, and the transition from consumer to prosumer behaviour models. As a leader in global energy markets, Russia is acting with these global trends in mind. Each year sees the number of renewable energy facilities increase. Russian technologies are developing, and production of equipment for renewable energy sources is increasing. Domestic companies are exporting their products. Taken as a whole, this heralds a new chapter in Russian renewables. What are the priorities for the continued development of the Russian renewables sector? As a knowledge-intensive, high-tech and export oriented sector, could renewables help accelerate economic development? What is the potential for international cooperation in the production and trade of renewable components? What are

the most promising renewable markets for Russian technologies? What is the likelihood of breakthrough technologies appearing which will dramatically accelerate the development of renewable markets? What changes should be made to government support for Russian renewables?

Moderator:

- **George Kekelidze**, Chairman of the Board, EUROSOLAR Russia Association for Renewable Energy; Managing Partner, GO2RU Solution Providing Agency

Panellists:

- **Maksim Bystrov**, Chairman of the Board, NP Market Council Association
- **Anatoliy Chubais**, Chairman of the Executive Board, RUSNANO Corporation
- **Alexander Chuvaev**, Executive Vice President, Head of the Russia Division, Fortum Corporation
- **Charles Hendry**, Director, Head of Future Energy, London Power Corporation; Minister of State for Energy (Department for Energy & Climate Change) of the United Kingdom of Great Britain and Northern Ireland (2010-2012)
- **Alexander Korchagin**, General Director, NovaWind
- **Igor Shakhray**, General Director, Hevel Group
- **Alexey Texler**, First Deputy Minister of Energy of the Russian Federation

Front row participants:

- **Herve Amosse**, Executive Vice President for Transportation, Telecom and Grid, Saft Groupe, Total Groupe
- **Willem Coppoolse**, Senior Business Developer for Russia, Engie
- **Andreas Dreisiebner**, Member of the Management Board, Solarspar Association
- **Alexander Gareev**, Managing Director, Eurasian Development Bank (EDB)
- **Aleksey Kaplun**, Council Member, EUROSOLAR Russia Non-Profit Partnership for the Development of Renewable Energy
- **Nikita Selivanov**, Head of Asset Management Departmen, Investment Company QBF
- **Alexander Sigov**, President, Federal State Budget Educational Institution of Higher Education «MIREA - Russian Technological University»

17:00–18:15

Manege, 1st floor
Presidium conference hall

International Mayors' Summit on Energy Efficiency and Sustainable Growth in Cities

Moderator:

- **Anton Inyutsyn**, Deputy Minister of Energy of the Russian Federation

Panellists:

- **Simeran Bachra**, Deputy Senior Manager for Cities, States and Regions, CDP Worldwide
- **Dmitriy Berdnikov**, Mayor of Irkutsk
- **Aleksandr Golkov**, Mayor of the Ulan-Ude City
- **Kristina Haverkamp**, Managing Director, DENA
- **Dmitriy Kaygorodov**, First Deputy Head of Urban District, Administration of Urban Okrug Khimki of Moscow Region
- **Valeriy Kozlov**, Head of Administration of Municipal Formation of Syktyvkar Urban District
- **Benoit Lebot**, Executive Director of the Secretariat, International Partnership for Energy Efficiency Cooperation (IPEEC)
- **Ellina Levina**, Manager of Partnerships, Clean Energy Ministerial Secretariat
- **Anatoliy Lokot**, Mayor of Novosibirsk City
- **Yuri Paranichev**, First Deputy Head of the City Administration of Chelyabinsk
- **Lauren Poe**, Mayor of Gainesville City
- **Cristian Felipe Rosenthal Ninapaytan**, Head of Economic Development, Head of Supervision and Control, Municipality of Lima
- **Renske Schuitmaker**, Analyst, Directorate of Sustainability, Technology and Outlooks, International Energy Agency
- **Vadim Shuvalov**, Head of Surgut
- **Bernd Tischler**, Lord Mayor of Bottrop

17:00–18:15

Manege, –2nd floor conference hall A

Global Energy Agenda

Panel Session

S&P Global Platts session – Global Energy Industry Development Outlook to 2040

There is a wide range of opinions on the trajectory of the long-term development of the energy markets. On the one hand, the forecasts of peak demand for oil over the next decade are justified by the expectation of the rapid spread of electric vehicles, the growth in the substitution of oil consumption with that of natural gas, and environmental restrictions on the growth of the petrochemical market. Supporters of this view believe that the share of coal in the global energy balance will be structurally reduced, and even the growth in natural gas consumption will be limited by the growth of renewable energy generation. On the other hand, concerns about a potential shortage of oil are due to a sharp decline in investment in traditional oil production projects amid a slowdown in the growth of shale oil production. At the same time, demographic factors in developing countries are leading to an increase in the global demand for energy. The Global Energy Industry Development Outlook to 2040 S&P Global Platts session will consider the key fundamental, legislative, and technological prerequisites for such forecasts, and will present the most likely scenario for the long-term development of the global energy market according to S&P Global Platts Analytics.

Panellists:

- **Martin Fraenkel**, President, S&P Global Platts Inc.
- **Alexey Khokhlov**, Head of the Electric Power Sector, Moscow School of Management SKOLKOVO
- **Denis Leonov**, Head of Directorate, Gazprom

October 4, 2018

10:00–11:15

Manege, 1st floor
Plenary conference hall

Development Plans for the Russian Fuel and Energy Industry

Plenary Session

Developing Infrastructure for Economic Growth and Improved Living Standards

In line with a presidential decree, the Government of the Russian Federation is drawing up a comprehensive plan in partnership with regional administrations to modernize and expand critical transport infrastructure. Experts have claimed that annual investments of around RUB 2 trillion are needed for infrastructure. At the same time, innovative and digital technologies are to be implemented, greatly improving business and public services. Fulfilling such ambitious objectives requires a coordination of efforts between infrastructure industries, the regions, equipment manufacturers, and the financial sector. How will fulfilling priority infrastructure development objectives affect regional policy? Which tasks will be undertaken by companies? What sources of funding for priority projects have been identified? Do Russian companies possess sufficient expertise to fulfil infrastructure development objectives, and what overseas experience and technology could prove beneficial? Which countries' experience was drawn upon when preparing the government's comprehensive plan?

Moderator:

- **Sergei Brilev**, Anchor, Deputy Director, Russia TV Channel; President, Bering Bellingshausen Institute for the Americas

Panellists:

- **Oleg Belozerov**, Chief Executive Officer – Chairman of the Executive Board, Russian Railways
- **Herman Gref**, Chief Executive Officer, Chairman of the Executive Board, Sberbank
- **Peter Herweck**, Executive Vice President for Industry, Member of the Executive Committee, Schneider Electric
- **Dmitry Kozak**, Deputy Prime Minister of the Russian Federation
- **Pavel Livinsky**, General Director, Rosseti
- **Sergei Sobyanin**, Mayor of Moscow

10:00–11:15

Manege, 1st floor
Presidium conference hall

Development Plans for the Russian Fuel and Energy Industry

Presentation of the Heat Supply System Efficiency Rating of the Russian Regions

In 2018, the Ministry of Energy of the Russian Federation continued their collaboration with the regions and expert community to draw up a heat supply system efficiency rating for Russian localities. Ratings of municipalities take place at the regional level, while ratings of regions take place at the national level. The rating evaluates efforts made by government bodies of all levels to create an environment conducive to a reliable, incident-free heat supply, a reduction in fuel consumption, a reduction in heat losses, the application of modern technologies in thermal networks and for use by the consumer, the updating of heat supply plans, and the implementation of the incorporated action plan. It does not only aim to measure a company's success, but also to identify and publicize best practices. Among those attending the event will be representatives of regional ministries of energy, housing and utilities; energy companies, and the expert community. Discussions will focus on the results of the rating, and experience will also be shared on applying best practices in heat supply system management and in implementing modern technologies in the industry.

Moderator:

- **Tatyana Gurova**, Editor-in-Chief, Expert magazine

Panellists:

- **Arseny Belenky**, Director of the Government Relations Department, Quadra - Power Generation
- **Airat Sabirzanov**, First Deputy General Director - Director for Economics and Finance, "Tatenergo"
- **Lidia Smolina**, First Deputy Governor of Vladimir Region for Infrastructure, Housing, Utilities and Energy Development
- **Dmitry Vavilin**, Minister of Industry, Construction, Housing and Utility Services, and Transport of the Ulyanovsk Region

10:00–11:15

Manege, –2nd floor conference hall A

Global Energy Agenda

Panel Session

Risks in Modern Global Energy and How to Manage Them

Issues for discussion:

- Identifying future opportunities, long-term risks, and negative trends in the oil and gas sector
- Regulatory restrictions and areas for development in energy markets (trade wars and extension of sanctions)
- Insurance as a mechanism for protecting the property interests of energy companies on the global market
- Economic digitalization and ensuring information security in the energy industry.

Moderator:

- **Vladimir Feigin**, President, Institute for Energy and Finance

Panellists:

- **Natalya Karpova**, Deputy Chairman of the Board, Russian National Reinsurance Company
- **Natalya Porokhova**, Head of Research and Forecasting Group, Analytical Credit Rating Agency (ACRA)
- **Oriol Pujoldevall**, Senior Associate, Affiliate Engagement and Business Development, Energy Web Foundation

10:00–11:15

Manege, –2nd floor conference hall B

Global Energy Agenda

Panel Session

The Energy Potential of the Arctic: Implementing Projects and Developing Logistics

The Russian Arctic contains almost 25% of the country's recoverable reserves of oil and gas condensate, and more than 72% of its gas reserves. The development of cross-industry networks incorporating sea ports, modern infrastructure, and high-tech services will ensure that hydrocarbon production will grow in the Arctic region. This will help replace declining production in regions of traditional development after 2020 and help bolster the country's energy security. Cargo traffic on the Northern Sea Route is planned to reach 80 million tonnes by 2024. This figure is expected to be reached largely as the result of transporting raw hydrocarbons in order to implement a number of projects, specifically Yamal LNG, Arctic LNG 2, Arctic Gates (Novoportovskoye field), and Prirazlomnoye field. Water transportation for other fields in the Yamal-Gydan Peninsula, offshore areas in the Arctic, and northern Russia could also be organized in the future. What promising hydrocarbon field development projects exist, and how long would it take to develop them? Which projects can be implemented using the existing transport infrastructure of the Arctic, and where could it be further developed, specifically with regard to pipelines and rail links? What are the prospects for developing the Northern Sea Route as the main sea transport corridor? To what extent could remote reserves be used in the energy mix of the Russian Arctic?

Moderator:

- **Tatyana Mitrova**, Director, Energy Centre, SKOLKOVO Moscow School of Management

Panellists:

- **Kirill Bogdanovsky**, Deputy Director for Marketing and Sea Transportation, Yamal LNG
- **Alexander Gladkov**, Director of the Department of Oil and Gas Production and Transportation, Ministry of Energy of the Russian Federation
- **Alexander Kalinin**, Deputy Governor of the Yamal-Nenets Autonomous Okrug
- **Rasim Mingazetdinov**, Head of Strategic Development Directorate, Transneft
- **Evgeny Nikora**, Deputy Governor of the Murmansk Region
- **Sergey Strelnikov**, Head of Maritime Safety Department, Atomflot
- **Denis Ushakov**, Head of Shipping Safety Department, The Federal Agency for Maritime and River Transport

10:00–11:15

Manege, –2nd floor conference hall C

Development Plans for the Russian Fuel and Energy Industry

Roundtable

The Development of Pricing on the International Oil Market: New Benchmarks, Currencies and Settlement Technologies

In partnership with St. Petersburg International Mercantile Exchange

The current pricing mechanism based on existing benchmarks has recently come in for criticism as a method of ascertaining a fair market price for oil. This is due to a significant fall in output at fields which largely account for the best-known price benchmark. However, new benchmarks are coming to the fore, based on more stable oil flows from the point of view of production volumes and quality

characteristics. More accurate pricing will also facilitate the creation of benchmarks through direct quoting. There is an ever-increasing trend for pricing to instead be based on exchange contracts, in order to best reflect market value. Aspects related to settlements in national currencies and applying blockchain technologies are of no less importance. Will the leading benchmarks change over the next 3–5 years? Will the CIF and FOB markets lose ground? When will oil companies show more interest in direct quoting of Russian oil? What role will quoting in yuan play with regards Chinese petroleum storage reservoirs? How will the global crude oil market change as digital platforms and blockchain technologies develop?

Moderator:

- **Elena Telegina**, Dean, Faculty of International Energy Business, Gubkin Russian State University of Oil and Gas (National Research University); Corresponding Member, Russian Academy of Sciences

Panellists:

- **Sergey Andronov**, Vice-President, Transneft
- **Anatoly Golomolzin**, Deputy Head, Federal Antimonopoly Service of the Russian Federation (FAS Russia)
- **Joel Hanley**, Editorial Director for European and African Oil, S&P Global Platts
- **Owain Johnson**, Managing Director for Energy Research and Product Development, CME Group
- **Denis Maximov**, Deputy General Director for Economics and Finance, Zarubezhneft
- **Kirill Molodtsov**, Aide to the Chief of Staff, Presidential Executive Office
- **Mark Quartermain**, Vice President for Crude Trading and Supply, Shell International Trading and Shipping Company Limited
- **Alexey Rybnikov**, President, St. Petersburg International Mercantile Exchange
- **Murat Seitnepesov**, General Director, Integral Petroleum SA
- **Pavel Sorokin**, Deputy Minister of Energy of the Russian Federation
- **Matthew Thompson**, Chief Strategy and Business Development Officer, Argus Media group

10:00–11:15

Manege, –2nd floor conference hall D

Global Energy Agenda

Panel Session

Energy of the Future: Three Drivers of Sustainable Development

The process of digital transition in the power industry, which will not only improve the efficiency of traditional energy systems, but also reduce maintenance costs and ensure greater security of energy supply, has been recognized by the advanced countries of the world as an important goal on the path towards a new global energy system.

Speakers at the session will assess changes in the level of implementation of digital technologies during the period from 2010 to 2020, and consider what stage of development digitalization has reached in energy distribution and transmission systems. How long will it be before a low-carbon future arrives? What share of the car industry will carbon-free fuels achieve in the coming years and how will this shift affect economic performance? What new approaches to generating and transforming energy are being developed now, and how can they be applied in such fields as medicine, construction, etc.

Moderator:

- **Sophie Shevardnadze**, Journalist, Anchor

Panellists:

- **Sergey Alekseyenko**, Academician, Member of the Department of Energy, Mechanical Engineering, Mechanics, and Control Processes, Russian Academy of Sciences
- **Rodney John Allam**, Nobel Peace Prize Laureate; Chairman of the International Award Committee, Global Energy Association
- **Dominique Fache**, Director, Sophia Antipolis Foundation; Chairman of the Board of Directors, Russian Technology Foundation (RTF); The Global Energy Prize Expert
- **Martin Green**, Professor, University of New South Wales (UNSW); Director, Australian Centre for Advanced Photovoltaics (ACAP)
- **Steven Griffiths**, Member of the Global Energy Prize International Award Committee; Senior Vice President, Research and Development, Khalifa University of Science and Technology
- **Liu Hongpeng**, Director, Energy Division, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP); The Global Energy Prize Expert
- **Chung Rae Kwon**, Nobel Peace Prize Laureate; Member of the Global Energy Prize International Award Committee; Professor Emeritus, Incheon National University
- **Klaus Riedle**, Honorary Professor, Friedrich-Alexander University Erlangen-Nürnberg (FAU)
- **Sun Xiansheng**, Secretary General, International Energy Forum (IEF)

11:00–13:30

Manege, 3rd floor
Turandot restaurant

Global Energy Agenda

Energy Systems of the Future: The Vector of Development

In partnership with Siemens LLC

The global economy is facing new challenges, and energy systems are undergoing radical change. This shift is called the "3D energy model" because it may be represented by three trends: decarbonization, decentralization, and digitalization. Of course, the transition from fossil fuels and centralized electricity supply from a few stations to a large number of distributed and renewable energy sources, such as wind and solar energy, will not happen overnight. However, the traditional energy sector, which once consisted of several large power plants with downward transmission and distribution of energy, is now changing fundamentally. A growing number of energy producers and consumers involved in production are being forced to completely reconsider how energy systems are managed. The level of complexity of energy systems is increasing significantly, and the management of digital data is one of the ways in which this infrastructure may be controlled. Millions of new smart grids and decentralized power generating units increase the energy infrastructure's level of complexity significantly. To cope with the increasing complexity of energy systems, electrical networks must be made smarter, harnessing the opportunities presented by digitalization. Modern technologies are able to analyse production processes and generate terabytes of data. How can this information be of most use to your business? Digital technology penetrates all branches of industry. Energy companies are looking for comprehensive methods to protect their assets from cyberattacks. Making the right decision and choosing the right partner is of critical importance. How can a company be protected from potential threats? Today, data is everywhere. For companies, data has become the most important and critical resource in the age of the internet of things. To uncover its full potential, data streams need to be converted into useful information. In order for this to happen, data from countless sources must be collected and analysed. This is a highly complex task. How can MindSphere, an open operating platform based on cloud technologies and the internet of things, help with this? Does the Russian market need new solutions for large, centralized generation?

Panellists:

- **Alexander Liberov**, President and Chief Executive Officer, Siemens in Russia
- **Alexander Pavlov**, Head of the Turbine Design Group, Siemens Gas Turbine Technologies
- **Georg Schellenberg**, Head of Business Development of Global Business Services Department of Energy Management Unit for EMEA, Siemens in Russia
- **Alexander Tanichev**, Director of Power Generation Services Department, Siemens in Russia

12:00–13:15

Manege, 1st floor
Plenary conference hall

Global Energy Agenda

Plenary Session

Global Energy 2035: Overcoming Barriers and Consolidating Opportunities

The world today has entered the fourth industrial revolution: all aspects of life are changing, and energy is no exception. World energy markets are currently undergoing a profound transformation that is significantly changing the volume and structure of demand and leading to increased competition across the globe. Technological advances are only serving to increase the pace of change. Today's key trends include the evolution of the energy mix in favour of cleaner sources; the increasingly prominent role played by the climate agenda (and consequently, the development of renewable energy sources); the all-pervading digitalization of life and the economy, and the development of technologies; and the globalization of the fuel and energy sector, and with it, the increasing accessibility of resources. And above all is the question of the petrol station versus the power outlet. What future awaits traditional energy? How can global energy security be ensured in a such a volatile economic and political climate?

New opportunities and hidden threats associated with the fourth industrial revolution. How can new trends in the global energy market be predicted?

- The implementation of new energy resource extraction and production technologies to maintain competitiveness. The current status in Russia.
- Gas as a solution to the issue of climate change and an alternative to renewable energy sources in the near future.
- The sustainable energy of the future's fuel mix: Russia and the world. Current threats to the oil demand.
- Tackling energy poverty and increasing energy access across the globe.

Moderator:

- **Annmarie Hordern**, Reporter, Bloomberg TV

Panellists:

- **Vagit Alekperov**, President, Member of the Board of Directors and Chairman of the Management Committee, LUKOIL

- **H.E. Khalid A. Al-Falih**, Minister of Energy, Industry and Mineral Resources of the Kingdom of Saudi Arabia; Chairman of the Board of Directors, Saudi Arabian Oil Company (Saudi Aramco)
- **H.E. Mohammad Sanusi Barkindo**, Secretary General, Organization of the Petroleum Exporting Countries (OPEC)
- **Alexander Novak**, Minister of Energy of the Russian Federation
- **Daniel Yergin**, Vice Chairman, IHS Markit

Front row participant:

- **Eckhardt Rümmler**, Chief Operating Officer, Uniper SE

12:00–13:15

Manege, 1st floor
Presidium conference hall

Open Meeting
Grid Digitization in Practice: Routes and Solutions

(meeting includes participation of subsidiaries and affiliates of Rosseti Public Joint Stock Company)

In Russia and other technologically advanced countries, the most forward-thinking energy companies are carrying out research and development in adopting smart grids, the distribution of smart energy, new energy storage technologies, consumer services, and the energy internet. In Russia, the digital economy programme has been ratified and Rosseti has been set the task of becoming one of the drivers of this process, which will generate a significant impetus for other market participants and bring overall efficiency in this sector to a qualitatively new level – in turn increasing the reliability of electricity supplies to consumers and boosting investor appeal. What achievements have been made in digitizing Russia's electricity network and the companies that operate in this market? Is there already a discernible economic impact from adopting new technologies? What difficulties do companies encounter when they are implementing digitization strategies? What further steps towards the digital transformation of the electricity grid and sector are needed?

Moderator:

- **Pavel Livinsky**, General Director, Rosseti

Panellists:

- **Oleg Bocharov**, Deputy Minister of Industry and Trade of the Russian Federation
- **Igor Makovskiy**, General Director, IDGC of Centre; General Director, IDGC of Volga Region
- **Konstantin Mikhaylenko**, Chief Adviser, Rosseti
- **Andrey Murov**, Chairman of the Management Board, FGC UES
- **Igor Rudenia**, Governor of Tver Region
- **Andrey Ryumin**, General Director, Lenenergo PJSC
- **Petr Sinyutin**, Chief Executive Officer, Moscow United Electric Grid Company

12:00–13:15

Manege, –2nd floor
conference hall A

Development Plans for the Russian Fuel and Energy Industry

Panel Session

The Strategy of Import Substitution in the Oil and Gas Industry: National Projects and Digital Technology

In 2015 the Ministry of Energy of the Russian Federation ratified a set of measures aimed at replacing imports in the country's oil refining and petrochemical industries. These measures, which encompass targets to reduce the share of imports by 2020, are currently being implemented. A national project is under way, entitled "The establishment of a range of domestically produced technologies and high-tech equipment to develop reserves in the Bazhenov Formation". It is not only focused on the potential to process 760 million tonnes of hydrocarbon reserves, but also to facilitate the country's self-sufficiency in exploring and developing non-traditional oil and gas reserves. In addition, two new projects have been ratified: "Creating hydroconversion technology for petroleum feedstock with the aim of obtaining high-quality fuel, oil, and feedstock for petrochemical processes" and "Fine refining catalysts for petroleum feedstock (based on aluminium oxide)". Oil and gas companies need to rapidly transfer to digital technologies in order for the industry to grow. This includes processes outlined in the plan to replace imports of software, which was ratified by the Ministry of Digital Development, Communications and Mass Media of the Russian Federation in 2015. Under this plan, the share of software imported for the energy industry will be cut to 70% by 2020, and 50% by 2025. How effective is the National Project format as a platform to trial equipment and technology? What kind of testing centres need to be created to develop technologies for geological surveying, and for exploring and extracting hard-to-recover hydrocarbon deposits? What are the intermediary results in import substitution for the oil refining and petrochemical industries? What does a standardization system provide as an import substitution tool in Russia? How can experience from the Cyber Hydrofracking competition be replicated in the development of Russian application software?

Moderator:

- **Sergey Arkhipov**, Head of the Department of Technology Partnership and Import Substitution, PJSC Gazprom Neft

Panellists:

- **Irina Korchuganova**, Leading Specialist, Transneft-Sintez
- **Daria Kozlova**, Head of Crude Oil Upstream and Technologies Direction, VYGON Consulting
- **Aleksandr Medvedev**, Director for Technical Sales and Promotion of Products in the Domestic Market, Tube Metallurgical Company (TMK)
- **Sergey Rudenko**, Head of Advanced Technologies Department, LNG Department, NOVATEK

12:00–13:15

Manege, –2nd floor conference hall B

Development Plans for the Russian Fuel and Energy Industry

Panel Session

Gas-powered and Electric Vehicles in Russia: Possible Development Rates and Strategies

The rising numbers of cars in the world means that the burden on the planet's environment is increasing, creating the demand for new types of transport and fuel. Vehicle manufacturers and innovators are actively working on creating infrastructure and new models of electric vehicles, as well as liquefied and compressed natural gas vehicles. In Russia, plans are also being implemented to develop the charging infrastructure for electric vehicles. In many regions, public transport and municipal vehicles already run on natural gas. International experience shows that it is possible to accelerate the speed and expansion of the alternative petrol/diesel fuel market significantly, due to the rapid development of infrastructure on key transport corridors and in large metropolitan areas, tougher requirements for purchases by public and municipal organizations in terms of public transport and the housing and utilities sector, regulation of how public transport is organized, and the subsidizing of vehicle conversion. What incentives could the Government of the Russian Federation support in order to achieve more ambitious goals for the development of the gas-powered and electric car market? What regulatory restrictions impede the wider introduction of alternative transport? What is the expected effect on the country? Are vehicle manufacturers and freight and passenger transport companies interested in changing the strategy for developing the market? What are the challenges facing the regions?

Moderator:

- **Vladimir Samokhvalov**, Managing Partner, SBS Consulting

Panellists:

- **Yury Bayramov**, Deputy Chairman of the Board for Operation and Road Safety, Russian Highways State Company
- **Shamil Gafarov**, Deputy Prime Minister, Republic of Tatarstan – Chief of Staff, Cabinet of Ministers, Republic of Tatarstan
- **Gasan Gasangadzhiev**, Head of the Housing, Utilities and Amenities Department, Government of Moscow
- **Iya Gordeyeva**, Chairperson, Association for the Development of Electric, Unmanned, and Connected Transport and Infrastructure (AETI)
- **Anton Inyutsyn**, Deputy Minister of Energy of the Russian Federation
- **Denis Khramov**, First Deputy Minister of Natural Resources and Environment of the Russian Federation
- **Kirill Malinin**, Deputy General Director, Neftmagistral
- **Yerlan Nurpeisov**, General Director, Green Auto Service; Member of the Working Group of the Ministry of Energy of the Republic of Kazakhstan for Development of the Market of Gas Engine Fuel in Kazakhstan
- **Denis Pak**, Director of the Department of Automobile Industry and Railway Engineering, Ministry of Industry and Trade of the Russian Federation

Front row participant:

- **Alexey Gogenko**, Deputy CEO for Strategic Development, Central Scientific Research Automobile and Automotive Engines Institute (NAMI)

12:00–13:15

Manege, –2nd floor conference hall C

Development Plans for the Russian Fuel and Energy Industry

Roundtable

Degasification, Extraction, and Disposal of Coalbed Methane

Coalbed methane poses a serious industrial and environmental problem. It leads to accidents causing fatalities, destruction, and company shutdowns. There is a need to conduct a systemic and constant analysis of international experience and to collect information on degasification, extraction, and disposal of coalbed methane and enclosing strata. A consolidated database of best international practice is also required, and would help improve coal mine safety in Russia and reduce methane emissions. What are the aims and objectives of Russia's international Centre for the Study and Advancement of Best Practices in the Degasification, Extraction, and Disposal of Coalbed Methane? What methods, technologies, and technical resources to extract methane gas mixtures appropriate for disposal are required today? What is the benefit of disposing of and using coalbed methane in Russia's energy mix, compared to traditional natural gas sources?

Moderator:

- **Valery Zaharov**, Director, Institute for Comprehensive Exploitation of Mineral Resources of the Russian Academy of Sciences

Panellists:

- **Konstantin Kolikov**, Head of the Department of Safety and Ecology of Mining, National University of Science and Technology MISiS
- **Evgeniy Kudinov**, Deputy General Director - Chief Geologist, Gazprom Dobycha Kuznetsk
- **Andrey Panov**, Acting Deputy Governor of the Kemerovo Oblast for Industry, Transport and Ecology
- **Sergey Shumkov**, Deputy Director of Coal Mining and Peat Industry Department, Ministry of Energy of the Russian Federation
- **Oleg Smirnov**, Chief of Aerologic Safety Department, SUEK

12:00–13:15

Manege, –2nd floor conference hall D

Development Plans for the Russian Fuel and Energy Industry

Panel Session

The Future of Russia's Heat Supply

Russia's heat supply network is being developed in line with Federal Law No.190-FZ dated 2010. This law lays the foundations for the economic relationships between all the participants of Russia's heat supply market along the entire supply chain: from initial production to final consumers. The law "On Heat Supply" forms the basis for the new model of this sector, which is designed to attract capital and increase efficiency throughout the full production line. What are the development prospects for cities' heat supply systems across the country? What is the optimum configuration for targeted investment in and the free pricing of thermal energy? Are existing regulatory tools (alt-boilers, benchmarks, long-term regulatory periods, concessions) compatible with major investment in heat supply system development? Can the country's heat supply system become a leader in terms of large-scale infrastructure reforms in the context of the May Decree issued by the President of the Russian Federation?

Moderator:

- **Ekaterina Derbilova**, Editorial Director, Vedomosti

Panellists:

- **Parviz Abdushukurov**, Vice President for Thermal Business, Deputy General Director for Operations, Chief Engineer, Fortum
- **Sergey Esyakov**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Alexander Gusev**, Governor of Voronezh Region
- **Rauzil Khaziev**, General Director, Tatenergo
- **Andrey Klychkov**, Governor of Orel Region
- **Vitaly Korolev**, Deputy Head, Federal Antimonopoly Service of the Russian Federation (FAS Russia)
- **Vyacheslav Kravchenko**, Deputy Minister of Energy of the Russian Federation
- **Natalya Porokhova**, Head of Research and Forecasting Group, Analytical Credit Rating Agency (ACRA)
- **Mikhail Shapiro**, Member of the Committee on Entrepreneurship in the Housing and Utilities Sector, Chamber of Commerce and Industry of the Russian Federation; General Director, Danfoss
- **Alexey Tsedenov**, Head of the Republic of Buryatia
- **Aleksandr Vilesov**, Director for Economics and Heat Sites, "T Plus"

Front row participants:

- **Sergey Buharov**, First Deputy General Director, Sibtek
- **Svetlana Grigoryeva**, Head of Fuel and Energy Complex and Housing and Utilities Directorate of the Tambov Region

14:00–15:15

Manege, 1st floor
Plenary conference hall

Global Energy Award

Each year, the Global Energy Prize honours outstanding achievements in energy research and technology from around the world which make a contribution to the promotion of energy efficiency and environmental security in the interest of all mankind. According to the IREG Observatory on Academic Ranking and Excellence, the Global Energy Prize is one of 99 leading international academic awards in terms of prestige and significance, and the only Russian award in the list. The Global Energy Prize is also included in the official list of the International Congress of Distinguished Awards (ICDA). The ICDA's prestige rating lists the Global Energy Prize in the Mega Prize category for its laudable goals, exemplary practice, and prize fund. The Global Energy Prize award ceremony is one of the most noteworthy annual events in global science. The ceremony is intended to emphasize the role of Russia, which unites the international energy community under the slogan "Energy of the future created by knowledge". The outstanding scientists to win the Global Energy Prize 2018 include Professor Martin Green (Australia) for his research, development, and educational work in photovoltaics, helping to reduce expenses and increase the efficiency and costs of solar photovoltaics; and Academician Sergey Alekseenko (Russia) for his research and development in thermal power engineering and heat transfer systems, enhancing mankind's resource potential.

Awards presented by:

- **Alexander Novak**, Minister of Energy of the Russian Federation

14:00–15:15

Manege, 1st floor
Presidium conference hall

Global Energy Agenda

Roundtable

Prospects for Partnership between Russia and the EU in Energy and Energy Efficiency

Cooperation between Russia and the European Union in energy and energy efficiency is crucial to sustainable global economic development. Russia is already a reliable supplier of environmentally friendly energy supplies to European consumers, and is assisting the EU's transition to an economy with a minimal climate footprint. In 2018, Russia and the EU set ambitious targets to improve energy efficiency by 2030. Through working together, these two major markets will bolster global energy security, technological modernization, and improve living conditions through the use of smart city systems. What should be done to get the most out of cooperation between Russia and the European Union in energy and energy efficiency? What role can business play in expanding cooperation? How will the ensuing transition to a digital economy help improve energy conservation in Russia and the EU? What European innovations could be particularly in demand in Russia, and what is the potential of scientific and technical cooperation in energy and energy efficiency? Do steps need to be taken to synchronize Russian and EU legislation in technological and environmental regulation in order to maximize the synergistic effect of energy efficiency policy?

Moderator:

- **Frank Schauff**, Chief Executive Officer, Association of European Businesses

Panellists:

- **Eric Benedetti**, General Director, Signify Russia and CIS
- **David Campbell**, President, BP Russia
- **Bashir Chalabi**, Chairman of the Energy Efficiency Committee, Association of European Businesses; Head of Environment and Energy Efficiency Practice, TIAR Center
- **Ernesto Ferlenghi**, Chairman of the Energy Committee, Association of European Businesses
- **Patrick Fragman**, Head, Grid Integration business, ABB
- **Viktor Haefeli**, Senior Advisor, Federal Department of the Environment, Transport, Energy and Communications of the Swiss Confederation; Vice-President, Swiss Association for Environmental Technology
- **Anton Inyutsyn**, Deputy Minister of Energy of the Russian Federation
- **Arnaud Le Foll**, Total Country Chair Russia; General Director, Total Exploration and Production Russie
- **Alexander Liberov**, President and Chief Executive Officer, Siemens in Russia
- **Alexander Pankin**, Deputy Minister of Foreign Affairs of the Russian Federation
- **Johan Vanderplaetse**, Chairman, Association of European Businesses; President, Russia and CIS, Schneider Electric

14:00–15:15

Manege, –2nd floor conference hall A

Development Plans for the Russian Fuel and Energy Industry

Panel Session

Increasing the Efficiency of Oil Production: Responding to the Challenges

Hydrocarbon extraction is currently declining in Western Siberia, the country's main oil and gas region. This is in spite of significant increases in expenditure and work. This decline can be explained by worsening geological conditions in the development of fields. Experts are predicting this trend to continue, which will lead to increased oil production costs and declining profitability. In order to avoid a fall in investment activity in the Russian hydrocarbon extraction segment, a range of mineral extraction tax benefits and special export duty rates have been put forward. What's more, an experiment is due to begin on 1 January 2019, whereby a tax will be levied on additional income from hydrocarbon production, in which assessment will be partially based on the real extraction economy. That said, over the last six years the fiscal regime affecting the oil industry has worsened overall. For oil production in traditional regions not qualifying for benefits (around 60% of the total), this is even more apparent. Frequent changes to tax legislation and the introduction of additional levies have played a part in this regard. Crucially, this is in sharp contrast with the fiscal policy affecting major oil producers around the globe, where additional stimuli are being introduced and the tax burden reduced in order to accelerate the monetization of oil reserves. Russia has one of the highest levels of taxation in the world for oil production companies. Deductions are on average 68% of vertically integrated oil company revenues. Today, some of the most promising areas of investment in oil production are in developing hard-to-recover reserves (in the Khanty-Mansiysk Autonomous Area, for example, they account for 33% of all reserves) and enhanced oil recovery methods (which enable the industrial development of as-yet untapped oil reservoirs). However, these areas of increasing oil production efficiency are fairly costly, and are unprofitable in the current fiscal environment. The development of fundamental approaches and areas for boosting investment in oil production and methods of intensifying extraction is therefore a priority for the Russian oil industry.

Topics for discussion:

1. The overall state of the Russian oil production industry, current challenges, and the need to encourage increased production.
2. The introduction of a windfall profit tax on hydrocarbon extraction.
3. Encouraging enhanced oil recovery methods to fully realize resource potential.
4. The potential to extract oil in traditional regions.
5. Encouraging oil production in fields containing hard-to-recover reserves.

Moderator:

- **Mikhail Orlov**, Partner, Head of Tax and Legal, KPMG Russia

Panellists:

- **Gennady Fedotov**, Member of the Management Committee, Vice President, Economics and Planning, PJSC LUKOIL
- **Alexander Gladkov**, Director of the Department of Oil and Gas Production and Transportation, Ministry of Energy of the Russian Federation
- **Alexey Govzich**, Executive Director for New Technologies, Gazpromneft Science and Technology Centre
- **Denis Khramov**, First Deputy Minister of Natural Resources and Environment of the Russian Federation
- **Alexey Sazanov**, Director of Tax Policy and Customs Schedule Department, Ministry of Finance of the Russian Federation
- **Andrey Tereshok**, Deputy Director of the Department of Oil and Gas Production and Transportation, Ministry of Energy of the Russian Federation

Front row participants:

- **Denis Borisov**, Director, Moscow Oil and Gas Center, EY
- **Alexey Kondrashov**, Senior Advisor, The Boston Consulting Group
- **Elena Korzun**, General Director, Association of Independent Oil and Gas Producing Organizations "AssoNeft"
- **Daria Kozlova**, Head of Crude Oil Upstream and Technologies Direction, VYGON Consulting

14:00–15:15

Manege, –2nd floor conference hall B

Global Energy Agenda

Panel Session

EnergyNet: The Reboot

The EnergyNet NTI roadmap was approved in September 2016 by the Presidential Economic Modernization and Innovative Development Council Presidium. It aims to develop Russian smart energy technologies and help Russian companies lead the way on global future energy markets over the next 15–20 years. The roadmap has already resulted in a number of pilot projects being implemented, improvements made to the regulatory framework and technical regulations, and a range of measures being taken to develop workforce potential. At the same time, new technology is developing across the globe at an ever-increasing rate. It will define the technological profile for equipment markets, software, engineering, and energy industry services. While this will magnify challenges for the Russian energy industry, it will also create additional opportunities to implement the roadmap and achieve overall innovative development. What results have already been achieved in the implementation of the roadmap? Which pathways to increasing the effectiveness of implementing the roadmap have matured in light of accumulated experience? What can be done to make energy companies and development institutions more engaged in the implementation of the roadmap? What additional stimuli and government support measures are required to increase the pace at which promising high-tech projects are implemented? How should measures outlined in the roadmap be transformed in this regard?

Moderator:

- **Oleg Grinko**, Working Group Co-Head, Energynet NTI

Panellists:

- **Oleg Dubnov**, Vice President, Executive Director, Cluster of Energy Efficient Technologies, Skolkovo Foundation
- **Dmitry Kholkin**, Head of Project Center for Innovation Development, Strategic Research Center Foundation; Deputy Head of the Working Group, Energynet National Technology Initiative
- **Aleksey Kolodeznikov**, First Deputy Chairman of the Government of the Republic of Sakha (Yakutia)
- **Leonid Neganov**, Minister of Energy of the Moscow Region
- **Evgeniy Olkhovich**, Deputy General Director for Strategic Development, Rosseti
- **Alexander Povalko**, Chief Executive Officer, Chairman of the Management Board, RVC
- **Valery Seleznev**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Alexey Texler**, First Deputy Minister of Energy of the Russian Federation

Front row participants:

- **Oleg Barkin**, Member of the Board - Deputy Chairman of the Board, Association "Market Council"
- **Nikolay Golubchikov**, Director of Innovation and International Operations Department, RusHydro
- **Alexey Khokhlov**, Head of the Electric Power Sector, Moscow School of Management SKOLKOVO
- **Vladislav Vorotnitsky**, Deputy General Director for Marketing and Sales, Tavrida Electric; Head of the Reliable and Flexible Networks Subgroup, Energynet National Technology Initiative

14:00–15:15

Manege, –2nd floor conference hall C

Development Plans for the Russian Fuel and Energy Industry

Roundtable

Industry 4.0 Technologies in the Coal Sector

One of the most technologically conservative industries – coal mining – is also undergoing an industrial revolution. This revolution is largely being driven by information technology. The current technological revolution under way in numerous countries around the globe calls for the implementation of the so called Industry 4.0 Programme. As one of the fundamental areas of this programme, digital modelling will be applied in production processes, including through employing relevant data obtained using a virtual model of the surrounding physical world. How is coal being brought into the digital era? How is the digital transformation of coal production progressing? What stage is the coal industry digitalization process currently at? To what extent are coal companies' IT strategies in line with today's requirements for the global coal mining sector?

Moderator:

- **Dmitry Klebanov**, Director for Development, VIST Group

Panellists:

- **Gennady Alekseev**, General Director, HC SDS-Coal
- **Tatyana Goffart**, Head of Scientific and Technical Department, Granch Ltd.
- **Sergey Mochalnikov**, Head of Department of Coal Mining and Peat Industry, Ministry of Energy of the Russian Federation
- **Sergey Myasnikov**, Deputy Head of the Department for Supervision in Coal Industry, Federal Environmental, Industrial and Nuclear Supervision Service (Rostechnadzor)
- **Sergey Nikishichev**, Director, IMC Montan
- **Yury Plakitkin**, Deputy Director for Research, Energy Research Institute of the Russian Academy of Sciences
- **Vladimir Tuzov**, Chief Strategy Officer, SUEK

14:00–15:15

Manege, –2nd floor conference hall D

Development Plans for the Russian Fuel and Energy Industry

Panel Session

A City Without Accidents: Reliable Engineering Systems and High-Quality Utilities as a Foundation for Creating a Comfortable Environment

The most important factor determining the comfort level of an urban environment is the reliability of its communications engineering and the quality of its utility services. A number of cities have been able to achieve above-average results, resulting in accident-free operations, a reduction in the number of summer days without hot water and improvement in other services: water supply and treatment, gas supply, and the organization of billing for services and resources. Energy efficiency has increased at the same time as environmental impact has been reduced. What experiences can help inform the benchmarking of a city's engineering systems and the quality levels of its utility services? How do reliability and quality indicators vary between Russian cities of various sizes? What best practices could become mandatory in the future? Which methods are being used for risk management?

Moderator:

- **Konstantin Polunin**, Partner, Managing Director, The Boston Consulting Group

Panellists:

- **Sergey Krokhin**, Deputy Chief Engineer for Heat Networks, Moscow Integrated Power Company
- **Alexander Osyka**, Chief Engineer, Mosgaz
- **Vasily Savin**, Partner, Head of Power and Utilities, KPMG in Russia and the CIS
- **Evgeniy Shushkevich**, Deputy General Director, Head of Water Supply Directorate, Mosvodokanal
- **Petr Sinyutin**, Chief Executive Officer, Moscow United Electric Grid Company

16:00–17:15

Manege, 1st floor Presidium conference hall

Development Plans for the Russian Fuel and Energy Industry

Roundtable

Alternative Energy for Transport: Present and Future

In partnership with Russian Railways

Russian Railways is undergoing a period of transformation, in which particular attention is being paid to innovative technologies powered by alternative sources of energy. As environmental directives become stricter, the company is actively working on developing and implementing gas motor traction rolling stock and traction rolling stock that utilizes batteries. When it comes to its infrastructure facilities, the company is increasingly implementing innovative environmentally clean technologies, shifting their facilities from getting heat and electricity from mazut and coal to using liquified natural gas and successfully implementing cutting-edge technologies such as heat pumps and solar collectors. As the commodity market for liquified natural gas (LNG) grows, Russian Railways has developed and is implementing a programme for switching automobile transport to LNG and creating a new generation of rail and switch locomotives powered by LNG.

- Batteries – when and where they will appear in Russian Railways?
- The creation of a switch locomotive with a battery for working in passenger stations in major cities.
- Heat pumps – a new trend or the future of distributed generation?

Moderator:

- **Sergey Kobzev**, Deputy Chief Executive Officer - Chief Engineer, Russian Railways

Panellists:

- **Vasiliy Cheremisin**, Director of the Research Institute of Energy Saving in Railway Transport, Omsk State Technical University

- **Vladimir Kiriachek**, Director, New Technologies LLC
- **Vladimir Kozlov**, Managing Director for Investment Activities, RUSNANO Management Company
- **Igor Sazonov**, Chief Designer, Scientific Research and Design Technology Institute of Rolling Stock JSC
- **Sergey Solovyev**, Development Engineer Renewable Energy and Energy Efficient Technologies, Viessmann LLC
- **Andrey Zarucheyskiy**, Head of Department Traction Rolling Stock, Railway Research Institute

16:00–17:15

Manege, –2nd floor conference hall A

Development Plans for the Russian Fuel and Energy Industry

Panel Session

Increasing Efficiency in Municipal Heat Supplies

Every single urban resident is impacted by the quality and reliability of heat supplies. In recent years we have seen major energy companies disengage from businesses related to heat supplies, because they were loss-making. This creates a complex situation for regional and municipal authorities, forcing them to find other solutions to this issue using state funds and emergency measures. Crises occur more and more frequently, and that means there is a need for consistent, comprehensive approaches to resolving them and – more importantly – preventing them. What measures need to be taken at federal, regional, and municipal levels? What positive experience from crisis resolution and prevention can be recommended to regions and municipalities?

Moderator:

- **Viktor Semenov**, President, Russian Heat Supplying

Panellists:

- **Andrey Lukashov**, Director for Strategic Development, Territorial Generating Company No. 2 (TGC-2)
- **Airat Sabirzanov**, First Deputy General Director - Director for Economics and Finance, "Tatenergo"
- **Sergey Shal**, Deputy Governor of Chelyabinsk Region
- **Dmitry Vakhrukov**, Director of the Department of State Tariffs Regulation, Infrastructure Reforms and Energy Efficiency, Ministry of Economic Development of the Russian Federation

16:00–17:15

Manege, –2nd floor conference hall B

Development Plans for the Russian Fuel and Energy Industry

Panel Session

Tax Reform in the Petroleum Refining Industry

A tax reform is under way involving the gradual abolition of customs duties for oil and petroleum products, and an increase in tax on extracting mineral resources. In order to compensate for oil refineries' falling revenues, a return scheme for oil excise is to be put in place, with primary beneficiaries being plants producing car petrol for Russian consumers or providing raw materials for the petrochemistry industry. In order to curtail price rises for automotive fuel, a dampening mechanism is being implemented in the domestic market. An opportunity to sign modernization agreements will also be available, with the aim of modernizing oil refining.

What will the effect of this tax reform be on consumers in Russia and the EAEU?

How effective are the proposed mechanisms to protect against rising oil product prices?

What is the destination model for the tax and customs system as it pertains to Russia's oil refining industry?

Are the prerequisites in place to increase investment in the development of Russia's oil refining industry?

Moderator:

- **Denis Borisov**, Director, Moscow Oil and Gas Center, EY

Panellists:

- **Gennady Fedotov**, Member of the Management Committee, Vice President, Economics and Planning, PJSC LUKOIL
- **Pavel Karchevskiy**, Adviser to Director General, Gazprom Neft
- **Alexey Kondrashov**, Senior Advisor, The Boston Consulting Group
- **Dmitry Mazurov**, Chairman of the Board of Directors, New Stream Group
- **Anton Rubtsov**, Director of Oil Refining and Gas Processing Department, Ministry of Energy of the Russian Federation
- **Alexey Sazanov**, Director of Tax Policy and Customs Schedule Department, Ministry of

Finance of the Russian Federation

16:00–17:15

Manege, –2nd floor conference hall C

Global Energy Agenda

Roundtable

Improving the Environmental Impact of the Coal Industry: Current Conditions and Possible Measures

Despite the positive results achieved by environmental protection measures in recent years, the ecological situation in the coal sector remains critical. In order to reduce the negative impact of coal production companies, it is necessary for them to work systemically with regional governments to transition to best available technologies. How is this transition progressing? Will comprehensive ecological permits serve as a consolidated document to regulate the level at which coal companies impact the environment? Which areas of Russia's environmental legislation need to be modernized with regards coal production? What problems exist in terms of decommissioning underground and surface mines in light of current Russian legislation? What is the effect of currently operating and closing companies on the hydrogeological and geodynamic situation in the region?

Moderator:

- **Dmitry Islamov**, Deputy Chairman of the Committee on Energy of the State Duma of the Federal Assembly of the Russian Federation

Panellists:

- **Gennady Alekseev**, General Director, HC SDS-Coal
- **Maria Dobrokhotova**, Deputy Director, Research Institute "Environmental Industrial Policy Centre"
- **Vitaly Latokhin**, Deputy Director for Ecology and Land Management, CC "Kuzbassrazrezugol"
- **Sergey Mochalnikov**, Head of Department of Coal Mining and Peat Industry, Ministry of Energy of the Russian Federation
- **Andrey Moiseenkov**, Director, State Administration on Reorganization and Liquidation of Unprofitable Mines and Cuts (GURSH)
- **Andrey Panov**, Acting Deputy Governor of the Kemerovo Oblast for Industry, Transport and Ecology
- **Lyudmila Perelygina**, Deputy Head of the Environmental Protection Department, SUEK
- **Victoria Venchikova**, Deputy Director of the Department of State Policy and Regulation in the Sphere of Environmental Protection, Ministry of Natural Resources and Environment of the Russian Federation

16:00–17:15

Manege, –2nd floor conference hall D

Development Plans for the Russian Fuel and Energy Industry

Panel Session

Energy Efficiency and the Environment: Two Pillars of the Electricity Industry of the Future

Economic growth involves additional costs, which in turn create an extra environmental load for cities. Minimizing this load is an important part of the development of any modern city. Energy-efficient solutions make capacities available for new projects without damaging the environment. Less efficient power sources are removed in order to increase the electricity sector's efficiency and reduce emissions of pollutants into the atmosphere. Cutting emissions can also be achieved by other measures, such as installing thermal power plant filtration systems, and by not using back-up fuels such as residual fuel oil or coal. Moscow's electricity network is highly environmentally friendly: natural gas accounts for close to 100% of the Russian capital's fuel mix. Using natural gas as a fuel prevents multiple pollutants from being emitted into the city's atmosphere. What energy-efficient solutions are deployed by public utility services? How can we calculate the impact of adopting energy-saving technologies at facilities where power consumption depends on weather conditions? How can we minimize the environmental load of the power supply network on the city?

Moderator:

- **Zoya Zotova**, Chairman of the Environmental Policy Committee, Moscow City Duma

Panellists:

- **Aleksey Bitiev**, Head of Energy Mechanical Directorate, Mosvodokanal
- **Petr Bubley**, Head of Ecology Service, Mosenergo
- **Aleksey Dyskin**, Head of Production Directorate, Moscow Integrated Power Company
- **Yury Erokhin**, Head of Industrial Safety and Ecology Directorate, Gazpromneft – Moscow Refinery
- **Vsevolod Ivanov**, First Deputy General Director, Chief Engineer, Moscow United Electric

Grid Company

17:30–18:45

Manege, 1st floor
Presidium conference hall

Global Energy Agenda

Roundtable

Energy Transition in the Asia-Pacific: New Challenges and Opportunities for Regional Cooperation

The global energy landscape is changing, presenting both opportunities and challenges for the Asia Pacific region. As projected by the International Energy Agency in their New Policies Scenario, global energy needs will rise more slowly than in the past, but still increase by 30% between today and 2040. The Asia-Pacific region will account for two-thirds of global energy growth. It has been recognized that fossil fuels will remain a dominant energy source in the near future. At the same time, new approaches to energy diversification are emerging from recent energy trends such as the rapid deployment and falling costs of clean and renewable energy technologies, growing electrification, increasing concerns about climate change and environmental degradation, and increased emphasis on more service-oriented economies in the region. Further effective measures and actions will be necessary in the energy transition. These will encompass achieving a greater share of cleaner fossil fuels in the energy mix, such as natural gas; developing new and renewable energy sources, and boosting energy efficiency. What different approaches to transforming the energy sector in the region have governments and experts from Russia and the Asia-Pacific identified? How does regional cooperation in the Asia Pacific help broaden and increase measures taken on the national level to meet the 2030 sustainable development agenda, in particular with regards to SDG 7: ensuring access to affordable, reliable, sustainable and modern energy for all?

Moderator:

- **Liu Hongpeng**, Director, Energy Division, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP); The Global Energy Prize Expert

Panellists:

- **Merrille Godfrey Abeywickrama Goonetilleke**, Additional Secretary, Ministry of Power and Renewable Energy of the Democratic Socialist Republic of Sri Lanka
- **Pravin Raj Aryal**, Joint Secretary, Ministry of Energy, Water Resources and Irrigation of the Federal Democratic Republic of Nepal
- **Mohammad Hossain**, Director General, Power Cell Division, Ministry of Power, Energy and Mineral Resources of the People's Republic of Bangladesh
- **Anton Inyutsyn**, Deputy Minister of Energy of the Russian Federation
- **Ruslan Karabulov**, Director of the Department of International Cooperation and Integration Processes, Ministry of Energy of the Republic of Kazakhstan
- **Khamso Kouphokham**, Deputy Director General, Department of Energy Policy and Planning, Ministry of Energy and Mines of the Lao People's Democratic Republic
- **Muhammad Naeem Malik**, Director, SAARC Energy Centre
- **Nguyen Phuong Mai**, Deputy Head, Electricity and Renewable Energy Authority, Ministry of Industry and Trade of the Socialist Republic of Vietnam

17:30–18:45

Manege, –2nd floor
conference hall A

Development Plans for the Russian Fuel and Energy Industry

Meeting of Chief Engineers of Electric Grids
Digitalization of the Electrical Grid

Today's need to digitalize the grid is predicated on the transition of production and transport to a single type of energy (electricity); the proliferation of distributed generation across the globe; the creation of microgrids; and the development of electricity and renewable storage devices which a consumer can install themselves, thereby becoming an electricity producer. Digitalization does not only translate to clear benefits to the consumer, but also extra costs borne by grid companies, and the need to change professional training programmes. How will self-operated and self-diagnosable digital electric grids affect reliability, expenses for the chief engineer, and quality of services for the population over the medium term? What needs to be done to ensure the greatest possible effect from digital grids from the very first years of their implementation? Will the rewards of digitalization be greatest in large cities or remote settlements? What competencies will an energy professional require to create, operate and repair digital grids? Should they be IT specialists with knowledge of energy, or energy specialists with knowledge of IT? Is a "digital electrician" required if digital grids can work without a person's input?

Moderator:

- **Dmitriy Gvozdev**, Deputy General Director – Chief Engineer, Rosseti

Panellists:

- **Vladimir Bolotin**, First Deputy General Director – Chief Engineer, IDGC of Urals
- **Andrey Bragin**, First Deputy General Director – Chief Engineer, Tyumenenergo

- **Grabchak Evgeniy**, Head of Department of Operational Control and Management in Electric Power Industry, Ministry of Energy of the Russian Federation
- **Ilshat Galimzianov**, Deputy General Director – Technical Director, Grid Company
- **Pavel Goncharov**, Deputy Director General for Technical Affairs – Chief Engineer, IDGC of South
- **Vsevolod Ivanov**, First Deputy General Director, Chief Engineer, Moscow United Electric Grid Company
- **Oleg Kinash**, First Deputy General Director – Chief Engineer, Tomsk Distribution Company
- **Igor Kuzmin**, First Deputy General Director – Chief Engineer, Lenenergo
- **Boris Misirov**, First Deputy General Director - Chief Engineer, IDGC of Northern Caucasus
- **Oleg Pavlov**, Deputy General Director – Chief Engineer, IDGC of Volga
- **Alexander Pilyugin**, First Deputy General Director – Chief Engineer, IDGC of Centre
- **Oleg Shamshovich**, Deputy Director – Chief Engineer, Bashkirenergo
- **Igor Shishigin**, Deputy General Director for Technical Issues – Chief Engineer, Kubanenergo
- **Igor Sorokin**, Deputy General Director for Technical Issues – Chief Engineer, IDGC of Siberia
- **Dmitriy Vodennikov**, Deputy Chairman of the Management Board – Chief Engineer, FGC UES
- **Denis Yagodka**, First Deputy General Director – Chief Engineer, IDGC of North-West
- **Dmitriy Zubritskiy**, Acting First Deputy General Director for Technical Affairs – Chief Engineer, Yantarenergo

17:30–18:45

Manege, –2nd floor conference hall B

Global Energy Agenda

Panel Session

The Development of Independent Services and Engineering in the Subsoil Resource Management Sector

Companies in the oil and gas service sector develop deposits and directly extract oil and gas. The current state and future development potential of these companies can therefore strongly affect the stability of Russia's oil and gas processing industry. The degree to which oil- and gas-related services are developed has a bearing on technological opportunities to maintain and expand hydrocarbon extraction, expenses borne by oil and gas companies, and consequently, the competitiveness and reliability of the Russian oil and gas sector as a whole. Declining oil prices, together with financial and technological sanctions, have had a serious impact on service companies, and should prompt greater consideration of their problems. What support measures are required to increase the competitiveness of oil-related services, both in domestic and overseas markets? Which areas of the legal and regulatory framework governing relations between major consumers and providers of services need improvement? What are the prospects for replacing imports of equipment and innovative technology in high-tech oil-related services?

Moderator:

- **Sergey Kostyuchenko**, Deputy General Director, Rosgeology

Panellists:

- **Sergey Arkhipov**, Head of the Department of Technology Partnership and Import Substitution, PJSC Gazprom Neft
- **Dmitry Kasatkin**, Leading Specialist, Head of Research Projects of the Industry Direction, Deloitte and Touche CIS
- **Victor Khaikov**, President, National Oil and Gas Service Association
- **Dmitry Kurochkin**, Vice President, Chamber of Commerce and Industry of the Russian Federation
- **Maxim Malkov**, Director of Oil and Gas Practice, KPMG
- **Mikhail Pasechnik**, President, Interregional Public Organization Euro-Asian Geophysical Society (MEP EAGO)
- **Oleg Pertsovskiy**, Chief Operating Officer of Energy Efficiency Technology Cluster, Skolkovo Foundation

Front row participant:

- **Vladimir Borisov**, General Director, LLC "GeoInTEK"

17:30–18:45

Manege, –2nd floor conference hall C

Development Plans for the Russian Fuel and Energy Industry

Meeting of Chief Engineers of Heat-Suppliers

Work is well under way on new operating rules for heat supply facilities and heat consumers, as outlined in the Russian Federal Law “On Heat Supply”. In the 15 years since the old rules were approved, the heat supply industry in Russia has changed dramatically. The new document will take these changes into account, which concern the improvement of heat supply management; the establishment of an institution to unite heat suppliers; and an increased role and independence for heads of operating companies and owners of heat supply facilities and heat consumers. What are chief engineers expecting from the planned changes to the regulation of the sector? What can be done before the new rules come into effect? How can equipment operation be effectively organized in line with the new rules, in addition to work with the energy supervision body responsible for checking for compliance?

Moderator:

- **Vasiliy Polivanov**, General Director, Association of the Manufacturers of Quality Products for Heat Supply

Panellists:

- **Parviz Abdushukurov**, Vice President for Thermal Business, Deputy General Director for Operations, Chief Engineer, Fortum
- **Arkady Kharaim**, Deputy Head of Advanced Development and Thermal Power Business Department, Gazprom Energoholding
- **Andrey Lovtsov**, Deputy Chief Engineering Officer, Irkutsk Energy Service Company
- **Lenar Magafurov**, Deputy Chief Operating Engineer, Tatenergo
- **Alexey Sivyakov**, Deputy General Director, Yaroslavskiye Energosistemy
- **Anton Sviridov**, Chief Engineering Officer, St. Petersburg Heating Grid

17:30–18:45

Manege, –2nd floor conference hall D

Development Plans for the Russian Fuel and Energy Industry

Panel Session

Light and Colour in the City: Safety, Aesthetics, and Energy Efficiency

Street lighting is an important part of creating a pleasant urban environment. The correct choice of lighting for various functional spaces helps solve a range of challenges, from increasing safety on the streets at night, to creating a festive atmosphere during special occasions. When attractively illuminated, a city’s sights become even more appealing to tourists, and new technologies are making it possible to increase the level of lighting without impacting energy consumption. Moscow has recently implemented a light and colour concept for the city, with visual comfort and artistic expression placed at the forefront. It is now one of the five best-lit cities in the world. Elsewhere, separate lighting projects are being successfully implemented in St Petersburg, Kazan, Vladimir, and numerous other cities in Russia. What experience can lie at the foundation when creating a city’s lighting environment? What lighting standards and targets can be applied for cities of various sizes in Russia? What are the advantages of modern light sources and light management systems, and how might they be developed in the future?

Moderator:

- **Alexander Bukatov**, Deputy Director for Operations and Technical Development of Architectural Lighting and Illumination, Mossvet

Panellists:

- **Eric Benedetti**, General Director, Signify Russia and CIS
- **Aleksandr Fotin**, Chief Project Engineer, International Lighting Engineering Corporation BOOS LIGHTING GROUP LLC
- **Denis Kruk**, Head of the Department of Outdoor and Architectural Lighting, United Energy Company JSC
- **Irina Tsvetkova**, Chief Specialist, Main Architectural and Planning Department of the Moscow Committee of Architecture and Urban Planning SBI
- **Aleksandr Valiullin**, General Director, Ipro

October 5, 2018

10:00–11:15

Manege, 1st floor
Presidium conference hall

Global Energy Agenda

Roundtable

Hydropower: Avenues for Sustainable Development

In partnership with RusHydro

Hydropower facilities, with their high manoeuvrability and reserves of renewable energy resources, are one of the most important elements in the energy generation capacity of virtually any or all power systems. Having hydroelectric power plants and pumped-storage hydroelectric plants able to operate at daily load peak times, which also consume less energy during overnight dips (as is the case with pumped-storage hydroelectric plants), enable nuclear, thermal, solar, or wind power plants to operate most effectively and optimize the energy system's operation as a whole. The criteria needed for sustainable development in the electricity sector are predicated on maximum efficiency in the use of non renewable primary energy resources and minimizing the environmental impact along the entire energy production chain. However, where there are significant advantages in using hydropower generation in electricity production, there are factors in play within Russia that slow down the implementation of measures to increase production of this vital form of fuel-free electricity. Are there sufficient grounds to talk about the sustainable development of hydroelectric projects in Russia? What barriers do hydroelectric companies come up against when attempting to implement projects at all stages of the life cycle? What evaluation tools meeting the project criteria for sustainable development are currently best practice? Can the achievement of these sustainable development goals in the domestic energy mix provide an additional impetus for growth in the consumption of hydraulic energy?

Moderator:

- **Oleg Lushnikov**, Executive Director, Hydropower of Russia Association of Organizations and Workers of Hydropower

Panellists:

- **Aleksandr Ilienko**, Member of the Management Board, Director for Development Management, System Operator of the United Power System
- **Vladimir Kremer**, Chief Engineer, Bashkir Generation Company LLC
- **Sergey Kuznetsov**, General Director, Krasnoyarsk HPP
- **Nikolay Shulginov**, Chairman of the Management Board, General Director, RusHydro
- **Vyacheslav Solomin**, Chief Executive Officer, EN+ GROUP

10:00–11:15

Manege, –2nd floor
conference hall A

Development Plans for the Russian Fuel and Energy Industry

Presentation of the Energy Efficiency Rating of Grid Companies

In collaboration with the expert community, the Ministry of Energy of the Russian Federation will submit for discussion the results of the annual energy efficiency rating of grid companies, based on results for 2016–2017. The rating evaluates efforts made by companies to reduce losses in the grid, implement modern technologies, and optimize the development of infrastructure. It does not only aim to measure a company's success, but also to identify and publicize best practices. Among those attending the discussion of the results will be representatives of regional and municipal ministries of energy, housing and utilities, energy companies, and experts.

Moderator:

- **Valery Presnyakov**, Editor-in-Chief, Power and Industry of Russia Newspaper

Panellists:

- **Yury Andreenko**, General Director, Far-Eastern Grids Company
- **Aleksandr Borisov**, Member of the Presidium of the Management Board, Chairman of Committee on Energy Efficiency and Energy Saving, All-Russian Non-Governmental Organization of Small and Medium-Sized Businesses Opora Russia
- **Andrey Bragin**, First Deputy General Director – Chief Engineer, Tyumenenergo
- **Ilshat Galimzianov**, Deputy General Director – Technical Director, Grid Company
- **Peter Kuruch**, General Director, Kuzbass Power Grid Company
- **Dmitriy Mikheev**, Deputy Director of Electric Power Industry Development Department, Ministry of Energy of the Russian Federation
- **Alexander Pilyugin**, First Deputy General Director – Chief Engineer, IDGC of Centre
- **Nikolay Zuyev**, General Director, Krasnoyarsk Regional Energy Company

Front row participants:

- **Alexey Khokhlov**, Head of the Electric Power Sector, Moscow School of Management

SKOLKOVO

- **Alexey Kireyev**, Deputy General Director for Economics and Finance, Yugorsk Regional Electric Grid Company (YREGC)
- **Andrey Kucheyev**, First Deputy Chief Executive Officer, North-Kuzbass Energy Company

10:00–11:15

Development Plans for the Russian Fuel and Energy Industry

Manege, –2nd floor conference hall B

Panel Session

Power Engineering: Providing Modernization Plans for the Electrical Energy Industry

At present, proposals aimed at introducing a mechanism for attracting investment for the modernization of the thermal power industry are being finalized. The mechanism is designed to attract investment of up to 2 trillion for the modernization of up to 41 GW of thermal generation in the period to 2035 in the pricing and non-pricing zones of the wholesale electricity and capacity market. Modernization projects will be chosen on a competitive basis. Projects that envisage the extensive modernization of equipment that is in very poor condition and highly sought after in the power system will be permitted to take part in the competition. It has been proposed that the ranking of the winners' projects (selection) should be carried out according to the estimated unit cost of electricity for consumers after the implementation of modernization projects. This will enable the most effective implementation of investment and minimize the investment burden on consumers. For the first time, the proposals envisage the establishment of unprecedentedly high requirements for the localization of production of equipment that will be used in modernization projects. Violation of these requirements will mean investors will not be able to receive a full return on capital investments. These requirements will therefore play an important role in making investors commit to implementing modernization projects. This session will include discussions on key approaches to setting requirements for the localization of equipment production, while considering the production and technical capabilities of Russian ferrous metallurgy manufacturers and manufacturers of power and power engineering equipment. The session will be attended by representatives of leading engineering companies, the metals industry, generation companies, and government bodies, as well as industry experts.

Moderator:

- **Stephan Solzhenitsyn**, Senior Partner, McKinsey & Company

Panellists:

- **Vyacheslav Kravchenko**, Deputy Minister of Energy of the Russian Federation
- **Mikhail Lifshitz**, Chairman of the Board of Directors, Rotec
- **Kirill Molodtsov**, Aide to the Chief of Staff, Presidential Executive Office
- **Vasily Osmakov**, Deputy Minister of Industry and Trade of the Russian Federation
- **Yuri Petrenya**, Deputy General Director – Chief Technical Officer, Power Machines; Member of the Global Energy Prize International Award Committee
- **Valery Seleznev**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Oleg Titov**, Director of Power and Gas Department, Siemens

Front row participants:

- **Viktor Orlov**, General Director, RF State Research Centre JSC "RPA "CNIITMASH"
- **Denis Pasler**, Chairman of the Management Board, Acting General Director, T Plus
- **Semyon Sazonov**, General Director, Quadra – Power Generation

10:00–11:15

Development Plans for the Russian Fuel and Energy Industry

Manege, –2nd floor conference hall C

Roundtable

Renewable Energy Sources in Russia: From the Wholesale Market to Supplying Energy to Isolated Regions

A foundation to develop distributed generation based on renewables has already been built in Russia. The ongoing renewable development programme has enabled new solar and wind generation facilities to be commissioned at a faster rate, and for a components industry to be built. Each year, installed capacity of renewable energy sources on the Russian wholesale market approximately doubles, and will continue to grow at a consistent rate. A Russian presidential decree entitled "On the Russian Federation's national targets and strategic objectives for the period to 2024" also outlines new approaches to supplying renewable energy to isolated regions in the Arctic, Siberia, and the Far East. What's more, in certain conditions, renewables could prove an effective option for small settlements in Central Russia, which are currently supplied through grid extensions. What solutions are required at the regional level to support new renewable projects, and what additional ways are there to attract investors? What risks should be considered when developing renewable energy sources in isolated regions and small settlements? Are renewable projects attractive to industrial companies and/or small and medium sized enterprises? Are there any barriers hindering the development of renewable energy sources which must first be removed? Which other countries offer experience in the development of renewable energy sources which could be applicable to Russia?

Moderator:

- **Anton Usachev**, Director, Russian Solar Energy Association

Panellists:

- **Herve Amosse**, Executive Vice President for Transportation, Telecom and Grid, Saft Groupe, Total Groupe
- **Igor Bryzgunov**, Chairman, Russian Association of Wind Power Industry
- **Vadim Dormidontov**, Vice President on Energy and Utilities, Gazprombank
- **Andrey Maximov**, Deputy Head of the Department of Electric Power Development, Ministry of Energy of the Russian Federation
- **Yuriy Mirchevskiy**, Director General, Peredvizhnaya Energetika (Mobile Energy)
- **Robert Paltaller**, First Deputy Chairman of the Government of the Altai Republic
- **Igor Shakhray**, General Director, Hevel Group
- **Dmitriy Vasilyev**, Head, Electrical Energy System Regulation Division, Federal Antimonopoly Service of Russia

Front row participant:

- **Andreas Dreisiebner**, Member of the Management Board, Solarspar Association

10:00–11:15

Manege, –2nd floor conference hall D

Global Energy Agenda

Panel Session

The Digitalization of Energy: from Local Solutions to Transforming the Industry

The development of the world's energy industry is increasingly sensitive to new technological trends. The degree to which digital solutions are implemented in fuel and energy companies is becoming one of the core drivers of their competitiveness in the global arena. Today, all major Russian fuel and energy companies have actively joined the technological race and are already demonstrating the initial results of implementing pilot projects. However, current work only constitutes the first, local steps for the digital transformation of the Russian energy sector. The transition of the entire industry to the digital track requires a fundamentally new approach to the creation and implementation of intelligent solutions. What challenges and opportunities does the digitalization of energy present? How may we ensure that a systemic effect is achieved across the entire energy industry through the introduction of digital solutions by individual companies? Do we need a common digital space, and if so, who would be its key actors? What is the role of the state in the digitalization of energy? How may the concept of digitization be synchronized with different industry representatives?

Moderator:

- **Vladimir Knyaginin**, Vice President, Strategic Research Centre Foundation

Panellists:

- **Boris Ayuyev**, Chairman of the Board, System Operator of the United Power System
- **Andrey Belevtsev**, Director of Digital Transformation Direction, PJSC Gazprom Neft
- **Oleg Dubnov**, Vice President, Executive Director, Cluster of Energy Efficient Technologies, Skolkovo Foundation
- **Kirill Komarov**, First Deputy Chief Executive Officer for Corporate Development and International Business, ROSATOM State Atomic Energy Corporation
- **Pavel Livinsky**, General Director, Rosseti
- **Dmitry Peskov**, Special Representative of the President of the Russian Federation on Digital and Technological Development
- **Alexey Texler**, First Deputy Minister of Energy of the Russian Federation

12:00–13:15

Manege, 1st floor Presidium conference hall

Development Plans for the Russian Fuel and Energy Industry

Roundtable

Modernization of Thermal Generation

Despite the comprehensive nature of a prior programme to construct energy-generating facilities under capacity-delivery contracts, the ageing of the Russian power grid's thermal generation complex remains a critical issue. A plan to deploy electric power facilities over a period up to 2035 calls for decisions on investments to be made with regards the high capacity of current thermal generation (thermal power plants and regional power stations), and questions to be answered regarding their modernization, or decommissioning and replacement. The most crucial challenge is implementing a fully-fledged market mechanism for such modernization within the shortest possible timeframe. What would be the ideal date for the first modernization projects to be launched? How can a balance best be struck between providing support to Russian power engineering and ensuring reliable operation of the energy system when determining localization requirements for reinstalled equipment at thermal power

plants? What is the optimal guaranteed rate of return for investors? Is it advisable to maintain the authority of the Government Commission for the Development of Electric Power with regards the selection of projects according to a separate quota? What are the selection criteria, and how can a balance be found between the interests of the regions and consumers? What is the best way of redistributing quotas for modernizing equipment which were not allocated during competitive selection on the wholesale market?

Moderator:

- **Stephan Solzhenitsyn**, Senior Partner, McKinsey & Company

Panellists:

- **Mikhail Andronov**, President, Rusenergosbyt
- **Vitaliy Khotsenko**, Minister of Energy, Industry and Communication of the Stavropol Krai
- **Vasiliy Kiselev**, Director, Energy Consumers Association
- **Vitaly Korolev**, Deputy Head, Federal Antimonopoly Service of the Russian Federation (FAS Russia)
- **Vyacheslav Kravchenko**, Deputy Minister of Energy of the Russian Federation
- **Alexei Kultyshev**, Deputy Chief Executive Officer – Sales Director, Power Machines
- **Leonid Neganov**, Minister of Energy of the Moscow Region
- **Fedor Opadchiy**, Deputy Chairman of the Board, System Operator of the United Power System
- **Vasily Osmakov**, Deputy Minister of Industry and Trade of the Russian Federation
- **Alexandra Panina**, Chairman of the Supervisory Board, Council of Power Producers
- **Mikhail Rasstrigin**, Deputy Minister of Economic Development of the Russian Federation
- **Eckhardt Rümmler**, Chief Operating Officer, Uniper SE
- **Semyon Sazonov**, General Director, Quadra – Power Generation
- **Valery Seleznev**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Ekaterina Usman**, Chief of Directorate for Competitive Pricing Development, NP Market Council Association

12:00–13:15

Manege, –2nd floor conference hall A

Development Plans for the Russian Fuel and Energy Industry

Panel Session

The Russian Energy Grid: A Dialogue with Suppliers

Russia's electrical grid needs wide-scale modernization, especially to counter its highly deteriorated capital assets. Russian producers must take the lead on this issue, with the support of international holding partners experienced in power grid digitalization. A digital transformation in electrical energy will open up new opportunities for domestic businesses that must be seized and utilized. Are equipment producers ready to rebuild their business processes from the ground up and make competitive offers for new digital grid infrastructure? How can dependence on imports be reduced? What has already been done and what measures need to be taken to facilitate effective cooperation?

Moderator:

- **Sergey Sergeev**, Deputy General Director for Capital Construction, Rosseti

Panellists:

- **Igor Fleyshman**, General Director, Energoservice Engineering Centre
- **Andrey Konev**, Director General, Monitor Electric
- **Maxim Kostarev**, Director for Innovation Development, EleSy JSC
- **Aleksandr Kozlovskiy**, Member of the Committee of the State Duma of the Federal Assembly of the Russian Federation on Economic Policy, Industry, Innovative Development and Entrepreneurship
- **Vladimir Naumov**, Deputy General Director, Technical Director, Research and Production Enterprise EKRA LLC
- **Oleg Rudakov**, General Director, Profotech
- **Valery Seleznev**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Alexander Slavinskiy**, Chairman of the Board of Directors, Massa (Izolyator Factory)
- **Oleg Tokarev**, Deputy Director of Machine Tool Building and Investment Machine Building Department, Ministry of Industry and Trade of the Russian Federation
- **Vladislav Vorotnitsky**, Deputy General Director for Marketing and Sales, Tavrida Electric; Head of the Reliable and Flexible Networks Subgroup, Energynet National Technology Initiative

12:00–13:15

Manege, –2nd floor conference hall B

The Promotion of Energy Efficiency and Transparency in the Fuel and Energy Complex: Nationwide Meeting

Russia's fuel and energy complex plays a crucial role in the country's social and economic development, providing over 30% of GDP even amid the current high volatility on world markets. Reliable energy supplies to tens of millions of consumers, and the importance of energy for the federal budget determine public interest in the situation in the industry. In order to address large-scale investment and production goals, and legislative support, it has been vital to boost transparency in the fuel and energy complex. In 2013–2017, with the support of the Ministry of Energy of the Russian Federation, companies and regions launched a combined effort to promote energy efficiency, professions in the fuel and energy complex, and social and environmental activities. This meeting will be attended by representatives of energy companies, regional energy ministries, the housing and utility sector, and the media. Following the results of the meeting, it is planned that priority topics for coverage in 2018 will be identified, and that a plan of federal measures to promote energy efficiency and transparency in the fuel and energy complex will be approved.

Panellists:

- **Dmitriy Bobkov**, Director of Information Policy and Public Relations Department, Rosseti
- **Anton Inyutsyn**, Deputy Minister of Energy of the Russian Federation
- **Roman Kamaev**, Deputy Head, Federal Agency for Youth Affairs (Rosmolodezh)
- **Artem Korolev**, Director, Nadezhnaya Smena Charity Foundation
- **Andrey Morozov**, Director for Public Relations, Siberian Generating Company
- **Margarita Nagoga**, Director of the Corporate Communications Department, RusHydro
- **Yury Pogorely**, Executive Director of Financial and Economic Information Service, Interfax Information Services Group
- **Irina Sokova**, Deputy Director, Volgograd Energy Efficiency Centre

12:00–13:15

Development Plans for the Russian Fuel and Energy Industry

Manege, –2nd floor conference hall C

Roundtable

Improving the Regulatory System in the Fuel and Energy Industry to Ensure Safe and Reliable Energy Supplies for the Consumer

The regulatory system governing the fuel and energy industry was drawn up over a period of more than 10 years. Despite the justifiably specific nature of legal regulation in the field, a great many aspects are more general, covering all sectors in the energy industry. This primarily concerns the legal framework supporting safe and reliable energy supplies for the consumer. What does the concept of safe and reliable energy supplies encompass? Is legislation governing the calculation and pricing of energy supplies effective? Does the existing regulatory system enable energy infrastructure investment projects to be implemented? Has a balance been struck on domestic energy markets between the interests of suppliers and consumers, extraction and generation companies, and transport and retail companies and the government? Does today's legal regulation in the fuel and energy industry successfully protect the rights of energy market participants? In the immediate future, what changes need to be made to legal models encountered in energy markets to ensure safe and reliable energy supplies for the consumer?

Moderator:

- **Victoria Romanova**, Head of the Energy Law Department, Kutafin Moscow State Law University (MSAL)

Panellists:

- **Leonid Akimov**, Director of the Legal Defense Department, Rosseti
- **Anastasiya Bondarenko**, State Secretary, Deputy Minister of Energy of the Russian Federation
- **Anna Efimova**, Deputy Managing Director, Director for Legal Issues, Mosenergo
- **Inna Kashlikova**, Head of the Legal Department, ATS Energo
- **Kirill Makarov**, Acting Director of the Law Department, Ministry of Energy of the Russian Federation
- **Tamara Merebashvili**, Head of the Corporate and Property Relations Department, Inter RAO Group
- **Nicolay Roshenko**, Member of the Board, Head of the Legal Division, NP Market Council Association
- **Marina Vildanova**, Vice President, St. Petersburg International Mercantile Exchange

12:00–13:15

Manege, –2nd floor conference hall D

Development Plans for the Russian Fuel and Energy Industry

Lecture

Renewable Energy in Russia: Current State and Future Prospects

Panellist:

- **Anatoliy Chubais**, Chairman of the Executive Board, RUSNANO Corporation

14:00–18:00

Manege, 1st floor Plenary conference hall

All-Russian Conference on Preparations by Electric Power Organizations for the Autumn/Winter Period 2018–2019

14:00–15:15

Manege, 1st floor Presidium conference hall

Global Energy Agenda

Roundtable

LNG for the Asia-Pacific: Potential for Cooperation and Sustainable Development

A booming population, GDP, and energy demand accompanied by an increasing focus on sustainability and environmental issues make natural gas – both pipeline and liquefied – the fastest growing fuel in the Asia-Pacific. Over 2 billion people – nearly half of the region's population – do not have clean cooking facilities and more than 400 million people do not have access to electricity. The social, economic, and environmental value of natural gas has made the Asia-Pacific region the fastest growing gas market in the world. A growing number of economies in Asia have expressed interest in developing LNG facilities to increase the share of gas in their energy mix or to serve as a shipment hub for neighbouring countries. On the supply side there is a big variety of new LNG projects in Australia, the USA, Russia, Qatar and East Africa coming on stream, so the preconditions are in place for the development of the Asia-Pacific LNG market. How could these issues be addressed, and how could the Asia-Pacific LNG market support socioeconomic development and environmental sustainability in the region?

Moderator:

- **Liu Hongpeng**, Director, Energy Division, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP); The Global Energy Prize Expert

Panellists:

- **Merrille Godfrey Abeywickrama Goonetilleke**, Additional Secretary, Ministry of Power and Renewable Energy of the Democratic Socialist Republic of Sri Lanka
- **Mohammad Hossain**, Director General, Power Cell Division, Ministry of Power, Energy and Mineral Resources of the People's Republic of Bangladesh
- **Alan Lau**, President Director, PT Anglo Euro Energy Indonesia; Member of Taskforce on LNG, United Nations Economic Commission for Europe
- **Tatyana Mitrova**, Director, Energy Centre, SKOLKOVO Moscow School of Management
- **Monica Sun**, Partner, Herbert Smith Freehills LLP
- **Liao Xianchun**, Professor, Research Institute of Green Development, Jinan University

Front row participant:

- **Tural Gadirli**, Portfolio Manager, QBF Portfolio Management

14:00–15:15

Manege, –2nd floor conference hall A

Global Energy Agenda

Panel Session

Strengthening International Alliances for the Localization of Waste-to-Energy Solutions

By 2050 global amounts of municipal solid waste are estimated to reach 3 billion tonnes per year. Waste managers and decision-makers in developing and emerging countries have to respond to increasing health and environmental problems and the discontent of the population coupled with rapidly growing energy demands. In recent times waste-to-energy (WtE) has been increasingly viewed as a solution. The volume of MSW in the Russian Federation has been steadily increasing in recent years. It is expected that by 2025 MSW generation in Russia will reach between 70 and 80 million tons per year. The current amount of accumulated landfill waste in the Russian Federation is enough to load the Trans-Siberian railroad to full capacity for 2,400 years. Efforts are under way to identify projects and solutions. However, there are several challenges, such as adopting waste-to-energy solutions which are specific to each waste management culture, high CAPEX and OPEX, limited opportunities for technology localization, and establishing a value-added domestic manufacturing sector, to name but a few. At the session, practitioners and experts from Germany, Austria, Brazil, India, Russia, and China will discuss success factors and multilateral sustainable solutions to industrialize the waste-to-energy supply chain. They will also focus on ways international alliances can be forged to achieve sustainable solutions, such as through institutional agreements and articulation; innovative decentralized technological solutions and business models, regulatory and innovative financial

instruments, and PPP mechanisms.

Moderator:

- **Carlos Ernesto Chanduvi Suarez**, Senior Coordinator, Climate and Innovation Technologies, Energy Department, UNIDO

Panellists:

- **Albina Dudareva**, Chairwoman of the Commission on Ecology and Environmental Protection of the Public Chamber of the Russian Federation
- **Viktor Haefeli**, Senior Advisor, Federal Department of the Environment, Transport, Energy and Communications of the Swiss Confederation; Vice-President, Swiss Association for Environmental Technology
- **Gerhard Kiennast**, President, Environmental Concepts Exchange Association (ECEXA)
- **Sergey Korotkov**, Director, UNIDO Center for International Industrial Cooperation in the Russian Federation
- **Philipp Krakau**, Chief Operating Officer, Pflüger International GmbH
- **Nikolay Kuzmin**, Chairman, Standing Committee on Ecology and Nature Management of the Legislative Assembly of the Leningrad Region
- **Walter Scharf**, Chief Executive Officer, Partner, IUT Waste Management Solutions; Chairman, ÖNORM Committee on Reuse and Recycling of Waste

Front row participants:

- **Zukhra Galperina**, Deputy General Director, Russian Energy Agency of the Ministry of Energy of the Russian Federation
- **Veronica Peshkova**, President, Foundation for the Development of Public Diplomacy Women's Perspective; Goodwill Ambassador, UNIDO
- **Christoph Schuerholz**, Partner, ECO Mondia Green Technology GmbH
- **Carlos Jose Serapiao Jr.**, Energy Attache, Embassy of the Federative Republic of Brazil in the Russian Federation

14:00–15:15

Manege, –2nd floor conference hall B

Development Plans for the Russian Fuel and Energy Industry

Meeting for Participants in the Wind Industry
The Challenges of Localizing the Production of Wind Turbines in the Russian Federation

One of the main requirements of legislation to support renewable energy in Russia is compliance with a high degree of localization of production. And with any type of development of wind power in Russia, it is unambiguously assumed that an industry for producing wind turbines will be created in Russia, and that the requirements for component manufacturers will be stepped up. According to the vendors who are currently producing wind turbines or their components, Russian companies are, generally, prepared to produce almost all the components for wind turbines. But, nevertheless, 'growing pains' cannot be ignored, and sometimes Russian companies that declare their readiness to produce components for wind turbines do not, in fact, always have high enough production standards, or equipment of a quality that vendors can accept. Today we already have the 'first signs' of the production of components for wind turbines: blades in the Ulyanovsk region, nacelles in Nizhny Novgorod and St. Petersburg, towers in Taganrog, and assembly production in Volgodonsk. But the potential of the market is huge, and many opportunities are not being taken up. Market experts have compiled a 'localization map for component production' for wind turbines, the active part of which includes a total of 15 enterprises, whereas the number of potential component manufacturers includes more than 200 factories and plants in various regions of the country. This is a powerful potential resource that could strengthen a new, emerging branch of power engineering in Russia. This new industry has a high export potential. The development of wind energy in neighbouring countries may be facilitated, and with the participation of Russian manufacturing firms. What experiences of setting up the wind industry in other countries should be taken into consideration? What production standards for component manufacturers are important specifically for the wind industry? What prevents the involvement of new participants in the localization process in Russia? Will the localization process facilitate the creation of a national line of wind turbines, and is this necessary for the industry?

Moderator:

- **Igor Bryzgunov**, Chairman, Russian Association of Wind Power Industry

Panellists:

- **Viktor Garbev**, Head of Sales for East Europe, Siemens Gamesa Renewable Energy SA
- **Alexander Korchagin**, General Director, NovaWind
- **Dmitry Smolin**, Localization Director, Vestas Manufacturing Rus
- **Oleg Tokarev**, Deputy Director of Machine Tool Building and Investment Machine Building Department, Ministry of Industry and Trade of the Russian Federation
- **Andrey Tyurin**, First Deputy Chairman of the Government of Ulyanovsk Region

14:00–15:15

Manege, –2nd floor conference hall C

Global Energy Agenda

Roundtable

Groundbreaking Technology and Human Capital in the Fuel and Energy Complex: Key Challenges

The development of the country's fuel and energy complex cannot be achieved without accelerated growth and efficient use of human capital. Seeing human resources and human capital as assets that can play a key role in increasing competitiveness should become standard features of the corporate culture of companies in the fuel and energy complex. The challenge is to ensure that the best global and Russian corporate practices in terms of staff training and development are widely disseminated, and that Russian higher educational institutions join the ranks of the world's best universities in the field. Which human resources management models are the most encouraging, and could become an additional driver for economic development, as well as influencing national security? Will knowledge, technology, and expertise become a competitive advantage in the modern world? Considering the globalization of educational services, is high-quality education – and its accessibility – a resource for the country's development and for ensuring social justice? What innovative tools contribute to the comprehensive improvement of the educational system and the upgrading of specialists' skills, in view of the challenges of the modern age? What kind of conditions may contribute to motivating young people to innovate, and to reveal their creative and scientific potential?

Moderator:

- **Tamara Fraltsova**, Rector, Institute of Improvement of Professional Skill of Executives and Specialists of Fuel and Energy Complex Federal State Autonomous Educational Institution of Further Professional Education

Panellists:

- **Anastasiya Bondarenko**, State Secretary, Deputy Minister of Energy of the Russian Federation
- **Dmitriy Chevkin**, Director of the Department of HR Policy and Organizational Development, Rosseti
- **Dmitriy Golubkov**, General Director, Mosoblgaz
- **Nikita Golunov**, Vice-Rector for Continuing Professional Education, Gubkin Russian State University of Oil and Gas (National Research University)
- **Alexey Govzich**, Executive Director for New Technologies, Gazpromneft Science and Technology Centre
- **Artem Korolev**, Director, Nadezhnaya Smena Charity Foundation
- **Georgiy Korshunov**, Vice-Rector for External and International Affairs, Ukhta State Technical University; Coordinator, National Consortium of Mineral Resource Industry Higher Educational Institutions of Russia
- **Pavel Krasnorutsky**, Chairman, Russian Union of Youth (RUY)
- **Valery Oskin**, Chairman of the Board, Development of Human Capital National Confederation
- **Nikolay Rogalev**, Rector, National Research University "Moscow Power Engineering Institute"
- **Arkadiy Zamoskovnyy**, General Director, Association of Electric Energy Employers

Front row participants:

- **Ruben Badalov**, First Deputy Chairman, Independent Russian Trade Union of Coal Industry Workers
- **Anna Getmanskaya**, Manager of the Global Education Program, Skolkovo Moscow School of Management
- **Alexander Mazhuga**, Acting Rector, Dmitry Mendeleev University of Chemical Technology of Russia
- **Zufir Nurgaliev**, Chief Executive Officer, All-Russian Coal Industry Employers' Association
- **Yuriy Ofitserov**, Chairman, All-Russian Electric Trade Union Public Organization
- **Vera Vitalieva**, Director in the Human Capital Management Practice, Deloitte CIS
- **Sergey Yungblyudt**, Rector, Kemerovo Region Professional Development Institute
- **Vladislav Zotov**, Deputy Chairman, Russian Oil, Gas and Construction Workers' Union

14:00–15:15

Manege, –2nd floor conference hall D

Development Plans for the Russian Fuel and Energy Industry

Panel Session

How May Utility Payments be Organized in a Way that is Convenient for the Public and Transparent for Suppliers?

This year was notable for the introduction of changes to the Housing Code, allowing for the transition to direct contracts between utility providers and consumers. Now, people can receive utility services from various suppliers: heat, gas, and power companies; water companies; and regional operators for handling household waste, which all have different charging schemes, seasonality of delivery, billing and payment standards, and systems of calculating and granting discounts. The volume of payments for utility services is huge, so a reliable, stable payment system for utilities, ensuring guaranteed delivery of payments from consumers to suppliers, is the key factor for the sustainable operation of all housing and utilities services. Against this background, the debate on the role of the Unified Information and Payment Centre in the system of settlements and interaction with consumers of housing and utilities services has once again become relevant. Should the Unified Information and Payment Centre become an obligatory part of the market for providing housing and utilities services? Which requirements/standards should they meet, and how may they guarantee protection against improper use of the funds paid by consumers and ensure transparency for consumers and service providers? Could the Unified Information and Payment Centre become an innovative driver in housing and utilities services and take the customer service system to a qualitatively new level, when digital technologies become part of our lives? Electronic services, digital management technologies, smart metering, blockchain, and smart contracts – are these just pretty words, or the real future of housing and utilities services?

Moderator:

- **Marina Fayrushina**, Council President, ARRC

Panellists:

- **Valeriy Kandaulov**, Deputy Director for IT, AIS Gorod LLC
- **Andrey Maximov**, Deputy Head of the Department of Electric Power Development, Ministry of Energy of the Russian Federation
- **Aleksandr Mikhaylishin**, Technical Director, Novosibirskenergosbyt
- **Denis Shabarin**, General Director, Unified Information and Settlement Center of Leningrad Region
- **Aleksey Sitdikov**, Deputy General Director for Development, Group of Companies TNS Energo PJSC
- **Aleksey Zaykov**, General Director, USC – Financial Logistics

16:00–18:00

Manege, 1st floor Presidium conference hall

Global Energy Agenda

Roundtable

EAEU Country Policies in Promoting Energy Efficiency and Sustainable Development of the Energy Sector: Challenges and Shared Initiatives

In partnership with UNDP

Energy saving and transitioning to modern, green technologies form one of the key means of ensuring the sustainable development of the energy sector in Eastern Europe and Central Asia. Countries where the quality of life is improving are interested in reducing their dependency on energy resources and increasing efficiency of use. Several countries in the region have already managed to create effective mechanisms to reduce energy consumption and ensure the sustainable growth of the energy sector. Experience has shown that the state has played a key role in achieving these results, with state support among the measures applied. What are countries prioritizing in their efforts to save energy and transition to green energy sources? Where has progress been most apparent, and how was this achieved? What is the current and potential role of Eurasian integration? Will it be possible to agree uniform supranational priorities and timeframes by which to achieve them? What energy and energy efficiency projects could be supported by the Russia–UNDP Trust Fund and other international donors in partnership with the UNDP in countries in the region? Will regional projects, such as the UNDP's Regulatory Framework to Promote Energy Efficiency in Countries of the Eurasian Economic Union prove to be an effective tool to align approaches and harmonize regulation across the region?

Moderator:

- **Kumarbek Kylychev**, Project Manager in Kyrgyz Republic, United Nations Development Programme

Panellists:

- **Alexander Averchenkov**, Head of UNDP Partnership Support Office, United Nations Development Programme (UNDP) Regional Center for Russian Federation

- **Hayk Badalyan**, Head of Energy Department, Ministry Of Energy Infrastructures And Natural Resources Of The Republic Of Armenia
- **Manas Baltabaev**, Head of Renewable Energy Sources and Energy Saving Development Sector, State Committee of Industry, Energy and Mine Usage of the Kyrgyz Republic
- **Aleksandr Barhatsin**, Head, Energy Efficiency Department, State Committee for Standardization of the Republic of Belarus
- **Vyacheslav Burmistrov**, Deputy Director, Technical Regulation and Accreditation Department, Eurasian Economic Commission
- **Suren Gyurdzhinyan**, Project Manager, Energy Efficiency Project in the Countries of the Eurasian Economic Union, United Nations Development Programme to the Republic of Armenia
- **Anton Inyutsyn**, Deputy Minister of Energy of the Russian Federation
- **Boris Meshchanov**, First Secretary, Department of International Organizations, Ministry of Foreign Affairs of the Russian Federation
- **Leonid Shenets**, Director of Energy Department, Eurasian Economic Commission
- **Zhaksylyk Tokaev**, Head of Energy Saving Directorate of Industrial Development and Industrial Safety Committee, Ministry for Investments and Development of Republic of Kazakhstan

16:00–18:00

Manege, –2nd floor conference hall D

Global Energy Agenda

Panel Session

Sustainable Cities and Eco-Energy Town Initiative

This CEM seminar on the Sustainable Cities and Eco-Energy Town Initiative will bring together participants of the initiative and leading city experts to share their experience, further develop the initiative, and identify synergies with other related CEM workstreams focusing on transport, buildings, and smart grids. One of the main focuses of the CEM initiative in 2019 will be the transport sector. Representatives of the CEM's Electric Vehicle Initiative will participate in the meeting to discuss opportunities for collaboration and coordination between the two initiatives. The key topics of inter-fuel competition in the urban transport sector and harmonization of data in cities will also be on the agenda. The event will be attended by representatives of Russian and Korean ministries, representatives of countries participating in the CEM Sustainable Cities and Eco-Energy Towns Initiative, representatives of the CEM EV Initiative, and stakeholders from leading international organizations such as the IEA, CDP, DENA, and others.

October 6, 2018

13:30–14:45

Manege, 1st floor
Plenary conference hall

#TogetherBrighter REW 2018 Youth Day

Informal Meeting

Panellists:

- **Mikhail Kotyukov**, Minister of Science and Higher Education of the Russian Federation
- **Alexander Novak**, Minister of Energy of the Russian Federation