BUSINESS PROGRAMME OF THE RUSSIAN ENERGY WEEK INTERNATIONAL FORUM

2–5 October 2019, Moscow

Programme accurate as of October 2, 2019

2 October 2019

09:00–10:15

Manege, 1st floor conference hall 1

Towards Leadership in the Global Energy Mix: Priorities of the Gas Industry

With its reduced impact on the environment and low cost, natural gas is set to be one of the most popular energy sources in the medium and long term. The transition from coal to gas will reduce current levels of greenhouse gas emissions in the power generation sector by 80% and give a major boost to the process of decarbonization. The use of natural gas as a source of hydrogen and motor fuel can make gas the leading global energy source in the long term. Can the gas industry continue to expand the supply of pipeline gas from production sites or ports to supply remote regions with natural gas? How can LNG production efficiency be increased, and the cost of gas production and liquefaction reduced? Will manufacturers be able to supply the required amount of gas with the reduced terms of LNG supply agreements and rate cuts in regional markets? Can we expect the reduction in coal consumption from China and other major consumers to accelerate? What are the optimal approaches to the development of the transport infrastructure and tanker fleet capacity in order to meet the rapidly growing demand for LNG?

Moderator:

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

Panellists:

- **Armida Salsiah Alisjahbana**, Executive Secretary, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
- **Dmitry Artyukhov**, Governor of Yamalo-Nenets Autonomous Region
- **H.E. Franklin Abrahim Khan**, Minister of Energy and Energy Industries of the Republic of Trinidad and Tobago
- **Leonid Mikhelson**, Chairman of the Management Board, Member of the Board of Directors, NOVATEK
- **H.E. Bijan Namdar Zanganeh**, Minister of Petroleum of the Islamic Republic of Iran
- **Alexander Novak**, Minister of Energy of the Russian Federation
- **Yury Sentyurin**, Secretary General, Gas Exporting Countries Forum (GECF)
- **Viktor Zubkov**, Chairman of the Board of Directors, Gazprom

09:00–10:15

Manege, 1st floor conference hall 2 (Moscow)

All-Russian Meeting on ‘National Projects: State Priorities and Opportunities for Growth’

The meeting will discuss the goals and objectives of the ‘Housing and Urban Environment’ and ‘Ecology’ national projects and the integration of energy-efficient and digital technologies in implementing national projects. Particular attention will be paid to the regional practice of utilizing an integrated approach to developing urban environments while implementing resettlement programmes for citizens living in unfit housing and communal infrastructure modernization projects.

Panellists:

- **Ruslan Bondarchuk**, Minister of Construction of the Kirov Region
- **Elena Dovlatova**, Executive Director, Russian Association of Water Supply and Sewerage
- **Oleg Melnichenko**, Chairman, Committee on Federal Structure, Regional Policy, Local Government and Northern Affairs, Federation Council of the Federal Assembly of the Russian Federation
- **Ilya Osipov**, Member of the Committee on Housing Policy and Housing and Utilities, State Duma of the Federal Assembly of the Russian Federation
- **Svetlana Razvorotneva**, Executive Director, National Center for Public Control in the Field of Housing and Communal Services HCS Control
- **Oleg Rurin**, Deputy General Director, Housing and Public Utilities Reform Support Fund
- **Igor Shpektor**, Chairman of the Commission on Housing and Utilities, Construction and Roads, Civic Chamber of the Russian Federation

- **Sergei Stepashin**, Chairman of the Supervisory Board, Housing and Public Utilities Reform Support Fund
- **Andrey Travnikov**, Governor of Novosibirsk Region
- **Konstantin Tsitsin**, General Director, Housing and Utilities Reform Fund
- **Alexander Tsybulskiy**, Governor of Nenets Autonomous Region
- **Vladimir Yakushev**, Minister of Construction, Housing and Utilities of the Russian Federation

09:00–10:15

Manege, –2nd floor conference hall A

Digital Transformation Cannot Be Stopped: How Can We Ensure Critical Infrastructure Security?

In order to adapt to new technologies and to increase both efficiency and consumer convenience, the global critical infrastructure will have to switch to digital over the next few years. The cybersecurity of the energy infrastructure in this new environment will be crucial. How do we meet these new challenges and protect power plants, networks, and auxiliary power facilities from blackouts? Can a digitally sovereign state ensure cyberspace security? What is the risk–benefit ratio of energy digitalization for energy consumers? What best practices can be developed into international standards?

Moderator:

- **Maria Morgun**, Anchor, All-Russia State Television and Radio Broadcasting Company

Panellists:

- **Petr Biryukov**, Deputy Mayor of Moscow for Housing and Utilities and Improvement
- **Pavel Livinsky**, General Director, Chairman of the Management Board, Rosseti
- **Ilya Sachkov**, Founder, General Director, Group-IB
- **Andreas Schierenbeck**, Chief Executive Officer, Uniper SE
- **Gerhard Schroeder**, Chairman of the Shareholders' Committee, Nord Stream 2 AG
- **Alexey Texler**, Governor of Chelyabinsk Region
- **Anatoliy Tikhonov**, Deputy Minister of Energy of the Russian Federation
- **Johan Vanderplaetse**, Chairman, Association of European Businesses; President, Russia and CIS, Schneider Electric

Front row participants:

- **Frede Blaabjerg**, Head, Center Of Reliable Power Electronics (CORPE), Aalborg University; Winner of the Global Energy Prize 2019
- **Carlo Palasciano Villamagna**, General Director, Enel Russia

09:00–10:15

Manege, –2nd floor conference hall C

The Development of Global Energy and the Future of Coal

The events unfolding before us in the global energy sector are nothing short of a revolution. The rapid development of technologies and increasingly stringent environmental standards are creating new scenarios for the development of the global fuel and energy industry. Just 30 years ago, the future of the coal industry appeared safe and certain. With the depletion of hydrocarbon reserves, it was coal that was supposed to take up the mantel as the main source of energy for households, transport and industry, and as a raw material for the chemical industry. Yet today, in connection with the global climate agenda and the latest industrial revolution, the coal industry is set to be quickly wound down, first in Europe, and then in other parts of the world. How strong are the arguments against the development of the coal industry globally? Does the development of the industry run counter to the UN Sustainable Development Goals? Which industry trends are most attractive to investors? Which coal markets are showing the highest growth? Does the industry expect any new scientific breakthroughs? Where is the potential for future growth in the coal industry? What can the industry do to help to restore public confidence in coal?

Moderator:

- **Ole Rolser**, Associate Partner & Solution Leader Global Energy Perspective, McKinsey & Company

Panellists:

- **Gennady Alekseev**, General Director, SDS-Ugol
- **Alexey Khokhlov**, Head of Power and Utilities, Energy Centre, Moscow School of Management SKOLKOVO
- **Chris Midgley**, Global Head of Analytics, S&P Global Platts
- **Aysen Nikolaev**, Head of Sakha Republic (Yakutia)
- **Yury Saakyan**, General Director, Institute of Natural Monopolies Research

- **Sergey Stepanov**, Vice President, Head of the Coal Division, EVRAZ
- **Sergey Tsivilev**, Governor of the Kemerovo Region–Kuzbass; Chairman, State Council Working Group for Energy
- **Anatoly Yanovsky**, Deputy Minister of Energy of the Russian Federation

10:45–12:00

Manege, 1st floor conference hall 1

Global Energy: New Alliances

In partnership with the Russian Direct Investment Fund

The strategic alliance between Russia and the GCC countries in recent years has allowed for the creation of the OPEC+ agreement, which has determined the new paradigm of the world energy market. The anticipated production cut in July 2019 ensured predictability of the oil prices and maintained a stable flow of investment into the oil industry. How does the future of the energy alliance between Russia and the Middle East look? What is the progress between the Russian and Western energy partnerships? What are the main challenges for the Russian and global energy producers and what contribution can the Russian companies and technologies bring to the development of the global energy industry?

Moderator:

- **Daniel Yergin**, Vice Chairman, IHS Markit

Panellists:

- **His Royal Highness Prince Abdulaziz bin Salman bin Abdulaziz Al Saud**, Minister of Energy, Industry and Mineral Resources of the Kingdom of Saudi Arabia
- **Michael Simon Borrell**, Senior Vice President for North Sea and Russia, Total SA
- **Jean-Marie Dauger**, Chairman, World Energy Council
- **Kirill Dmitriev**, Chief Executive Officer, Russian Direct Investment Fund (RDIF)
- **Dmitry Konov**, Chairman of the Management Board, SIBUR Holding
- **Francesco La Camera**, Director-General, IRENA
- **Alexander Novak**, Minister of Energy of the Russian Federation
- **Carlo Palasciano Villamagna**, General Director, Enel Russia
- **Dmitriy Pumpyanskiy**, Chairman of the Board of Directors, Tube Metallurgical Company (TMK); President, Sinara Group

Front row participant:

- **Natalya Komarova**, Governor of Khanty-Mansi Autonomous Area–Yugra

10:45–12:00

Manege, –2nd floor conference hall A

Key Factors in the Competitiveness of the Global Petrochemical Industry: A Paradigm Shift?

In cooperation with SIBUR

Due to increased demand, improved technologies and large-scale investments, petrochemicals are growing faster than the global economy. The prospects for future growth very much depend on the situation in the hydrocarbon markets, regional focus in terms of raw materials and production, and differences in industry incentives and regulatory mechanisms. At the same time, the global petrochemical industry is witnessing big changes in consumer preferences, demand for new materials, improvements in environmental standards and the development of a closed-loop economy based on recycling. Which internal and external challenges can change the paradigm for the development of the industry? What restrictions are preventing Russian producers from becoming more competitive in the global petrochemical markets? What are the expected recycling growth rates in Russia and the rest of the world?

Moderator:

- **Alexey Kondrashov**, Senior Advisor, BCG

Panellists:

- **Tomohisa Abe**, Representative director, Toyo Engineering Corporation
- **Sergey Donskoy**, Member of the Board of Directors, INK-Capital
- **Tim Gould**, Head of Division, Energy Supply and Investment Outlooks, Directorate of Sustainability, Technology and Outlooks, International Energy Agency (IEA)
- **Mikhail Karisalov**, Chairman of the Management Board, Chief Executive Officer, SIBUR
- **Kazushige Kimura**, Sales Director, Strategic Marketing Department, Sales and Marketing Division, Toyo Engineering Corporation
- **Alexey Sazanov**, Director of Tax Policy and Customs Schedule Department, Ministry of Finance of the Russian Federation

- **Pavel Sorokin**, Deputy Minister of Energy of the Russian Federation

Front row participants:

- **Denis Deryushkin**, Head of Analytical Center, Russian Energy Agency of the Ministry of Energy of the Russian Federation
- **Anastasiya Nabatchikova**, Head of Director Petrochemicals, Far East Investment and Export Agency
- **Grigory Vygon**, Managing Director, VYGON Consulting

10:45–12:00

Manege, –2nd floor
conference hall B

Nuclear Energy as an Integral Element of the Sustainable Future Agenda

Sustainable development is based on three key components: the environment, society, and business. To achieve global sustainable development goals, these three elements must form an equilateral triangle, and we can only achieve ecological balance if we focus equally on all three sides. The global climate agenda is not feasible without nuclear energy, as nuclear generation is low-carbon and minimizes CO2 emissions into the atmosphere. Nuclear plants, as infrastructure projects on a national scale, have a significant developmental impact on both the industrial sector and local populations. What are the key benefits and values of nuclear technology? How do they affect people's quality of life? What are the main barriers to the development of nuclear energy?

Moderator:

- **Thomas Blees**, President, Science Council for Global Initiatives

Panellists:

- **H.E. Mohamed Al Hammadi**, Chief Executive Officer, Emirates Nuclear Energy Corporation
- **Mikhail Chudakov**, Deputy Director General, Head of the Department of Nuclear Energy, International Atomic Energy Agency (IAEA)
- **Amged El-Wakeel**, Chairman of the Board, Nuclear Power Plants Authority of the Arab Republic of Egypt
- **Bernard Fontana**, Chief Executive Officer, Framatome SA
- **Viktor Karankevich**, Minister of Energy of the Republic of Belarus
- **Alexey Likhachev**, Chief Executive Officer, State Atomic Energy Corporation ROSATOM
- **Peter Szijjarto**, Minister of Foreign Affairs and Trade of Hungary

10:45–13:00

Manege, 3rd floor
Turandot restaurant

Business breakfast

Global Trends Shaping Sustainable and Reliable Energy Systems of the Future

In partnership with Siemens in Russia

Energy demand is on the rise all over the world. This presents core challenges for a sustainable energy system: flexibility, security of supply, affordability, climate protection, and resource efficiency. In order to meet the sustainability challenges, measures must be taken along the entire energy conversion chain – from the utilization of fossil fuels and renewable resources for power generation and transportation to improvements in consumption. What will the energy system of the future look like? How can we prepare for the coming changes in the energy landscape? What transformation should enterprises undergo in order to remain competitive in the existing and new market realities? What role do decarbonization, decentralization and digitalization have to play in shaping the new energy system?

Key notes:

- **Lisa Davis**, Member of the Managing Board, Siemens AG
- **Alexander Liberov**, President, Siemens in Russia

Panellists:

- **Igor Ivanov**, Director of Power Transmission Equipment business unit, Siemens in Russia
- **Nikolay Kutsenko**, Director of Oil and Gas business unit, Siemens in Russia
- **Oleg Titov**, Director of Power and Gas business unit, Siemens in Russia
- **Alexander Zolotukhin**, Director of Service and Digital Solutions business unit, Siemens in Russia

12:00–12:30

Manege, 1st floor
Rosseti stand,
presentation area

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

Federal and regional media, journalists, public relations departments of fuel and energy companies and regional administrations will take part in the competition. The main goal of the competition is to

increase the level of professionalism of energy companies in terms of public relations, to raise awareness among the public about fuel and energy development projects, to support projects aimed at promoting professions in the fuel and energy industry, and to raise the value attached to power engineers as well as oil and gas workers. The competition results will be announced at the Russian Energy Week International Forum.

The awards ceremony for MediaTEK winners will continue on 3 October at 11:15 and at 13:15.

Awards presented by:

- **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

Members of the MediaTEK Expert Council:

- **Dmitriy Kiseliev**, General Director, Rossiya Segodnya International Information Agency
- **Mikhail Komissar**, Chairman of the Board of Directors, General Director, Interfax Information Services Group
- **Sergey Mikhaylov**, General Director, Russian News Agency TASS
- **Elena Vartanova**, Dean, Faculty of Journalism, Lomonosov Moscow State University
- **Vladimir Zhelonkin**, General Director, Kommersant

14:00–15:30

Manege, 1st floor
Plenary conference hall

Plenary session

Energy Partnership for Sustainable Growth

Address by the President of the Russian Federation Vladimir Putin

Moderator:

- **Keir Simmons**, Correspondent, NBC News

Panellists:

- **H.E. Mohammad Sanusi Barkindo**, Secretary General, Organization of the Petroleum Exporting Countries (OPEC)
- **Robert Dudley**, Group Chief Executive, BP
- **Pekka Lundmark**, President, Chief Executive Officer, Fortum Corporation
- **Rainer Seele**, Chairman of the Executive Board, Chief Executive Officer, OMV AG
- **Darren Woods**, Chairman, Chief Executive Officer, Exxon Mobil Corporation

17:00–18:30

Manege, 1st floor
conference hall 1

Global Challenges and Trends in Renewable Energy Development

Many countries are prioritizing the development of renewable energy as the basis for low-carbon economic growth. Today, 11 million people are employed in the renewable energy industry worldwide and more and more countries are discovering the benefits of renewable energy. National support programmes, coupled with cost reductions due to technological progress and the need to respond to the challenges of climate change have caused a sharp increase in the generation of renewable energy and growth in employment in the industry. Renewable energy facilitates the development of sought-after technologies not only in solar and wind energy generation, but also in energy storage, the hydrogen cycle, energy efficiency in buildings, smart technologies, electric transport and e-mobility, and more. These sectors ultimately enhance people's quality of life. At the same time, having scaled up significantly, the development of renewable energy sources throughout the world is also facing serious economic challenges with regard to state budgets and consumers. The challenges include restrictions on the siting of renewable energy facilities, equipment disposal, and environmental consequences. How can the global renewable energy industry respond to these challenges in order to maintain its high rates of growth? What technological breakthroughs can be expected in renewable energy? When will people see their lives improve as a result of the advent of renewable energy? What challenges does the Russian renewable energy industry need to address and what measures have been proposed to increase the share of renewable energy in the export of technologies?

Moderator:

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

Panellists:

- **Armida Salsiah Alisjahbana**, Executive Secretary, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
- **Alexander Chuvaev**, Executive Vice President, Head of the Russia Division, Fortum Corporation

- **Kristina Haverkamp**, Managing Director, German Energy Agency (dena)
- **Alexander Korchagin**, General Director, NovaWind
- **Francesco La Camera**, Director-General, IRENA
- **Yuriy Manevich**, Deputy Minister of Energy of the Russian Federation
- **Sergey Morozov**, Governor of Ulyanovsk Region
- **Valery Seleznev**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Igor Shakhray**, General Director, Hevel Group

Front row participants:

- **Fatih Donmez**, Minister of Energy and Natural Resources of the Republic of Turkey
- **Alisher Kalanov**, Head, Investment Division RES, RUSNANO Management Company
- **George Rizhinashvili**, Member of the Management Board, First Deputy Director General, RusHydro

17:00–18:30

Manege, 1st floor conference hall 2 (Moscow)

Meeting on 'Accelerated Infrastructure Development: Strategy for the Development of the Natural Gas Motor Fuel Market'

In 2013–2018 a large-scale pilot project was implemented resulting in the construction of CNG filling stations in most of the country's regions. Vehicles that run on compressed gas began to be mass-produced and used by city councils and as public transport. In order to increase the competitiveness of the transport industry and reduce its impact on the environment, a new phase in the development of the market has been initiated in 2019: the implementation of a strategy for the accelerated development of CNG and LNG filling stations. The strategy will create the proper conditions to attract the investment needed to expand natural gas vehicle fleets for domestic and international transportation. The meeting will play host to a discussion on challenges in the field of infrastructure development, including an expansion in the range of vehicles running on CNG and LNG, the development of a conversion programme and measures to encourage transition to natural gas fuel, promote gas fuel, and create the right conditions to attract investors.

Under the chairmanship of:

- **Dmitry Kozak**, Deputy Prime Minister of the Russian Federation

Panellists:

- **Innokentiy Alafinov**, First Deputy Minister of Transport of the Russian Federation
- **Anton Inyutsyn**, Deputy Minister of Energy of the Russian Federation
- **Sergey Kogogin**, Director General, KAMAZ
- **Vitaly Markelov**, Deputy Chairman of the Management Committee, Member of the Board of Directors, Gazprom
- **Alexander Morozov**, Deputy Minister of Industry and Trade of the Russian Federation
- **Gleb Nikitin**, Governor of Nizhny Novgorod Region
- **Heads of Constituent Entities of the Russian Federation**
- **Yevgeny Savchenko**, Governor of Belgorod Region
- **Sergey Tsivilev**, Governor of the Kemerovo Region–Kuzbass; Chairman, State Council Working Group for Energy

17:00–18:30

Manege, –2nd floor conference hall A

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

There is an extremely wide range of views on where energy markets are headed over the next decade. At one extreme, some are calling for "peak oil demand" within the next decade driven by the rapid penetration of EVs, growing gas-for-oil substitution, and environmental limits on growth in plastics. In this vision, coal will be in structural decline and even natural gas growth will be limited by renewables penetration in power generation. At the other extreme, there is concern that the sharp decline in investment in new long-lived supply projects could lead to a shortage of oil, as shale growth slows while demographic factors in developing countries support an expansion in global energy demand. The S&P Global Platts session on 'Global Energy Industry Development Outlook to 2040' will examine the key fundamental, policy, and technology assumptions behind such forecasts and put forward a most likely outlook for the evolution of the long-term global energy market and outline what the world needs to do to achieve a trajectory towards a global temperature rise of less than 2 degrees Celsius. The session will also examine the potential impact on production, refining and energy demand in the energy industry.

Moderator:

- **Chris Midgley**, Global Head of Analytics, S&P Global Platts

Panellists:

- **Elena Anankina**, Senior Analytic Director, Ratings and Infrastructure, S&P Global Ratings
- **Abderrezak Benyoucef**, Head of the Energy Studies Department, Organization of the Petroleum Exporting Countries (OPEC)
- **Denis Deryushkin**, Head of Analytical Center, Russian Energy Agency of the Ministry of Energy of the Russian Federation
- **Vladimir Drebentsov**, Chief Economist for Russia and CIS, BP
- **Tim Gould**, Head of Division, Energy Supply and Investment Outlooks, Directorate of Sustainability, Technology and Outlooks, International Energy Agency (IEA)
- **Maksim Remchukov**, Director for Sustainable Development, SIBUR Holding
- **Sergey Vakulenko**, Head of Strategy and Innovations Department, Gazprom Neft

17:00–18:30

Manege, –2nd floor conference hall C

Lawmaking in the Fuel and Energy Sector: Main Trends and Cooperation Between Federal and Regional Levels of Government

Lawmaking is a multifaceted process in which the creation (amendment, cessation) of statutes and the corresponding procedures by which participants cooperate are equally important. The goal of lawmaking in the fuel and energy sector is to increase the reliability and accessibility of the energy supply for all consumers across all constituent entities of the Russian Federation. All branches and levels of government are engaged in this process: the President of the Russian Federation, the Federal Assembly of the Russian Federation, the Government of the Russian Federation, federal executive bodies, legislative and executive bodies of the constituent entities of the Russian Federation, and courts. The constitution is the basis for the establishment and development of cooperation between the various branches and levels of government in modern Russia and for the joint work that has now been carried out for over 25 years on the adoption of laws that directly regulate or affect relations in the energy sector. How can cooperation be enhanced between key players in the lawmaking process? Which best practices can be replicated when it comes to strengthening the role of the legislative bodies of the constituent entities of the Russian Federation and their involvement in the agenda of the fuel and energy sector at the federal level? Which countries can Russia learn from in terms of how the authorities and the fuel and energy business community work together in the lawmaking process?

3 October 2019

10:00–11:15

Manege, 1st floor
Plenary conference hall

Plenary session

Maintaining Energy Connectivity in an Unstable World

Oil is one of the key primary energy resources in the global fuel and energy balance, and experts predict that it will continue to hold this status until 2040. Nevertheless, the oil industry is currently undergoing a period of structural changes. On the one hand, the instability of the global economy, international conflicts, and the continuation of a policy of trade wars and sanctions are creating excessive volatility in the commodity and financial markets for oil. On the other hand, the development of electric cars and renewable energy sources, the hydrogen economy and the gas motor fuel market, and tightening environmental regulations pose new challenges to the oil market. How well equipped are the current OPEC+ terms of trade to deal with the growing threats to the oil market? How do 'black swans' change the composition of the global balance of supply and demand for oil? Is a further consolidation of efforts necessary in order to minimize the effects of black swans? What is the potential for transforming oil trade flows, taking into account the growth in shale production?

Moderator:

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

Panellists:

- **His Royal Highness Prince Abdulaziz bin Salman bin Abdulaziz Al Saud**, Minister of Energy, Industry and Mineral Resources of the Kingdom of Saudi Arabia
- **Vagit Alekperov**, President, Executive Member of the Board of Directors, Chairman of the Management Committee, LUKOIL
- **Pekka Lundmark**, President, Chief Executive Officer, Fortum Corporation
- **Alexander Novak**, Minister of Energy of the Russian Federation
- **Manuel Quevedo**, Minister of People's Power of Petroleum of the Bolivarian Republic of Venezuela; President, Petróleos de Venezuela (PDVSA)
- **Parviz Shahbazov**, Minister of Energy of the Republic of Azerbaijan
- **Hon. Timipre Sylva**, Minister of State and Petroleum Resources, Federal Republic of Nigeria
- **Daniel Yergin**, Vice Chairman, IHS Markit

10:00–11:15

Manege, 1st floor
conference hall 2
(Moscow)

Developing Regional Renewable Energy Market Segments in Russia: Retail, Remote Territories, and Microgeneration

Unlike Russia's mature wholesale renewables market, other market segments are only just picking up steam. Renewable energy is a commercially viable power generation source for isolated power systems, making them a high-priority, promising area of development in Russia's renewable energy sector. Isolated power systems usually get their energy from diesel power plants, which can be switched out for green energy sources. In certain cases, renewable energy may serve as an effective solution for micro-settlements in central Russia that are currently getting their energy from long-distance connections to electric grids. However, despite the gradual improvement in the regulatory framework for wind and solar energy facilities, there are a number of factors that are significantly slowing the regional development of renewables. Households are another promising market segment. The passing of the law on microgeneration will significantly increase the size of the renewables market in Russia and create many new jobs. What regional solutions are needed to support new renewables projects and what additional incentives can be provided to investors? Which risks associated with the development of renewable energy in remote territories and micro-settlements must be considered? Are renewables projects of interest to industrial or small and medium-sized enterprises? Which barriers to developing renewable energy must be tackled first? Which countries' experiences in developing renewable energy can be applied to Russia?

Moderator:

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

Panellists:

- **Roman Berdnikov**, Director of the Department of Prospective Development, RusHydro
- **Sergey Esyakov**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Aleksey Kaplun**, Council Member, EUROSOLAR Russia Non-Profit Partnership for the Development of Renewable Energy
- **Masaomi Koyama**, Director of the International Affairs Office of the Energy Efficiency and Renewable Energy Department, Ministry of Economy, Trade and Industry of Japan
- **Andreas Kuhlmann**, Chief Executive Officer, German Energy Agency (dena)
- **Evgeny Nikora**, Deputy Governor of Murmansk Region

- **Igor Shakhray**, General Director, Hevel Group
- **Alexander Smekalin**, Chairman of the Government of Ulyanovsk Region
- **Christoph Urbschat**, Director, German Solar Energy Association
- **Aleksey Voronin**, Director, Branch Office of Rusatom - Automated Control Systems - Rusatom Electrotechnic

Front row participant:

- **Julia Bunina**, Sustainable Development Business Partner, IKEA

10:00–11:15

Manege, –2nd floor conference hall A

What Does the Energy Industry of the Future Look Like?

The development of the electric power industry and related industries, as well as consumers' digitalization, requires the use of both tested and new methods of data processing, the creation of controlled segmentation in the electric power network, and the simultaneous development of the information network and the power grid. Flexible management and control of network operating modes will require the use of high-speed neural networks and other machine algorithms, and possibly even quantum computing technologies. It is evident that the comprehensive management and control of a complex network requires a huge number of factors to be taken into account. Such computation is currently beyond the capability of existing information algorithms. However, the transition to digital control devices and the provision of electricity services will allow for the dynamic control of electricity flows, improving the load parameters of the power generation network. Moreover, the ability to simultaneously transmit data and supply power can open the door to additional benefits in existing arrays, the development of consumer services, and intelligent control systems. What does the energy industry of the future look like? Could the merger of electric power and information networks result in a new community larger than the global Internet? Which technological trends will drive change in the electric power industry?

Moderator:

- **Konstantin Mikhaylik**, Deputy General Director for Operation Activity, Rosseti

Panellists:

- **Oleg Barkin**, Member of the Board, Deputy Chairman of the Board, NP Market Council
- **Ian Colebourne**, Chief Executive Officer, Deloitte CIS
- **Denis Dodon**, Director of the Innovation Development Center, Alfa Bank
- **Oleg Dubnov**, Vice President, Executive Director, Cluster of Energy Efficient Technologies, Skolkovo Foundation
- **Evgeniy Grabchak**, Head of Department of Operational Control and Management in Electric Power Industry, Ministry of Energy of the Russian Federation
- **Denis Kasimov**, Chairman of the Board of Directors, Clover Group
- **Leonid Neganov**, Deputy Chief Executive Officer for Investment and Capital Construction, Rossetti
- **Laurent Paganon**, Director, EDF Representative Office in Russia and the CIS

10:00–11:15

Manege, –2nd floor conference hall C

EnergyNet 2.0: Priorities, Outlook, Opportunities

Since the roadmap for the EnergyNet National Technology Initiative (NTI) was implemented in 2016, a whole range of projects in smart energy have been launched on business-led initiatives and are already bringing a completely new segment of high-tech solutions to the energy services market. Work is currently underway to improve the regulatory framework with a focus on simplifying interaction between government and innovative business, ensuring a basic set of standards for rolling out new solutions to the market. At the same time, new technologies are developing rapidly in Russia and around the world, including digital technologies, which are already a key factor in increasing the competitiveness of companies. With this in mind, it is necessary to update the roadmap with an emphasis on planning wide-ranging projects and programmes as well as organizing new forms of interaction between tech companies, corporations and state-owned businesses in order to achieve the goals set out in the EnergyNet NTI roadmap, which cover the creation of global and high-end commercial products and services and their promotion on foreign markets. What results have already been achieved in implementing the EnergyNet NTI roadmap? What new technological trends have appeared on global energy markets? What challenges do they pose to the Russian energy sector? How can wide-ranging projects aimed at creating global high-tech products and services be launched and implemented, and how can they be promoted on foreign markets? What is the role of the EnergyNet NTI roadmap in the digital transformation of the energy industry?

Moderator:

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

Panellists:

- **Andrey Butko**, General Director, Rusatom Automated Control Systems

- **Andrey Katayev**, Director of Energy Markets, System Operator of the United Power System
- **Dmitry Kholkin**, Head of Project Center for Innovation Development, Strategic Research Center Foundation; Deputy Head of the Working Group, EnergyNet NTI
- **Konstantin Mikhailenko**, Director, Digital Transformation Department, Rossetti
- **Dmitry Peskov**, Special Representative of the President of the Russian Federation on Digital and Technological Development
- **Valery Seleznev**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Pavel Sorokin**, Deputy Minister of Energy of the Russian Federation

11:30–12:00

Manege, 1st floor
Plenary conference hall

The Global Energy Prize Award Ceremony 2019

Each year, the Global Energy Prize honours outstanding achievements in energy research and technology from around the world that make a contribution to the promotion of energy efficiency and environmental security in the interests of all of humanity. The outstanding scientists to win the Global Energy Prize 2019 include Khalil Amine (USA) for his outstanding contribution to the development of efficient electrical energy storage technology, and Frede Blaabjerg (Denmark) for his outstanding technical contribution to the design of power management systems enabling the integration of renewable energy.

12:00–13:15

Manege, 1st floor
conference hall 1

The Digital Transformation of the Oil and Gas Industry: New Opportunities for Government and Business

In just the past few years, digitalization has become a firmly embedded concept. Russia's leading oil and gas companies have begun to take active measures to implement smart technologies. This has already had an effect – geological prospecting and well drilling have become more precise, the number of errors made when planning and commissioning industrial facilities has been reduced, and advance warning about possible equipment failure can be given. As a result, both government and business are able to take advantage of new opportunities. The government has the opportunity to use operational data to significantly increase the quality of governance and strategic planning. Business, meanwhile, has a way to optimize its assets and reduce its most significant costs by substantially improving the efficiency of its production and business processes. However, in order to fully unlock the potential of the oil and gas industry's digital transformation and to achieve a systemic effect from implementing digital technologies, it is essential for government and business to work together. What results can be expected from the digital transformation of the oil and gas industry? What administrative barriers need to be removed in order to aid the development of digital technologies? How do oil and gas companies view their role in this digital transformation? What should the Digital Transformation of the Oil and Gas Industry working group focus on?

Moderator:

- **Pavel Sorokin**, Deputy Minister of Energy of the Russian Federation

Panellists:

- **Pavel Anisimov**, Director for Industry Direction, Digital Economy
- **Andrey Belevtsev**, Director of Digital Transformation, Gazprom Neft
- **Vitaly Gataullin**, Deputy General Director for Digital Development, Tatneft
- **Igor Korytko**, Chief Executive Officer, Chairman of the Board, Tube Metallurgical Company (TMK)
- **Daria Kozlova**, Director of Consulting in the Fuel and Energy Complex State Regulation Field, VYGON Consulting
- **Denis Maximov**, Deputy General Director for Economics and Finance, Zarubezhneft
- **Oleg Zhdaneyev**, Head of Import Substitution in Oil and Energy Complex Competence Center, Russian Energy Agency of the Ministry of Energy of the Russian Federation

Front row participants:

- **Valery Krivenko**, Executive Chairman of the Board, Angara Service
- **Igor Zakharchenko**, Head of the Center for the Development of Information Technology Support of DITO, LUKOIL

12:00–13:15

Manege, 1st floor
conference hall 2
(Moscow)

Energy of the Future: Technological Solutions for Cities and Regions

The spread of new technologies and devices is transforming the energy and utilities sectors: energy consumption trends are changing and demand for investment in creating new capacities is growing. On the other hand, depreciation and obsolescence of energy infrastructure and increasing security, environmental, and reliability demands on energy systems force city administrations to increase spending on system maintenance. New players and innovative business models (e.g. startups, telecom

companies) are entering the energy sector. City and regional administrations are actively searching for new practical and innovative solutions. Moreover, city administrations must create conditions to turn their cities into platforms for testing new technologies and business models, including those within the traditionally budget-intensive segments of the fuel and energy sector. What technologies, solutions, and business models in the fuel and energy sector are most sought after in both cities and regions? How is that demand influenced by Russia's unique characteristics? How can the reliability and security of existing systems be increased and their energy capacities expanded while reducing maintenance costs? What legislative changes are required for the implementation of new solutions and business models? What support must the government provide to stimulate this process? What practical stimulus instruments have already been developed and are being implemented?

Moderator:

- **Anna Serebryanikova**, President, Association of Big Data Market Participants; Member of the Board of Directors, MegaFon

Panellists:

- **Petr Biryukov**, Deputy Mayor of Moscow for Housing and Utilities and Improvement
- **Yuriy Manevich**, Deputy Minister of Energy of the Russian Federation
- **Mikhail Oseevskiy**, President, Chairman of the Management Board, Rostelecom
- **Mikhail Shapiro**, General Director, Danfoss
- **Ferdinand Varga**, Managing Director, Senior Partner, BCG

12:00–13:15

Manege, 1st floor conference hall 3

Integration of Renewables into the Grid: Best Practices, Challenges and Opportunities across Europe

Over the past few years, energy efficiency and renewable energy have gained increasing interest in the Russian Federation, where there is a consensus that steps have to be taken to control carbon emissions, in line with the Paris Agreement. Lately, a number of legislative initiatives have been adopted to enhance the integration of renewables into the existing framework. At the same time, power feed-in from big industry players and small and medium-sized enterprises as well as surplus energy provided by households can cause significant changes to the grid system. Today, the efficient grid integration of renewables remains a challenging task and a matter of public debate in many countries. How does the grid integration of renewables work in practice? What key regulatory issues need to be addressed and implemented in order to ensure the proper integration of renewables? How can grid stability be ensured while increasing the share of renewables and producing energy in harsh climate conditions? How can grid-connected biomass, wind and solar parks become a reliable and cost-competitive energy source? What challenges do the Russian regions face with regard to the integration of renewable energy into the grid? Can renewables become a significant tool for providing energy in remote off-grid settlements?

Moderator:

- **Alexey Khokhlov**, Head of Power and Utilities, Energy Centre, Moscow School of Management SKOLKOVO

Panellists:

- **Oleg Barkin**, Member of the Board, Deputy Chairman of the Board, NP Market Council
- **Pablo Bauquier**, Country Representative in Russia, Total Eren
- **Konstantin Borisov**, Leading Expert, Center for Energy Efficiency (CENEf)
- **Andreas Dreisiebner**, Member of the Management Board, Solar Energy Association Solarspar
- **Theo Fens**, Senior Research Fellow, Delft University of Technology; Associate Partner, Deloitte
- **Matteo Governatori**, Energy Policy Specialist, Directorate-General for Energy, European Commission
- **Viktor Haefeli**, Senior Advisor, Swiss Ministry of the Environment; Vice-President, Swiss Association for Environmental Technology
- **Alexander Korchagin**, General Director, NovaWind
- **Andreas Kuhlmann**, Chief Executive Officer, German Energy Agency (dena)
- **Sergey Morozov**, Governor of Ulyanovsk Region
- **Leonid Neganov**, Deputy Chief Executive Officer for Investment and Capital Construction, Rossetti
- **Bruno Prestat**, Manager, Power Systems Economics Research Team, Électricité de France (EDF)
- **Pavel Yakushev**, General Manager for Russia, Belarus and Armenia, Aggreko
- **Kimal Yusupov**, General Director, Vestas Manufacturing Rus

12:00–13:15

Manege, –2nd floor conference hall A

Further Regulation of the Russian Power Grid: Target Model and Amendments to the Development Strategy

There are currently a number of unresolved issues acting as constraining factors on the development of the Russian power grid: contradictions in the objectives of Rosseti, a socially responsible and public company; pricing problems in the electric power industry (tariffs, cross subsidization and utility connections); network fragmentation and a high number of local grid operators; depreciation of funds and low levels of automation, digitalization and network visibility. The development of new technologies and a reduction of energy consumption in the distribution system threaten the future development prospects of the power grid. At the same time, the world is entering a fourth phase of energy transition, the fundamental trends of which are: digitalization (transition from analogue, centralized and standardized technologies to digital, distributed and personalized ones); electrification (electric transportation, transition of the heating supply system to electric power); decentralization (development of distributed generation, energy accumulation and storage technologies, energy efficiency, and demand management). These trends and challenges, both external and internal, are bringing changes to the global electric power sector and forcing an overhaul of the Russian power grid. What is the government's vision of the current situation in the power grid and the coming transformations? What is Rosseti's role and what are its strategic plans with respect to the ongoing changes (innovative and technological development, digital transformation and diversification of the power grid, support for import substitution, increasing investment attractiveness, etc.)?

Moderator:

- **Tatyana Naumova**, Project Manager, NTV Channel

Panellists:

- **Maksim Bystrov**, Chairman of the Board, NP Market Council
- **Vasiliy Kiselev**, Director, Energy Consumers Association
- **Vitaly Korolev**, Deputy Head, Federal Antimonopoly Service of the Russian Federation (FAS Russia)
- **Pavel Livinsky**, General Director, Chairman of the Management Board, Rosseti
- **Yuriy Manevich**, Deputy Minister of Energy of the Russian Federation
- **Valery Seleznev**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation

Front row participants:

- **Boris Ayuyev**, Chairman of the Board, System Operator of the United Power System
- **Natalya Nevmerzhitskaya**, Chairman of the Board, Association of Energy Suppliers

12:00–13:15

Manege, –2nd floor conference hall B

EU–Russia Partnership: Opportunities for the Environmental Transformation of the Energy Market

The rapid growth rate of the EU economy since the mid-2010s has led to an unforeseen increase in energy consumption among the member economies. If this trend persists, EU energy consumption levels may continue to increase, and leaders will need to take additional measures to reduce the impact of the energy sector on the environment and climate in the region. As a reliable supplier of energy for the EU, this opens up a number of opportunities for Russia. For this potential to be fulfilled, it will require close cooperation between the two parties. By the same token, innovative products devised by European energy companies can help Russia to achieve the goals of its National Environment Programme and find solutions to the problem of processing non-hazardous and low-hazard waste from the electricity and mining industries. How can Russia help the EU to ensure the environmental transformation of its energy sector? What measures should be taken to expand the energy market between Russia and the EU? How does digitalization change the energy landscape? What role should business play in fostering cooperation? Which sustainable innovative products devised by European companies can be used in Russia? What is the potential for cooperation in energy production, energy efficiency, environmental protection, and non-hazardous and low-hazard industrial waste management? Is transformational change in the energy sector undertaken at the industrial level, or can consumers also contribute to the process?

Moderator:

- **Ernesto Ferlenghi**, Chairman of the Energy Committee, Association of European Businesses

Welcoming address:

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

Panellists:

- **David Campbell**, President, BP Russia
- **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, Siemens in Russia
- **Carlo Palasciano Villamagna**, General Director, Enel Russia
- **Alexander Pankin**, Deputy Minister of Foreign Affairs of the Russian Federation
- **Maxim Shirokov**, Chief Executive Officer, Unipro
- **Vadim Titov**, Senior Vice President, Rusatom-International Network
- **Johan Vanderplaetse**, Chairman, Association of European Businesses; President, Russia and CIS, Schneider Electric

Front row participants:

- **Sergey Dayman**, Director of Sustainable Development Services, EY
- **Matthias Unger**, Managing Director, Schauenburg Maschinen-und Anlagen-bau

12:00–13:15

Manege, –2nd floor conference hall C

Development Strategy of the Russian Coal Industry to 2035: A New Perspective

As a result of the increase in prices and demand for coal products over the past three years, the Strategy and Programme for the Development of the Russian Coal Industry to 2035 needs updating. Concerned federal executive bodies and coal companies are following instructions from the President of the Russian Federation: they are working on promising investment and infrastructure projects, analyzing Russia's prospects in the global coal market, surveying mechanisms for developing traditional and new coal mining centres, increasing the potential of traditional coal markets, and observing new trends. What is the potential of the global coal market and what is Russia's place in it? How will the volume of coal exports change by 2035 and in which direction: Atlantic or Eastern? How will transport infrastructure develop, especially those parts that facilitate the export of coal to the East? What is the potential of the domestic coal market? What are the challenges and opportunities for coal generation in Russia and around the world? What is the level of technological development of the coal industry and what is its share of unprofitable organizations? What are the prospects for growth in coal production from the development of new and easily recoverable coal reserves?

Moderator:

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

Panellists:

- **Gennady Alekseev**, General Director, SDS-Ugol
- **Oleg Kazanin**, Dean of the Faculty of Mining, Saint Petersburg Mining University
- **Sergey Mochalnikov**, Head of Coal Mining and Peat Industry Department, Ministry of Energy of the Russian Federation
- **Ivan Petrov**, Dean of the Faculty of Economics and Finance of the Fuel and Energy Complex, Financial University under the Government of the Russian Federation
- **Yury Saakyan**, General Director, Institute of Natural Monopolies Research
- **Vladimir Tuzov**, Chief Strategy Officer, SUEK

12:00–18:30

Hotel Metropol

21st Ministerial Meeting of the Gas Exporting Countries Forum

Session (closed event)

The Gas Exporting Countries Forum is an international governmental organization, offering a platform for the exchange of best practices and information between its member countries. The Forum was established as an intergovernmental, international organization on 23 December 2008 in Moscow. Twelve countries are permanent GECF members, while seven countries have observer status. The objectives of the Forum are to protect the sovereign right of member countries to access their natural gas reserves and their ability to independently plan for and secure their sustainable and effective development, taking the environmental impact into account, and to exploit and maintain those natural gas reserves for the benefit of their people. The organization’s member countries control 70% of the world’s proven natural gas reserves, 45% of its production, 64% of pipeline exports and 54% of LPG exports.

14:00–18:45

Manege, 1st floor Plenary conference hall

Supplier Day – RusHydro

RusHydro is one of the largest energy holding companies in Russia. It plays a vital role in ensuring the efficient use of hydroelectric resources and providing a reliable energy supply to its users, including in the Far Eastern Federal District. In order to do this, it needs to employ high-quality, reliable, and innovative equipment, as well as cutting-edge technology and effective solutions. Executives from RusHydro Group companies will discuss a range of topics related to procurement at the event, held in cooperation with the Federal Corporation for the Development of Small and Medium Business, OPORA RUSSIA, and the United Electronic Marketplace. Among those joining the discussions will be partners, market experts, and figures from major industrial enterprises, as well as representatives of various SMEs specializing in constructing and commissioning energy facilities, manufacturing and supplying

equipment, fuel, IT, logistics, communications, and other areas. What are the steps to becoming an energy company partner? What specific aspects of procurement in the Russian Far East should companies be aware of? What can be done to replace imports with domestically produced alternatives? What recent developments have there been in legislation? What has already been done, and what measures need to be taken to ensure that energy companies and suppliers cooperate effectively?

Moderator:

- **Sergey Dashkov**, General Director, Energoservis

Panellists:

- **Igor Ananskikh**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Julia Burlaka**, Head of Key Account Management of the Corporate Clients Department, United Electronic Market Place
- **Nikolay Golubchikov**, Director of Innovation and International Operations Department, RusHydro
- **Viktor Khmarin**, Member of the Management Board, Deputy General Director, RusHydro
- **Mikhail Kolesnikov**, Vice President, All-Russian Non-Governmental Organization of Small and Medium-Sized Business OPORA RUSSIA
- **Alexey Nikitin**, Deputy Chief Engineer, Director of Equipment Modernization Department, RusHydro
- **Alexander Ponomarenko**, Deputy Chief Engineer, RusHydro
- **Anna Sablukova**, Head of Compliance Assessment and Compliance Monitoring Directorate, SME Corporation
- **Nikolay Shulginov**, Chairman of the Management Board, General Director, RusHydro
- **Stanislav Terentyev**, Director of Information Technologies Department, RusHydro
- **Denis Toropov**, Director of Procurement, RusHydro; General Director, RusHydro Procurement
- **Dmitry Zahvataev**, Procurement Director, RusHydro MC

14:00–15:15

Manege, 1st floor conference hall 1

Stimulating Oil Extraction in the Russian Federation

The objective worsening of conditions for mining, a decrease in the output of new boreholes, and an increase in the water content over the next 15 years will lead to an annual increase in operational expenses and a simultaneous fall in oil extraction. To prevent the fall in investment in the extraction sector, a range of mineral tax benefits and special rates for export duties are being put forward. As of 1 January 2019, a tax scheme has come into effect introducing a windfall profits tax on hydrocarbon production, which is designed to partly take into account the real economics of extraction when imposing taxes. To attract additional investment to the oil extraction sector for 2019–2024 and prevent a reduction in extraction, a roadmap has been developed to implement measures aimed at exploring oil reserves and increasing the volume of oil extraction in the Russian Federation. What are the anticipated results of taking an inventory of oil reserves in terms of the economic efficiency of mining those oil reserves given the current tax conditions? What is the potential for additional extraction and for essential measures to incentivize oil extraction in regions where extraction has traditionally taken place? What incentives for the use of tertiary oil recovery techniques in the oil industry must be implemented to maximize the use of this resource's potential? Which incentives are essential for mining small deposits?

Moderator:

- **Alexey Ryabov**, Partner, EY

Panellists:

- **Marina Belyakova**, Partner, EY
- **Orest Kasparov**, Deputy Head, Federal Agency for the Subsoil Use (Rosnedra)
- **Alexander Matytsyn**, First Vice-President, Member of the Management Board, LUKOIL
- **Kirill Molodtsov**, Aide to the Chief of Staff, Presidential Executive Office
- **Alexey Sazanov**, Director of Tax Policy and Customs Schedule Department, Ministry of Finance of the Russian Federation
- **Pavel Sorokin**, Deputy Minister of Energy of the Russian Federation
- **Grigory Vygon**, Managing Director, VYGON Consulting

Front row participants:

- **Daria Kozlova**, Director of Consulting in the Fuel and Energy Complex State Regulation Field, VYGON Consulting
- **Rustam Romanenkov**, Deputy General Director for Legal, Corporate and Property Issues, Gazprom Neft Shelf

- **Rinat Shayakhmetov**, Head of Strategic Planning Directorate, Tatneft
- **Victoria Turgeneva**, Partner, Head of Tax and Legal Consulting Services Providing for Companies of Oil and Gas Sector, KPMG in Russia and the CIS

14:00–15:15

Manege, 1st floor conference hall 2 (Moscow)

Energy for Humans: Creating an Urban Atmosphere

Creating a comfortable urban environment is a development priority and the basis of cities' economic growth. The fuel and energy sector is not just the foundation of urban infrastructure: it affects a city's atmosphere and its residents' mood. Fuel and energy sector services must be developed in accordance with the demands of city dwellers. It is important to properly build relationships with city residents and involve communities in decision-making and project implementation. How does the fuel and energy sector affect urban development and people's perception of a city? What effect does government investment have on stimulating private sector investment? What fuel and energy sector development initiatives can cities implement to increase the effectiveness of cooperation with the public and foster an inclusive urban environment? How can the public be encouraged to partake in more energy-efficient city living?

Moderator:

- **Sophie Shevardnadze**, Journalist, Anchor

Panellists:

- **Raad Alkadiri**, Senior Director of the Center for Energy Development, BCG
- **Oleg Shapiro**, Founder, Wowhaus
- **Aleksandr Solovyev**, Head of Housing and Utilities Department, Moscow City Government
- **Vyacheslav Tsybulnikov**, Vice President, Chairman of the Moscow Bank, Sberbank

14:00–15:15

Manege, 1st floor conference hall 3

The Promotion of BAT in the Energy Sector. Expected Effectiveness of IEP

The increasingly stringent approaches to environmental protection pose new challenges for power engineers. The reduction of the human impact on the environment in line with the best available technologies (BAT), the development and acquisition of integrated environmental permits (IEP), the need to develop and implement programmes to improve environmental efficiency, and the need to install automatic measuring equipment on a mandatory basis are all important issues for category 1–2 electric power and mining sectors which exert a negative impact on the environment. How can we synchronize the achievement of BAT indicators with the new standardization system and list of controlled targets? Are the incentive measures in place sufficient for organizations to implement BAT and can they be implemented? Are expert commissions combined with a state environmental impact assessment necessary when issuing an IEP?

Moderator:

- **George Popov**, Head of Technical and Economic Indicator Standardization Division of the Electric Power Development Department, Ministry of Energy of the Russian Federation

Panellists:

- **Maxim Dovgyallo**, Executive Secretary of the Commission for the Mining Complex, Russian Union of Industrialists and Entrepreneurs (RSPP)
- **Evgeny Gasho**, Head of Laboratory, National Research University Moscow Power Engineering Institute
- **Olga Kondratyeva**, Head of the Department of Environmental Engineering and Labor Protection, National Research University Moscow Power Engineering Institute
- **Dmitriy Vologzhanin**, Director, Council of Energy Producers

14:00–15:15

Manege, –2nd floor conference hall A

Investment in the Sustainable Development of the Energy Sector: New Opportunities and Current Obstacles

By 2022, with the launch of the last nuclear power plants built as part of the Capacity Supply Agreement, the first large-scale investment cycle in Russia's modern energy sector will be complete. The goal of modernizing Russia's generating capacities is far from complete, but it now faces new global challenges: the digital revolution, environmental protection, and changing consumer profiles. As such, the market must now determine what development path the industry will take. Will the existing centralized power supply system be preserved, with the domination of traditional energy companies, the preservation of existing network infrastructure (with minimal changes), and the same pools of consumers and consumer profiles? Or will the industry change more noticeably due to rapidly developing technologies in various spheres and modern global trends, with banks serving as key partners in this transformation? What are the main industry- and economy-wide issues that will need to be addressed in this new energy investment cycle? What factors will play a role in determining which development scenario will prevail? What is the investment potential of the industry's development and

how are financial institutions preparing? Will the industry continue to undergo widescale changes within the current energy market model or will it need to undergo a complete transformation? What do the government and market participants need to do to create a comfortable climate for the implementation of modern technologies in the creation of new energy sector markets?

Moderator:

- **Alexandra Panina**, Chairman of the Supervisory Board, Council of Power Producers

Panellists:

- **Maksim Bystrov**, Chairman of the Board, NP Market Council
- **Alexander Chuvaev**, Executive Vice President, Head of the Russia Division, Fortum Corporation
- **Aleksey Grenkov**, Vice President, Sberbank
- **Mikhail Khardikov**, General Director, Eurosibenergo
- **Kirill Komarov**, First Deputy General Director, Director of Development and International Business Unit, ROSATOM State Atomic Energy Corporation
- **Carlo Palasciano Villamagna**, General Director, Enel Russia
- **Stephan Solzhenitsyn**, Director General, Siberian Generating Company

14:00–15:15

Manege, –2nd floor conference hall B

The Evolution of Global Benchmarks: New Pricing Trends in International Oil Markets

In partnership with St. Petersburg International Mercantile Exchange

The search continues for the best pricing mechanisms for international oil grades. The amount of oil available for calculating the North Sea Brent Crude is dropping, and trading liquidity at the North Sea ports is decreasing. Production peaks at most oil fields are behind us, and ever more light oil is being imported to Europe from around the world. The issue of the stability and quality of various oil grades is ever more pertinent. The basic methods for calculating the North Sea Dated (Argus Media) and Brent Crude (S&P Global Platts) indices have undergone changes. These indices serve as a benchmark price for most European oil company contracts with consumers. Pricing agencies calculate spot market quotations for physical deliveries, and this market then forms the basis for derivative exchange instruments, including futures. What changes to trading can we expect in the coming years, given the new approaches to pricing? What are the trends and prospects for growth in the international and Russian crude oil markets?

Moderator:

- **Jorge Montepeque**, Consultant, Global Markets

Panellists:

- **Sergey Andronov**, Vice-President, Transneft
- **Maryam Ayati**, Head of Origination and Investments Global Crude, Products Trading and Supply, Shell International Trading & Shipping Company Ltd; Board Founding Chair, Vakt Holdings
- **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
- **William Harwood**, Senior Vice President for Business Development Eurasia, Argus Media
- **Nikolay Kiselev**, Deputy Chief Executive Officer, Surgutneftegas
- **Denis Maximov**, Deputy General Director for Economics and Finance, Zarubezhneft
- **Mark Quartermain**, Vice President for Crude Trading and Supply, Shell International Trading and Shipping Company Limited
- **Alexey Rybnikov**, President, St. Petersburg International Mercantile Exchange
- **Taghi Taghi-zada**, Deputy Head of Global Physical Trading, Socar Trading

Front row participants:

- **Alexander Sergeev**, Head of Analytical Group of Executive Office of the Commission on Fuel and Energy Complex and Environmental Safety Development Strategy, Presidential Executive Office
- **Pavel Sorokin**, Deputy Minister of Energy of the Russian Federation

14:00–15:15

Manege, –2nd floor conference hall C

Digitalizing the Coal Sector: Challenges and Opportunities

The 4th Industrial Revolution (Industry 4.0) is opening up new opportunities for coal companies to increase their competitiveness. The introduction of digital technologies makes it possible to fully automate the majority of processes, grow labour productivity, increase the sector's competitiveness,

and reduce workplace accidents and injuries. At the same time, the sector must also develop its own technologies and approaches to cybersecurity and data exchange. How far advanced are coal companies in terms of achieving digital transformation in the industry today, and how can the coal sector reposition itself towards digital interaction with other industries? What obstacles and threats lie on the path towards digital transformation in the coal sector? What are the requirements of coal companies in terms of platform solutions with varying functionality and levels of integration for the creation of a single informational and technological space as part of Russia's 'digital energy' and 'digital economy'? What digital solutions and new digital models have already been introduced into administrative processes at leading coal companies? What new innovations are set for implementation in the near future?

Moderator:

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

Panellists:

- **Gennady Alekseev**, General Director, SDS-Ugol
- **Alexander Ivanov**, Chief Technologist, Mining and Coal Preparation Complex Denisovskiy, MC Kolmar
- **Sergey Mochalnikov**, Head of Coal Mining and Peat Industry Department, Ministry of Energy of the Russian Federation
- **Yury Plakitkin**, Head of Center for Analysis and Innovation in Energy, Energy Research Institute of the Russian Academy of Sciences
- **Irina Pominova**, Deputy Head of the Department for Fuel, Energy and Housing Utilities, Analytical Center for the Government of the Russian Federation
- **Dmitry Sizemov**, Deputy Director for Information Technology, SUEK
- **Yury Zhukovsky**, Director of the Center for Digital Technology, Saint Petersburg Mining University

16:00–17:15

Manege, 1st floor conference hall 2 (Moscow)

Accelerated Development of Energy Infrastructure: Effective Planning and Mutual Responsibility

Energy infrastructure development is essential to the generation of a favourable investment climate and implementation of regional investment projects. Forecasting demand and planning the accelerated development of the energy sector requires effective procedures and mutual responsibility on the part of regional authorities and energy consumers. In which cases should the development of electric power facilities stimulate the creation of new regional investment projects for consumers? In which cases should this development happen following utility connection? How should we take into account regional investment project registries when forecasting electric energy demand and capacity? Who should maintain these registries? What is the role of technical conditions and electric power network utility contracts?

Moderator:

- **Gleb Shvetsov**, Expert, Centre for Project Management in the Energy Sector

Panellists:

- **Aleksandr Ilienko**, Member of the Management Board, Director for Development Management, System Operator of the United Power System
- **Aleksandr Pyatigor**, Deputy Director General for Sales of Services, Rosseti
- **Vyacheslav Skulkin**, Deputy Director of Electric Power Industry Development Department, Ministry of Energy of the Russian Federation
- **Fedor Veselov**, Head, Department for Development and Reforms in the Electric Power Sector, Energy Research Institute of the Russian Academy of Sciences (ERI RAS)

Front row participants:

- **Nikolay Borisov**, Acting Director, Department of Energy, Energy Efficiency, and Tariff Policy, Administration of the Smolensk Region
- **Vasiliy Kiselev**, Director, Energy Consumers Association
- **Mikhail Morozov**, Deputy Minister of Energy and Housing and Utilities of the Nizhny Novgorod Region

16:00–17:15

Manege, 1st floor conference hall 3

Governing Risks in the Modern World of Energy

In partnership with general partner Rosneft

Phenomenal progress in the development and proliferation of energy efficient technologies, an economic breakthrough in renewable energy production (solar, wind, geothermal, etc.), and changes to behavioural patterns in energy consumption have led to a sharp slowdown in the growth of energy demand across much of the world and a rapid diversification of energy sources in favour of a transition

to a low-carbon economy. The scale of the changes being observed today in the energy sector, and especially in IT development, points to a global energy system that has entered a new stage of fundamental transformation. At the same time, what sets this transformation apart is the fact that its driving factors are not just economic but also, and in fact to a greater extent, non-economic. What influence is the global energy transformation having on corporate strategies and risk management principles for energy companies? How can operational and financial risk be reduced and investment stability in energy projects be ensured in an environment of sanctions, highly volatile energy prices and other uncertainties? Could insurance be looked upon as a strategic solution to preserve the financial interests of business? How can digitalization be used as a risk management tool for all stages of the production process? We invite you to discuss this and many other questions during the panel session organized with support of Rosneft. The company pays particular attention to developing continuous, sustainable, and integrated corporate risk management and internal control systems. It allows for proper timely response to internal and external changes, as well as raising the efficiency and productivity.

Moderator:

- **Alexey Gromov**, Principal Director on Energy Studies, Institute for Energy and Finance

Panellists:

- **Dmitry Chekalkin**, Vice President, St. Petersburg International Mercantile Exchange
- **Denis Krasnovsky**, Corporate Ratings Group Analyst, Analytical Credit Rating Agency (ACRA)
- **Chris Midgley**, Global Head of Analytics, S&P Global Platts
- **Gulmira Rzayeva**, Research Associate, Oxford Institute for Energy Studies
- **Darya Surova**, Analyst, Rystad Energy AS
- **Mikhail Volkov**, Chief Executive Officer, Chairman of the Management Board, Ingosstrakh Insurance Company

16:00–17:15

Manege, –2nd floor conference hall A

Intelligent Predictive Technologies: New Opportunities for the Development of the Electric Power Industry

Intelligent technologies are central to the national economic development strategies in many countries. Russia is also developing a national strategy for the introduction of artificial intelligence in the energy sector. Will the fairly conservative industry take on AI technologies to increase safety levels, provide trouble-free operation of power equipment, and lower operating costs? Can these technologies create new breakthrough opportunities for the development of the industry?

Moderator:

- **Veniamin Usov**, Director, Electric Power Innovation Club; Deputy Chief Executive Officer, Interregional Agency for the Electricity and Power Market (MAREM+)

Panellists:

- **Vladimir Averbakh**, Managing Director, Head, Center for Data Research of Government Agencies, Sberbank
- **Oleg Barkin**, Member of the Board, Deputy Chairman of the Board, NP Market Council
- **Oleg Dubnov**, Vice President, Executive Director, Cluster of Energy Efficient Technologies, Skolkovo Foundation
- **Ilya Galkin**, Vice President, Strategic Development and Marketing, TVEL
- **Evgeniy Grabchak**, Head of Department of Operational Control and Management in Electric Power Industry, Ministry of Energy of the Russian Federation
- **Steven Griffiths**, Member of the Global Energy Prize International Award Committee; Senior Vice President for Research and Development, Khalifa University of Science and Technology
- **Mikhail Khardikov**, General Director, Eurosibenergo
- **Oleg Lushnikov**, Executive Director, Hydropower of Russia Association of Organizations and Workers of Hydropower
- **Konstantin Mikhailenko**, Director, Digital Transformation Department, Rossetti

Front row participant:

- **Leonid Chernigov**, Chief Executive Officer, Rakurs-Engineering

16:00–17:15

Manege, –2nd floor conference hall B

Investing in High-Tech Projects for the Extraction of Hard-to-Recover Oil Reserves

Stepping up efforts to develop hard-to-recover oil reserves, which will secure a competitive advantage for Russia on the global hydrocarbon market, is a priority area in the development of the national economy. Given the presence of economic sanctions, achieving this task is possible through the replacement of imported technologies with domestic equipment for the exploration and extraction of

hard-to-recover reserves, as well as the development of a competitive oilfield services market. A federal project to develop the Bazhenov Formation in Western Siberia is being launched to this end. To date the federal project has assembled a group of over 20 participants, including research institutes, start-ups, small and medium-sized businesses, and vertically integrated oil companies. All of this contributes to the formation of a unique ecosystem in the Russian Federation for creating innovative new businesses with high export potential. The project envisages the creation of a system of state incentives aimed at removing administrative barriers and supporting innovators. What challenges do technology companies working in the oil industry face? How large is the domestic market and what is the export potential of these technologies? What tools will be created at the federal and regional levels to attract investment towards the implementation of technology projects? Which industry participants are being considered as potential project partners and what conditions will be imposed on them? Are Russian tech projects in demand among international investors?

Moderator:

- **Arkady Dvorkovich**, Chairman, Skolkovo Foundation

Panellists:

- **Kirill Komarov**, First Deputy General Director, Director of Development and International Business Unit, ROSATOM State Atomic Energy Corporation
- **Nikolay Milkis**, Deputy Governor, Director of Economic Development Department, Government of the Khanty-Mansiysk Autonomous Okrug-Ugra
- **Pavel Sorokin**, Deputy Minister of Energy of the Russian Federation
- **Oleg Teplov**, Chief Executive Officer, VEB Innovation
- **Vadim Yakovlev**, First Deputy General Director, Deputy Chairman of the Management Board, Gazprom Neft

16:00–17:15

Manege, –2nd floor conference hall C

Environmental Protection in the Coal Industry: Current Solutions

The development of the coal industry in recent decades has led to major changes in natural landscapes and the degradation of vegetation across vast areas. Mining has led to the pollution of the aquatic environment and the atmosphere, as well as a decrease in biological diversity. Dramatic changes to the environment occur over time. They are caused by the excavation to the surface of deep-seated rocks of past geological epochs that are not characteristic of modern landscapes. With increasingly stringent standards for environmental conservation, the market trend towards renewable sources of energy, and information transparency, improvement of production management policies is required, as well as the implementation of working methods in accordance with international standards for sustainable development. This is the key to both the success of coal companies in the global economy and to ensuring the energy security of the Russian Federation. What promising modern technologies are coal mining companies using to protect and preserve the environment and restore biodiversity around mines? What barriers to the successful and effective rehabilitation of the environment exist in the coal industry? What measures should be taken to boost derelict land reclamation and remediate environmental damage in the coal industry? Is there a need for incentive measures for coal companies to implement reclamation programmes and should amendments be introduced to the current legislation of the Russian Federation?

Moderator:

- **Yury Manakov**, Chief Researcher, Federal Research Center for Coal and Coal Chemistry of the Siberian Branch of the Russian Academy of Sciences

Panellists:

- **Alexander Grigoryev**, Deputy General Director, Institute of Natural Monopolies Research
- **Vitaly Latokhin**, Deputy Director for Ecology and Land Management, Kuzbassrazrezugol
- **Ekaterina Markova**, Chief Ecologist, SUEK-Khakassia
- **Aysen Nikolaev**, Head of Sakha Republic (Yakutia)
- **Ivan Petrov**, Dean of the Faculty of Economics and Finance of the Fuel and Energy Complex, Financial University under the Government of the Russian Federation
- **Svetlana Radionova**, Head, Federal Service for Supervision of Natural Resources
- **Elena Sarycheva**, Head of Strategic Communications Department, Kuzbasskaya Toplivnaya Company

16:30–18:45

Manege, 1st floor conference hall 1

Public session
Working Group on Reducing the Dependence of the Oil Refining and Petrochemical Industries on the Equipment, Components, Technologies, and Services (Works) Import of the Expert Council of the Russian Ministry of Energy

The Russian oil refining and petrochemical sector is a strategically important part of the national economy, with significant potential for the manufacture of products with a high added value, resulting in synergistic effects in related sectors of the economy, including domestic higher education and science.

The oil refining and petrochemical industries may come to serve as key drivers of industrial growth and increase non-commodity, non-energy exports. The development and accelerated implementation of domestic technologies and innovations and the full-scale launch of import substitution processes are needed to achieve these results. What limitations are currently standing in the way of the development of domestic technologies and components for the oil refining and petrochemical industries? What are the priority areas and opportunities for increasing the competitiveness of domestic technologies, catalysts, and fuel and oil additives in domestic and foreign markets? What regulatory changes and government support measures will help in reaching a significant breakthrough in the technological development of the domestic oil refining and petrochemical industries? Members of the working group will discuss the results of their work in inventorying technologies used in the Russian oil refining and petrochemical industries, evaluating priority areas for import substitution, and creating a roadmap for reducing the dependence of the oil refining and petrochemical industries on the import of equipment, components, technologies, and services (works).

Moderator:

- **Pavel Sorokin**, Deputy Minister of Energy of the Russian Federation

Panellists:

- **Sergey Evdokimov**, Senior Vice President, State Development Corporation VEB.RF
- **Mikhail Ivanov**, Director of the Machine Tool Building and Investment Engineering Department, Ministry of Industry and Trade of the Russian Federation
- **Vladimir Kapustin**, Head of the Department of Oil Processing Technologies, Gubkin Russian State University of Oil and Gas (National Research University)
- **Mikhail Kotyukov**, Minister of Science and Higher Education of the Russian Federation
- **Alexander Noskov**, Deputy Director, Federal Research Center Boreskov Institute of Catalysis of the Siberian Branch of the Russian Academy of Sciences
- **Vladimir Razumov**, Deputy Chairman of the Management Board, SIBUR Holding
- **Ilshat Salakhov**, General Director, TANEKO
- **Vadim Vorobyev**, First Vice President, Member of the Management Board, LUKOIL
- **Oleg Zhdaneyev**, Head of Import Substitution in Oil and Energy Complex Competence Center, Russian Energy Agency of the Ministry of Energy of the Russian Federation

17:30–18:45

Manege, 1st floor conference hall 2 (Moscow)

Russian Student Brigades and the Energy Sector: Opportunities for Collaboration

Maintaining an effective government youth policy is crucial for the sustainable development of the country. It is important to develop tools today that will help young people to successfully begin their careers and integrate into the labour force. Russian Student Brigades are among the country's largest youth organizations. Over the last 60 years, student brigades have served as one of the most effective tools for graduates in Russia to gain relevant work experience while still in education. The Russian Student Brigades have an active presence at power grid, oil and gas, and nuclear facilities in Russia. For companies in the fuel and energy sector, this represents an opportunity to attract the most motivated graduates, and for the students it is a way to earn money while testing their professional aptitude in real-world conditions, namely at fuel and energy production facilities. It is important to foster this kind of cooperation and to replicate best practices with the aim of developing human capital potential in the fuel and energy sector. Understanding what conditions are necessary for effective interaction between energy companies and the student brigades is essential. What is the experience of working at fuel and energy companies for construction brigades? How can the success of student brigades organizing within the energy sector be measured?

Moderator:

- **Mikhail Kiselev**, Head of the General Staff, Russian Student Squads

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
- **Andrey Golovanov**, Development Director, Head of the Communications and Qualifications Development Office, Capital Construction Industry Centre, State Atomic Energy Corporation ROSATOM
- **Victoria Pugach**, Deputy General Director for Human Resources, GazArtStroy

17:30–18:45

Manege, –2nd floor conference hall A

Central Asia: Key to the Development of International Projects in the Electric Power Industry

There is a clear upward trend in relations between Moscow and the countries of Central Asia. Previously unfulfilled, the cooperation potential between the countries is growing across the board: mutually beneficial trade and economic relations are strengthening, as is cooperation in the energy

sector. Additionally, Russia has particular interest in the Central Asian countries it perceives as guarantors of stability in the region. In order to support developing countries in the dissemination of digital technologies and the construction of power grids, projects are being implemented to introduce digital technologies that have already shown success in developed countries. As such, electric power facilities are being built under mutual agreements. Responsibilities and costs are shared between partner countries, and the technologies' efficiency is demonstrated through their application in practice. Russia is involved in a huge number of megaprojects, on which further improvements in quality of life and the economies of developing countries depend. What support measures and mechanisms can serve as an additional incentive for investors? What funding channels are available to Russian companies? What should we consider when implementing international projects in third countries to construct power grids? Which Russian manufacturers of electrical equipment can break into foreign markets?

Moderator:

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

Panellists:

- **Byambasaikhan Bayanjargal**, Special Envoy of the President of Mongolia on Regional Energy Cooperation
- **Dadajon Isakulov**, Chairman of the Management Board, Uzbekistan National Power Networks
- **Andrey Logatkin**, Director of the International Department, Rosseti
- **Jurabek Mirzamahmudov**, First Deputy Minister of Energy of the Republic of Uzbekistan; General Director, Uzatom
- **Alexander Trishin**, Deputy General Director, Head of Hydro Power Division, Power Machines
- **Dmitry Volkov**, Head Central Asia and the Caucasus Asset Management Unit, Inter RAO

Front row participant:

- **Vasily Savin**, Partner, Head of Power and Utilities, KPMG in Russia and the CIS

17:30–18:45

Manege, –2nd floor conference hall B

Meeting of Chief Engineers of Heat Suppliers

In order to implement legislation on heat supply and the fundamentals of Russian state policy in industrial safety, new regulations for the technical operation of heat supply facilities and heat-consuming plants are being developed. These regulations are aimed at ensuring the safety and quality of the heat supply and increasing the role and independence of the heads of operating organizations. What are the expected outcomes of planned changes to industry regulation? How will the requirements for the operation of hazardous production facilities and mobile technical equipment differ? What is the proposal for addressing the extension of the assigned service life of technical equipment, buildings and facilities? What is the role of the head of the operating organization in this process? How can the operation of equipment be managed according to the new requirements?

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
- **Andrey Bondarchuk**, Chairman of the Committee on Energy and Engineering, Government of St. Petersburg
- **Sergey Esyakov**, First Deputy Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation
- **Aleksey Khrapkov**, Deputy Director of Electric Power Industry Development Department, Ministry of Energy of the Russian Federation
- **Roman Kutasin**, Department for the Supervision of Thermal Power Plants, Heat Generating Units, and Networks, Department of State Energy Supervision, Federal Environmental, Industrial, and Nuclear Supervision Service
- **Svetlana Nikonova**, Director of the Housing and Utilities Development Department, Ministry of Construction, Housing and Utilities of the Russian Federation
- **Oleg Zverev**, Deputy Chief Executive Officer, Director for Heat and Power Sales, Tatenergo

17:30–18:45

Manege, –2nd floor conference hall C

Power Engineering: Prospects for the Development of High-Capacity Gas Turbines in the Russian Federation

The ability to produce high-capacity turbines is a key goal for Russia's power engineering industry,

marking as it would a significant step forward in guaranteeing the country's energy security. The use of high-capacity gas turbines for the heat and electric energy combination cycle at thermal power plants would also lead to an improvement in technical and economic performance. However, it is important to bear in mind that developing and manufacturing high-capacity turbines is a complex technical undertaking, which not only involves the turbines themselves, but also other related areas, including materials, metals, casting and forging. The government is therefore taking steps to support the development of manufacturing technology for turbines of this kind. In order to make this development process more efficient and to ensure that demand for turbines remains stable in the future, it is vital to also involve power generating companies, given that they will be the customers of these Russian-made products. This will enable organizations to draw upon the experience of commissioning similar facilities abroad, and to test solutions which may help Russian gas turbines become leaders in the international market. What is the current situation with regards the development of high-capacity gas turbine manufacturing? What additional measures could the government take to support manufacturers? How do power generating companies assess future demand for Russian-produced high-capacity gas turbines? What proposals can power generating companies put forward using the experience of commissioning similar facilities in Russia and abroad? What can be done to facilitate collaboration between manufacturers of energy equipment and the companies using it?

Moderator:

- **Stephan Solzhenitsyn**, Director General, Siberian Generating Company

Panellists:

- **Andrey Cherezov**, Deputy Minister of Energy of the Russian Federation
- **Evgeniy Grabchak**, Head of Department of Operational Control and Management in Electric Power Industry, Ministry of Energy of the Russian Federation
- **Oleg Tokarev**, Deputy Director of Machine Tool Building and Investment Machine Building Department, Ministry of Industry and Trade of the Russian Federation

Front row participants:

- **Mikhail Bulygin**, Director for Electricity Market, Gazprom Energoholding
- **Rauzil Khaziev**, General Director, Tatenergo
- **Mikhail Lifshitz**, Chairman of the Board of Directors, Rotec
- **Timur Lipatov**, Chief Executive Officer, Power Machines
- **Gurgen Olkhovsky**, President, VTI
- **Andrey Vagner**, Chairman of the Board, General Director, T Plus

4 October 2019

10:00–11:15

Manege, 1st floor conference hall 1

Mission Possible: Scientific Response to Universal Energy Challenges

Humanity is on the cusp of a new technological cycle. The scope of changes and the complexity of solutions to be introduced within the new industrial revolution differ from those of previous global transformations. In the light of the new reality, demand for electricity will continue to grow given that, according to the UN data, one in five people have no access to this energy carrier. Over one billion people, most of whom live in rural areas, suffer from energy poverty. The global community is witnessing the trends of the 4th Industrial Revolution while suffering the consequences of the third one. Modern states are bound to seek solutions to universal energy challenges and shape their energy policies while keeping in mind the rapidly changing technologies and environmental issues. As part of the panel session, the speakers will identify the capacity of scientific and technological potential to modernize and digitalize universal energy systems and evaluate the role of researchers in solving global energy issues. How can science assist in achieving the UN Sustainable Development Goals in energy? What are the necessary stages of a full-scale digital transformation of the fuel and energy sector? Can advanced technologies for extracting, processing, and storing energy resources be developed during a transition to a new philosophy of energy consumption? How is it possible to increase the efficiency of traditional energy systems and ensure greater security in the energy supply? And finally, what are the chances that disruptive technologies for boosting the transition to clean energy will appear?

Moderator:

- **Steven Griffiths**, Member of the Global Energy Prize International Award Committee; Senior Vice President for Research and Development, Khalifa University of Science and Technology

Panellists:

- **Rodney John Allam**, Nobel Peace Prize Laureate; Member of the International Award Committee, Global Energy Association
- **Khalil Amine**, Winner of the Global Energy Prize 2019; Adjunct Professor, Department of Materials Science and Engineering, Stanford University
- **Frede Blaabjerg**, Head, Center Of Reliable Power Electronics (CORPE), Aalborg University; Winner of the Global Energy Prize 2019
- **Marta Bonifert**, Member of the International Award Committee, Global Energy Association; Board Member, Hungarian Business Leaders Forum
- **Oleg Budargin**, Vice Chair for Regional Development, World Energy Council (WEC)
- **Chung Rae Kwon**, Nobel Peace Prize Laureate; Chairman, Global Energy Prize International Award Committee; Advisor to Chair, High-level Experts and Leaders Panel on Water and Disasters (HELP)

10:00–11:15

Manege, 1st floor conference hall 3

Science and Technology in the Energy Trilemma: Decarbonization, Digitalization, Decentralization

The international community is focusing on issues surrounding innovative development in the energy sector. This year, the energy ministries of the G20 member nations adopted the Innovation Action Plan on Energy Transitions. Under this plan the countries will work together to develop innovative technologies in energy efficiency, renewable energy, nuclear power, digitalization, and fossil fuels. Russia is playing an active role in the search for solutions to the challenges posed by the energy trilemma: decarbonization, digitalization, and decentralization. Furthermore, the Russian energy sector is faced with the task of ensuring technological sovereignty and sufficient competencies in all key areas. How does the scientific community view efforts to solve these crucial issues in energy development? Which sectors could see the emergence of Russia as an innovation leader? How can effective international cooperation be nurtured? What priority developments should be made in power engineering today? How will energy production respond to the era of digitalization?

Panellists:

- **Masaomi Koyama**, Director of the International Affairs Office of the Energy Efficiency and Renewable Energy Department, Ministry of Economy, Trade and Industry of Japan
- **Sergey Philippov**, Director, The Energy Research Institute of the Russian Academy of Sciences
- **Nikolay Rogalev**, Rector, National Research University "Moscow Power Engineering Institute"

10:00–11:15

Manege, –2nd floor conference hall A

Energy Security and Efficiency of Hydropower Facilities against the Backdrop of Modernization and Digital Transformation

In recent decades in Russia, the quantity of hydro power plant (HPP) and pumped storage power plant (PSPP) equipment in use beyond its operational service life has significantly increased. In the near future the local industry will focus on replacing dated infrastructure. Domestic hydropower also faces the challenge of digitalization, which ensures the optimization of technological and business processes to improve energy security and efficiency. What are the biggest challenges encountered by hydropower companies when upgrading equipment? How effective is partially or fully upgrading the main equipment at large HPPs proving to be? What can be gained by introducing digital technologies at HPPs and PSPPs? What targets are companies setting in this regard? What are the plans of the Russian power engineering sector in terms of import substitution? What are foreign companies planning in terms of localizing production in the Russian Federation?

Panellists:

- **Vladimir Demyanov**, Deputy Chief Executive Officer of the Hydropower Division, Power Machines
- **Guenter Engelbutzeder**, General Director, VolgaHydro
- **Evgeniy Grabchak**, Head of Department of Operational Control and Management in Electric Power Industry, Ministry of Energy of the Russian Federation
- **Mikhail Khardikov**, General Director, Eurosibenergo
- **Rauzil Khaziev**, General Director, Tatenergo
- **Sergey Kuznetsov**, General Director, Krasnoyarsk HPP
- **Oleg Lushnikov**, Executive Director, Hydropower of Russia Association of Organizations and Workers of Hydropower
- **Nikolay Shulginov**, Chairman of the Management Board, General Director, RusHydro

10:00–11:15

Manege, –2nd floor conference hall B

Transforming Retail Power: Strategic Objectives and Action in the Face of Uncertainty

The transformation of the energy sector and the technological changes happening around consumers demands a fundamentally new approach to creating and implementing intelligent solutions in the retail power sector. New technologies could change the very nature of competition in the retail market, through the arrival of financial service, digital service, and social network providers. What technologies used in other markets could have an effect on the activities of retail power companies? What ecosystems might appear around new technologies and platform solutions? Will banks, social networks, and digital service providers, or participants from other service markets, be future competitors or partners and co-investors? Where should investments go in these unpredictable conditions, and what positive changes should consumers expect to see in just 3–5 years? What legislative changes are necessary?

Moderator:

- **Natalya Nevmerzhitskaya**, Chairman of the Board, Association of Energy Suppliers

Panellists:

- **Mikhail Andronov**, President, Rusenergosbyt
- **Oleg Barkin**, Member of the Board, Deputy Chairman of the Board, NP Market Council
- **Elena Dvoretskaya**, Vice President, BANK ROSSIYA
- **Marina Fayrushina**, Council President, ARRC
- **Petr Konyushenko**, General Director, Atom Energy Trade
- **Dmitry Naberezhnev**, Partner, Bain & Company
- **Pavel Snikkars**, Director of Electric Power Industry Development Department, Ministry of Energy of the Russian Federation
- **Dmitry Stapran**, Director for Strategy and Operations, PwC

10:30–11:45

Manege, 1st floor conference hall 2 (Moscow)

Prospects for Collaboration between Energy and Defence Companies to Achieve Import Substitution and Technological Development

Given the international tensions of recent years, the Russian fuel and energy industry needs to ensure that it has technological sovereignty and expertise in all the critical areas for its sustainable development. In this regard, the prospects for collaboration between energy and defence companies to diversify production appear to be promising. This will allow fuel and energy companies to acquire the high-tech products necessary for the effective development of Russia's mineral resources, while defence companies could boost production and their technological capabilities. At the same time, the launch of fuel and energy equipment production facilities requires intersectoral cooperation. It will also require solutions to the financial, human and technological risks whose likelihood of occurrence and ultimate impact will depend directly on the measures undertaken and the implementation of inspection regimes. What are the prospects for applying defence industry expertise in the fuel and energy industry

and what is the optimal business model by which defence and energy companies can collaborate? What promising technologies could increase the operational efficiency of energy companies? What should be done to accelerate the diversification of defence companies according to the nomenclature of the fuel and energy industries?

Moderator:

- **Oleg Zhdaneyev**, Head of Import Substitution in Oil and Energy Complex Competence Center, Russian Energy Agency of the Ministry of Energy of the Russian Federation

Panellists:

- **Kirill Komarov**, First Deputy General Director, Director of Development and International Business Unit, ROSATOM State Atomic Energy Corporation
- **Pavel Livinsky**, General Director, Chairman of the Management Board, Rosseti
- **Nail Maganov**, General Director, Chairman of the Management Board, Tatneft
- **Denis Manturov**, Minister of Industry and Trade of the Russian Federation
- **Anatoly Yanovsky**, Deputy Minister of Energy of the Russian Federation

Front row participants:

- **Vitaly Markelov**, Deputy Chairman of the Management Committee, Member of the Board of Directors, Gazprom
- **Rinat Shafigullin**, Deputy General Director for Repair, Well Drilling and Enhanced Oil Recovery, Tatneft
- **Andrey Zheregelya**, General Director, United Rocket and Space Corporation

11:30–12:45

Manege, 1st floor conference hall 1

The Evolution of Energy Systems: A Global Perspective

In partnership with CIGRE

The speed of managerial and technological transformation today is key to the effectiveness of major companies and entire industries. It consists of two components: the ability to anticipate changes in the environment, and the time that companies spend on implementing innovative products. Several trends are impacting the development of the modern electric power industry, some of which, at first glance, contradict each other. How does the development of renewable energy and the emergence of prosumers correlate with continuing demand for a reliable electricity supply? What about the growth of new energy-intensive sectors of the economy (primarily associated with the storage and processing of large amounts of data) and energy saving? Digitalization and cybersecurity? Decentralization of energy systems and the creation of international energy corridors and associations? These phenomena have reached different levels of penetration in different countries, with positive and negative consequences. Obviously, they affect not only technological solutions, but also industry management models, relations with consumers, market mechanisms and regulation, etc. How stable are these trends and which of them will have the biggest impact on the development path of the industry in the long term?

Moderator:

- **Andrey Murov**, Chairman of the Management Board, FGC UES

Panellists:

- **Philippe Adam**, Secretary General, International Council on Large Electric Systems (CIGRE)
- **Saulius Adomaitis**, Partner, Head of Energy Practice, Middle East and India, EY
- **Maksim Bystrov**, Chairman of the Board, NP Market Council
- **Pavel Livinsky**, General Director, Chairman of the Management Board, Rosseti
- **Yuriy Manevich**, Deputy Minister of Energy of the Russian Federation
- **Adam Middleton**, Chairman, United Kingdom National Committee (CIGRE UK)
- **Fedor Opadchiy**, Deputy Chairman of the Board, System Operator of the United Power System
- **Yuri Sharov**, Chief Executive Officer, Inter RAO–Engineering
- **Marcio Szechtman**, Vice-President Technical, International Council on Large Electric Systems (CIGRE)

Front row participant:

- **Boris Ayuyev**, Chairman of the Board, System Operator of the United Power System

12:00–13:15

Manege, 1st floor conference hall 2 (Moscow)

Modernization of Thermal Power Generation in Russia: Successful Implementation and Improvements

In 2019, the first tenders were held to modernize heat-generating equipment with delivery dates from 2022 to 2025. 14 GW of equipment will be upgraded, requiring investments of about RUB 200 billion.

In the first tenders, competition was fierce and there was a sizeable reduction in capital costs and single-rate prices, which attests to the success of the chosen tender mechanism. At the same time, the tenders showed that changes should be made to competitive procedures or amendments should be introduced to related Russian government resolutions. Are combined cycle gas turbine (CCGT) projects absent in the list of selected applications due to an inability to compete with foreign makers or due to the lack of domestic gas turbines? Is the power engineering sector ready to guarantee the supply of localized gas turbines to generators? Are localization requirements redundant? Should the tender be divided into thermal power plants, regional power stations, and CCGTs? Is a price floor necessary? Is it advisable to increase the Government Commission quota?

Moderator:

- **Maksim Bystrov**, Chairman of the Board, NP Market Council

Panellists:

- **Yuriy Manevich**, Deputy Minister of Energy 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
- **Andrey Vagner**, Chairman of the Board, General Director, T Plus
- **Pavel Zavalny**, Chairman of the Committee on Energy, The State Duma of the Federal Assembly of the Russian Federation; President, Russian Gas Society

Front row participants:

- **Maksim Balashov**, Director for Natural Monopolies, RUSAL
- **Fedor Opadchiy**, Deputy Chairman of the Board, System Operator of the United Power System
- **Airat Sabirzanov**, First Deputy General Director - Director for Economics and Finance, "Tatenergo"
- **Stephan Solzhenitsyn**, Director General, Siberian Generating Company

12:00–13:15

Manege, –2nd floor conference hall A

Housing and Utilities Strategy to 2035: Current Status, Priorities and Goals

Housing and utilities play a huge role in the economic and social life of the country. People hold housing and utilities services responsible for any problems or improvements in utility services and their subsequent impact on the quality of life of citizens and the environment. The aging of fixed assets combined with macroeconomic and social factors poses challenges to the industry, and new technologies are opening up opportunities to improve the quality of services and investments. What is the current status of housing and utilities services? What are the priorities and goals for the new housing and utilities development strategy until 2035? What approaches to housing and utilities services will facilitate the effective management of the sector, including price and regulatory controls and regulations? With today's sluggish economy and slowdown in investment activity coupled with the rapid development of technology, how can the public sector become an attractive market for investors? What new technologies are most sought after and how can the digitalization of housing and utilities services benefit consumers? What are the best examples that can be replicated?

Moderator:

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

Panellists:

- **Victoria Gimadi**, Head of the Department for Fuel and Energy Sector, Analytical Center for the Government of the Russian Federation
- **Lev Gorilovskiy**, President, Polyplastic Group
- **Alexey Kuleshov**, Vice President, OTR 2000
- **Pavel Malkov**, General Director, Regional Information Center
- **Natalya Nevmerzhitskaya**, Chairman of the Board, Association of Energy Suppliers
- **Svetlana Nikonova**, Director of the Housing and Utilities Development Department, Ministry of Construction, Housing and Utilities of the Russian Federation
- **Viktor Semenov**, President, Russian Heat Supplying
- **Denis Shabarin**, General Director, Unified Information and Settlement Center of Leningrad Region

Front row participant:

- **Sergey Sivaev**, Director of Project Office Energy Efficiency, Rostelecom

12:00–13:15

Manege, –2nd floor conference hall B

Rosseti: A Dialogue with Manufacturers

The industry today faces key challenges in ensuring the reliability of its power grids, as well as the

technological and information security of its facilities. Russian equipment manufacturers are playing a crucial role in this process. Expanding cooperation in this area will include the stress testing of applied technical solutions to determine the efficiency and stability of the energy system and its individual nodes in the face of a dramatic change in the foreign exchange rate and/or sanctions. The dialogue will include a discussion of new technological solutions, related challenges, and the ongoing development of cooperation in the field.

Moderator:

- **Konstantin Mikhaylik**, Deputy General Director for Operation Activity, Rosseti

Panellists:

- **Ilya Ivantsov**, President, Element
- **Timur Lipatov**, Chief Executive Officer, Power Machines
- **Leonid Neganov**, Deputy Chief Executive Officer for Investment and Capital Construction, Rossetti
- **Mikhail Pavlyuk**, General Director, Milandr
- **Sergey Sakhnenko**, Industrial Director of Radioelectronic Complex, Rostec
- **Vasiliy Shpak**, Head of the Department of Radioelectronic Industry, Ministry of Industry and Trade of the Russian Federation
- **Oleg Zhdaneyev**, Head of Import Substitution in Oil and Energy Complex Competence Center, Russian Energy Agency of the Ministry of Energy of the Russian Federation

Front row participant:

- **Alibi Katchiev**, General Director, KASKAD

12:00–13:15

Manege, –2nd floor
conference hall C

All-Russian Meeting on the Promotion of Energy Conservation and Information Transparency in the Fuel and Energy Industry

Russia's fuel and energy industry plays a special role in its socio-economic development, accounting for over 30% of GDP even with the current high volatility in the global markets. The public is concerned about the industry as it supplies energy to tens of millions of consumers, and is of great importance for the federal budget. Information transparency in the fuel and energy industry needs to be enhanced in order to solve the challenges revolving around large-scale investment and production, as well as their legislative support. In 2013–2019, with the support of the Ministry of Energy of Russia, companies and regions consolidated their efforts to promote energy conservation, advertise professions in the fuel and energy industry, and launch social and environmental programmes. The meeting will be attended by representatives of energy companies, regional energy and housing ministries, and the media. The meeting will conclude by identifying the priority topics to be covered in 2020 and approving a plan of federal measures to promote energy conservation and information transparency in the fuel and energy industry.

Under the chairmanship of:

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

Panellists:

- **Heads of Press Services of Energy Companies**
- **Representatives of Regional Ministries and Mass Media**

14:00–18:00

Manege, 1st floor
Plenary conference hall

All-Russian Meeting on the ‘Preparation of the Electric Power Industry for Autumn and Winter 2019/2020’

Panellists:

- **Andrey Cherezov**, Deputy Minister of Energy of the Russian Federation
- **Alexander Novak**, Minister of Energy of the Russian Federation
- **Vladimir Yakushev**, Minister of Construction, Housing and Utilities 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

14:00–15:15

Manege, 1st floor
conference hall 1

Global Energy Challenges: Focus on Talent

In partnership with the ROSATOM State Atomic Energy Corporation

The technological shifts taking place around the world entail fundamental changes in the global labour market. The approaches to labour management being adopted and the nature of organizational models

within companies are evolving. Globally, HR management is focused on training, attracting, and retaining highly effective experts. Today, talent is the key competitive advantage in the high-tech, diversified and creative economy of the future. International analysts state that by 2030 the talent deficit will increase by 11% globally, and left unchecked, this could result in USD 2.1 trillion of unrealized global income. As a result, the global demand for talent is set to intensify, with the values of lifelong education and personal growth already included in several national strategic priorities, including in Russia. 2019 saw the inception of the Global Talent Index in the Energy Sector , which shows that the energy sectors are suffering from a 57.6% talent crunch. Given the key role of the energy system in the Russian economy, it is vital to focus on effective tools that can help to attract the best talent, provide them with incentives, and develop their skills. How effective are the current approaches to HR development and are there any niches for new initiatives at both national and international levels? Are there any successful national advanced training programmes? Who is the key player in respect of career changes: the state, employers, or the employees themselves? What needs to be considered when working with talent in the energy sector? What conditions must be created in order to develop and retain talent? What is preventing the transition from mass education to individual educational tracks?

Moderator:

- **Olga Golyshenkova**, President, Association of Civilians and Organizations for Corporate Learning and Development MAKO

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
- **Yury Pikhtovnikov**, Head of the Department of Organizational Development and Career Management, PJSC LUKOIL
- **Nikolay Rogalev**, Rector, National Research University "Moscow Power Engineering Institute"
- **Anton Stepanenko**, Partner, BCG
- **Tatyana Terentyeva**, HR Director, ROSATOM State Atomic Energy Corporation
- **Arkadiy Zamoskovny**, General Director, Association of Electric Energy Employers

14:00–15:15

Manege, 1st floor conference hall 2 (Moscow)

Using Energy Storage and Distributed Generation at Russian Railways: Problems and Opportunities

In partnership with Russian Railways

Russia is paying special attention to technical solutions capable of increasing the energy and technological efficiency of railway transit, including those utilizing alternative energy sources. The rail traction power network was created in the USSR, as part of the Unified Energy System, and met the objectives set before it during the Soviet period and the projected transit volumes of the time. New volumes of transit require new solutions. Increasing traffic along the Baikal–Amur Mainline and the Trans-Siberian Railway necessitates an increase in railway and contact network capacities. Where does the future lie? In the construction of new thermal power stations and railways? Distributed generation? Energy storage? Is energy storage a technological and technical breakthrough for electric power systems? Solar panels: a trendy technological solution or the future of distributed generation?

Moderator:

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

Panellists:

- **Sergey Ageev**, General Director, TAMP
- **Khalil Amine**, Winner of the Global Energy Prize 2019; Adjunct Professor, Department of Materials Science and Engineering, Stanford University
- **Igor Landgraf**, Chief Project Designer, Krylov State Research Centre
- **Sergey Mayorov**, Chairman of the Management Board, Mechanical Engineering Cluster of the Republic of Tatarstan
- **Polina Mishustina**, Head of Analytical Center, Liteko
- **Mikhail Nikiforov**, Deputy Director, Research Institute of Energy Saving in Railway Transport, Omsk State Transport University (OSTU)
- **Nikolay Popov**, General Director, Hevel Retail
- **Anatoliy Silyuta**, Deputy Head of Laboratory, VNIIZHT Railway Research Institute

14:00–15:15

Manege, 1st floor

Topical Issues Related to Advancing Energy and Resource Efficiency in the Eurasian Economic Union

conference hall 3

The UN General Assembly identified 17 Sustainable Development Goals (SDGs) and 169 related targets that countries must achieve by 2030. SDGs are a key part of a large system of targets and indicators, primarily for developing countries, aimed at eliminating poverty, preserving the planet's resources, and ensuring prosperity for all. Responsible Consumption and Production and Climate Action (SDGs 12 and 13) propose doing more and better with fewer resources, through the use of rational consumption and production models and the efficient use of natural and energy resources, with a minimal impact on the climate. This is the primary principle behind the idea of a circular (closed-loop) economy and defines the contemporary green economic model. A circular economy is the most effective way of conserving energy, resources, and materials and plays an important role in changing methods of economic growth. Many countries, including China, the USA, South Korea, and the European Union, are actively integrating circular economy principles into their government policies. Countries in the EAEU have also identified circular or green economies as a strategic priority and are working towards this goal, taking into account national characteristics. What priorities do countries have with respect to energy and resource efficiency? Which countries have made progress towards transitioning to a green economy? How did they do this? What are the existing and potential roles of Eurasian integration? Is it possible to align unified national priorities and the speed with which they are achieved with a circular economy? Will green economic development issues become an effective instrument for further integration between countries in the region?

Moderator:

- **Leonid Shenets**, Director of Energy Department, Eurasian Economic Commission

Panellists:

- **Vyacheslav Burmistrov**, Deputy Director, Technical Regulation and Accreditation Department, Eurasian Economic Commission
- **Anton Inyutsyn**, Deputy Minister of Energy of the Russian Federation
- **Mikhail Malashenko**, Deputy Chairman, Director of the Department for Energy Efficiency, State Committee for Standardization of the Republic of Belarus (Gosstandart)
- **Dmitry Maryasin**, UNDP Resident Representative in Republic of Armenia
- **Emil Osmonbetov**, Chairman, State Committee of Industry, Energy and Subsoil Use of Kyrgyz Republic
- **Agi Veres**, Deputy Director, UNDP Regional Bureau for Europe and the CIS in Istanbul
- **Amaniyaz Yerzhanov**, Vice Minister of Industry and Infrastructure Development of the Republic of Kazakhstan

14:00–15:15

Manege, –2nd floor
conference hall A

Big Energy Data: Why Do We Need the State Information System for the Fuel and Energy Sector (GIS TEK)?

The global and, by extension, Russian energy systems are currently undergoing a period of global digital transformation. Each year, the industry sees the launch of new and improved facilities and complexes for the extraction, processing, generation, and transmission of energy in its various forms. Meanwhile, 'digital duplicates' of these systems are being made in the interest of increasing efficiency – data is being collected at every turn in order to create, in the long run, a federal information system for the fuel and energy industry that helps us to better understand how the sector should develop in the future. The pilot version of the Russian Federal State Information System for the Fuel and Energy Sector (GIS TEK), which is tasked with collecting and analyzing data, was launched in May this year and is expected to enter into full operation in early 2020. Over 50 major Russian energy companies and 600 legal entities are currently involved in this process. Those numbers will continue to grow. Infrastructure industries, regions, equipment manufacturers, and the financial sector must coordinate their efforts in order to successfully take on a task of this scale. What role do regional authorities play in the creation of a unified state information space for Russia's fuel and energy industry? What unified approaches and automated processes need to be launched so that the GIS TEK is capable of efficiently and effectively collecting data and analyzing massive amounts of information? What is the current state of industry processes for the preparation and monitoring of fuel and energy industry companies' investment projects and programmes, and what issues do they currently face? Who will be required to submit data to the GIS TEK? How should this data be prepared and secured? How will information globalization improve big data analytics and affect energy systems optimization?

Moderators:

- **Igor Kozhukhovskiy**, Deputy General Director, Russian Energy Agency of the Ministry of Energy of the Russian Federation
- **Svetlana Panichkina**, Deputy Head of Department of the Project Management of the Direction for Development of GIS Fuel and Energy Complex, Russian Energy Agency of the Ministry of Energy of the Russian Federation

Panellists:

- **Vladimir Komov**, General Director, Foresight
- **Svetlana Yakovleva**, Chief of Statistics of Production Groups, Federal State Statistics Service

- **Kirill Yamanov**, Director of the Public Sector Department, Informzashita

14:00–15:15

Manege, –2nd floor conference hall B

Long-term Development Strategy with Low Greenhouse Gas Emissions to 2050: Challenges and Opportunities for the Russian Energy Sector

Climate change is on the agenda of the entire global community. As an active player and a global leader in energy exports, Russia recognizes its responsibility to the world and is helping to address environmental issues. Previously a dedicated participant in the Kyoto Protocol, in 2016 Russia signed the Paris Climate Agreement. Russia, similarly to the other signees of the document, now needs to develop a strategy for the long-term development of the country's economy. The strategy covers the fuel and energy sector to 2050, with greenhouse gas emissions staying low. What new challenges may Russia encounter as an energy power? What is being done today to reduce greenhouse gas emissions in the Russian energy sector, and what is the potential for improvement? Will the adoption of the strategy serve as an additional incentive for the high-tech development of the fuel and energy sector?

Moderator:

- **Grigoriy Yulkin**, Director of Strategic Planning and Partnership Department, Autonomous Non-Commercial Organization "International Sustainable Energy Development Centre" under the auspices of UNESCO

Panellists:

- **Larisa Korepanova**, Deputy Director of the Competition, Energy Efficiency and Ecology Department, Ministry of Economic Development of the Russian Federation
- **Alexey Kulapin**, Director of the State Energy Policy Department, Ministry of Energy of the Russian Federation
- **Branko Milicevic**, Economic Affairs Officer, Group of Experts on Gas, United Nations Economic Commission for Europe
- **Oleg Shutkin**, Deputy General Director, Director of Business-Unit Engineering and Generation, Hevel
- **Vyacheslav Solomin**, Chief Executive Officer, En+ GROUP
- **Sergey Tverdokhleb**, Deputy General Director, Director for Strategy and Corporate Policy, SUEK

Front row participants:

- **Andrey Nepomnyashchiy**, Executive Director, Member of the Board of Directors, BerezkaGas Company
- **Sergey Roginko**, Head, Center for Ecology and Development, The Institute of Europe, Russian Academy of Sciences (IE RAS); Chairman, Climate Policy Subcommittee, Committee on Energy Strategy and Development of the Fuel and Energy Complex, Chamber of Commerce and Industry of the Russian Federation
- **Dmitriy Vologzhanin**, Director, Council of Energy Producers
- **Alexey Zhikharev**, Partner, VYGON Consulting; Director, Russia Renewable Energy Development Association

14:00–15:15

Manege, –2nd floor conference hall C

Master class

MediaTEK: Best Practices

What are the best practices in implementing information support projects for the construction of power facilities, technology modernization, digitalization, popularization of careers in fuel and energy, programmes to nudge customers to pay for services on time, and preventative energy safety programmes for children? Which best practices used by the winners and runners-up in the All-Russian MediaTEK Competition 2019 for media organizations, press services of energy companies and regional administrations could be useful to regions and energy companies?

16:00–18:00

Manege, 1st floor conference hall 1

Team Competencies for Digital Transformation and Leadership in Technology

One of the keys to achieving results in digital transformation is the human factor. The success of any transformation is determined by the readiness of a team to embrace and support transformative processes. The introduction of digital technologies changes the organizational culture and environment of a company, requiring fundamentally new competencies both at the individual and corporate levels. As part of the School of Technology Leadership, teams from SIBUR, Rosseti, RusHydro and Mosoblgaz will round up the module on Managing People and Teams in the Tech Business, presenting their design solutions for managing digital transformation at fuel and energy companies. What is employee readiness for digital transformation? What training should staff undergo when new technologies are introduced? How do you put together teams for digital projects? What individual and team competencies are required for the successful digital transformation of organizations?

Moderator:

- **Olga Golyshenkova**, President, Association of Civilians and Organizations for Corporate Learning and Development MAKO

Panellists:

- **Anastasiya Bondarenko**, State Secretary, Deputy Minister of Energy of the Russian Federation
- **Alexey Kulapin**, Director of the State Energy Policy Department, Ministry of Energy of the Russian Federation
- **Arkadiy Zamoskovny**, General Director, Association of Electric Energy Employers

16:00–18:00

Manege, 1st floor conference hall 2 (Moscow)

The Evolution of Energy Law: Formation, Development… Guillotine?

The formation of energy law at an institutional level in modern-day Russia took place over several stages: the delineation of powers between various levels of governance by the Constitution of the Russian Federation and the implementation of acts of the USSR and RSFSR; the adoption of federal and regional-level laws and bylaws and municipal regulations governing relations in the fuel and energy sector; the enforcement and identification of problems and gaps, the drawing up of key issues as part of legal and anticorruption appraisals; the development of energy law as an academic-adjacent discipline; and the examples of successful training programmes implemented at leading Russian universities. Policymaking as a whole, including in the fuel and energy sector, has come a long way in Russia over the last 25 years, but is now facing new challenges and undergoing a transformation. The agenda includes conceptual legislative changes: reforming regulatory and oversight activities, working on a new Code of Administrative Offences, and implementing the 'regulatory guillotine'. How will energy law be impacted by these changes? What are the possible routes towards transformation, and what forms will it take? What aspects of regulation should be left untouched, and where is it completely out of date?

Moderator:

- **Anastasiya Bondarenko**, State Secretary, Deputy Minister of Energy of the Russian Federation

Panellists:

- **Leonid Akimov**, Director of the Legal Defense Department, Rosseti
- **Mikhail Konstantinov**, Member of the Management Board, Head of Legal Unit, Inter RAO Group
- **Petr Lakhno**, Associate Professor of the Department of Business Law, Faculty of Law, Lomonosov Moscow State University
- **Kirill Makarov**, Director of the Law Department, Ministry of Energy of the Russian Federation
- **Victoria Romanova**, Head of the Energy Law Department, Kutafin Moscow State Law University (MSAL)
- **Nicolay Roshenko**, Member of the Board, Head of the Legal Division, NP Market Council
- **Franz Juergen Saecker**, Academic Director for the Master's Programme European and International Energy Law, Technical University of Berlin
- **Pavel Snikkars**, Director of Electric Power Industry Development Department, Ministry of Energy of the Russian Federation

16:00–18:00

Manege, –2nd floor conference hall A

Energy in the Digital Economy: New Technologies and Growth Factors

In the face of today's global structural upheavals and technological transformations, digitalization is a driver of accelerated development in the national economy and a factor in increasing its competitiveness on the global stage. The introduction of digital technologies is already changing existing processes in every sector of the economy, leading to increased efficiency and reduced costs. The fuel and energy sector is no exception. The advent of cutting-edge data technologies, machine learning and the Internet of Things is changing the face of the modern energy industry, transforming it into a provider of the 'energy of the future'. At the same time, economic transition towards a new phase of digital development is placing fundamentally new demands on the energy sector in terms of providing a reliable and accessible energy supply to consumers at a qualitatively new level. Meeting these demands is a top priority when it comes to digitalization in the energy sector. The Ministry of Energy of the Russian Federation is currently working on a solution as part of its Digital Energy departmental project, which has brought leading industry players together to pool their efforts and capitalize on the multiplier effects of digitalization. What role does the digital transformation of the fuel and energy sector have to play in the transition to a digital economy? How is the state leading the way in terms of digitalizing energy? What is needed for a comprehensive digital transformation of the entire fuel and energy sector? What steps have already been taken? What are the plans for the immediate future?

Moderator:

- **Vladislav Onishchenko**, Head, Analytical Center for the Government of the Russian Federation

Panellists:

- **Pavel Anisimov**, Director for Industry Direction, Digital Economy
- **Oleg Dubnov**, Vice President, Executive Director, Cluster of Energy Efficient Technologies, Skolkovo Foundation
- **Mikhail Korolkov**, Head of Digital Technology Center of Digital Transformation Direction, Gazprom Neft
- **Artiom Kozlovski**, Partner, Head of Consulting Services for Oil and Gas Companies, Central, Eastern, Southeast Europe and Central Asia, EY
- **Tamara Merebashvili**, Chief Executive Officer, Inter RAO – Information Technologies
- **Alexander Potapov**, Consultant for Digital Transformation, World Bank Group
- **Nikolay Zubarev**, Director of Direction Information Security, Digital Economy

16:00–18:00

Manege, –2nd floor conference hall B

Expert Meeting of the Clean Energy Ministerial Initiative for Sustainable Urban Development