

# The international forum "Renewable energy for regional development"

## Event Program

"Expocentre Fairgrounds"  
14, Krasnopresnenskaya nab., Moscow, Russia

### Tuesday, June 18

<b>Registration</b>	<b>Registration of participants</b>
<b>10.00 – 10.30</b>	
<b>Plenary meeting</b>	<b>Renewable energy: global trends and new opportunities</b>
<b>10.30 – 12.30</b>	<p>In recent years, Russia is implementing a consistent policy of development of renewable energy sources (RES). The Russian Federation became a member of the International renewable energy Agency (IRENA). There is a program to support renewable energy under contracts for the provision of capacity, under which projects are implemented in the wholesale electricity market. Due to the prevailing competition on the market of renewable energy in recent years, there was a success with regard to a significantly reduce the average value of the planned capital costs for 1 kW installed capacity projects.</p> <p>At the same time, the retail market of renewable energy in Russia starts to grow rapidly. To the previously implemented projects in isolated energy-regions of the Far East new projects in other regions of the country are being added. A system of support for energy supply projects for consumers on the basis of RES, at the regional level and in terms of the development of microgeneration, is being formed. There is a clear potential for further development of renewable energy projects on the retail markets, including remote and isolated areas. Along with the task solution of increase of reliability of energy supply in isolated areas, the priority of renewable energy development in Russia is the development of advanced technologies and competencies with the further export of high-tech products.</p> <p>What additional measures should be taken to support the implementation of RES projects on retail markets? How can we use the international experience in the development of renewable energy projects? What technological solutions are needed in different regions of the country? What promising technologies based on renewable energy sources can be used for power supply of consumers in the near future? What funding options are available?</p> <p><b>Participants:</b> The Committee for Energy of the State Duma of the Russian Federation, the Ministry of Energy, Ministry of Industry and Trade of the Russian Federation, IRENA, RUSNANO, the Embassy of Germany in Russia, the Government of the Ulyanovsk region, the government of the Republic of Sakha (Yakutia), Gazprombank</p>
(duration 2 hours)	
<b>12.30 – 13.00</b>	Coffee-break
<b>Panel discussion</b>	<b>The use of renewable energy sources in the regions: best technologies and projects</b>
<b>Hall 1</b>	The specificity of the region determines the possibility of using renewable energy. At the same time, an increasing number of projects RES are aimed at solving specific regional/local problems.
<b>13.00 – 14.30</b>	<p>What share do RES occupy in the total amount of electricity, what are the prospects for their use? How can the regional administrations use the opportunities of renewable energy? What technologies are being used in the implementation of projects in the regions? What technologies will help RES to make a new breakthrough? Can energy storage technologies become such technologies?</p> <p>What is remarkable about the sector of renewable energy in Russia for different companies? What</p>
(duration 1.30)	

	<p>could be done in this sector and what are the difficulties?</p> <p><b>Participants:</b> KomaiHalteck, PJSC "Peredvizhnaya energetika", the Ministry of Industry of the Republic of Bashkortostan, Kubanenergo Institute for personnel training, "NPF Energia" Ltd.</p>
<p><b>Panel discussion</b></p> <p><b>Hall 2</b></p> <p><b>13.00 – 14.30</b></p> <p>(duration 1.30)</p>	<p><b>Regulatory control, state support actions and opportunities for financing renewable energy projects on retail markets</b></p> <p>Compared to the development of RES projects in the wholesale zones of electricity market in the Russian Federation, the system of support for the implementation of RES projects on retail markets has begun to form only recently. Legislation is being developed to support both - retail projects in wholesale zones and in isolated and remote areas. Microgeneration based on RES is developing. What main trends for the market are to expect in the Russian norm-setting in the near future? Can Russia use the experience of developing the legal framework of European countries, or it is necessary to take into account its own specifics? What options for financing renewable energy projects are possible now, what are the prospects? How do investors see RES projects? What is their appetite?</p> <p><b>Participants:</b> Np "Sovet Rynka", JSC "NovaWind", JSC «STC UPS» (Scientific and Technical Center of Unified Power System), ECM Technologies, "Bipron" Ltd.</p>
<p><b>14.30 – 15.30</b></p>	<p>Lunch</p>
<p><b>Panel discussion</b></p> <p><b>Hall 1</b></p> <p><b>15.30 – 17.00</b></p> <p>(duration 1.30)</p>	<p><b>Localization of production of RE components: experience and prospects for further development</b></p> <p>Russia is implementing a programme to localize the production of renewable energy components. What are its preliminary results? Is there sufficient state support for investors localizing RES equipment? How high is the limit of the degree of localization and are there any trends for its revision?</p> <p><b>Participants:</b> Ministry of Industry and Trade of the Russian Federation, Rusnano, Vestas, JSC "NovaWind"</p>
<p><b>Panel discussion</b></p> <p><b>Hall 2</b></p> <p><b>15.30 – 17.00</b></p> <p>(duration 1.30)</p>	<p><b>The digitalization of modern energy: from local solutions to transformation the whole industry</b></p> <p>The development of global energy is increasingly sensitive to new technological trends. The level of implementation of digital solutions in fuel and energy companies is becoming one of the determining factors of their competitiveness on the global stage.</p> <p>Today, all major Russian fuel and energy companies are actively involved in the technology race and are already demonstrating the first results of pilot projects. However, current work is only the first local step in the digital transformation of the Russian energy sector. The transition of the entire industry to digital rails requires a fundamentally new approach to the creation and implementation of intellectual solutions.</p> <p>What challenges and opportunities does the digitalization of energy offer? How to ensure a systemic effect at the level of the entire energy industry from implementation of digital solutions by individual companies? Do we need a common digital space, and if so, who are its key actors? What is the role of the state in the digitalization of energy sector? How to synchronize the vision of digitalization among different representatives of the industry?</p> <p><b>Participants:</b> PJSC "Rosseti", Ministry of Energy of the Russian Federation, Ministry of Digital Development, Communications and Mass Media of the Russian Federation, Russian Union of Industrialists and Entrepreneurs (RSPP), Np "Sovet Rynka", PJSC Lukoil, State Atomic Energy Corporation ROSATOM, Sberbank, JSC Inter RAO, Fortum, "Sistemnyy Operator Yedinoy Energeticheskoy Sistemy" JSC</p>

## Wednesday, June 19

### Panel discussion

Hall 1

10.00 – 11.30

(duration 1.30)

### Europe`s experience of RES development: what is "good" and what is "bad"

What RES are common in European countries and why, what share do they occupy in the total, what are the prospects?

What mechanisms does the state use to support RES, and how strong is the strategic vision of the state and the regulator in this matter?

How do consumers of RES in Europe assess their experience? What of the European renewable energy market model can be an example of good practice, and what needs to be changed?

#### Participants:

IRENA, Federal Ministry for Economic Affairs and Energy of Germany (BMWi), Mitsui & Co., Ltd., SKM Market Predictor AS, Trade Promotion Agency of Andalusia

### Panel discussion

Hall 2

10.00 – 11.30

(duration 1.30)

### Biofuels and biomass: efficiency of raw materials processing and modern solutions in waste utilization

Biofuels have been known to mankind since time immemorial and are still present in the structure of consumption: the raw materials of the first generation are wood and crops with a high content of fats, starch, sugars. 54-60% of biofuels are its traditional forms: firewood, plant residues and dried manure for heating homes and cooking. They are used by 38% of the world's population. The ability of biofuels to serve as a primary source of energy depends on their energy profitability. Often, the profitability of biofuels strongly loses the profitability of hydrocarbon energy. However, for many years, scientists have been trying to commercialize the production of biofuels of the second and third generation, dreaming to solve the problem of ecology, which is acute when using fossil fuels.

A real breakthrough for humanity in this area would be the processing of household waste into high-class energy. But how realistic is this? What is the current global market for biofuels and what are the prospects for its development on the Russian market? Can biofuels become an alternative to hydrocarbons and electric transport? Can they really be considered as harmless to the environment? What modern technologies make it possible to obtain biofuels from domestic and industrial waste?

#### Participants:

Association "EnergoInnovatsiya", The Ministry of Natural Resources and the Environment of the Russian Federation The State Duma, Russian Biofuels Association, Государственная Дума РФ, Российская Биотопливная Ассоциация, JSC Tsentr Novykh Tehnologij, Moscow Region Government, Gubkin Russian State University of Oil and Gas (National Research University)

11.30 – 12.00

Coffee-break

### Panel discussion

Hall 1

12.00 – 13.30

(duration 1.30)

### Promising technologies for power supply systems in remote and isolated power systems

The experience in the implementation of energy supply projects in isolated areas using RES in different climatic conditions shows the need to use appropriate technologies to ensure reliable and safe energy supply to consumers. What are the requirements for such technologies? To what extent are the existing support measures for such technologies and projects sufficient for the systematic implementation of projects?

#### Participants:

"VDM-tekhnika" LLC, "Neosun Energy" LLC, Sergej Gribkov - academician of RIA, Sistemo-Tekhnika" Group

<p><b>Panel discussion</b></p> <p><b>Hall 2</b></p> <p><b>12.00 – 13.30</b></p> <p>(duration 1.30)</p>	<p><b>Swiss experience: organization of financing of innovative applied R&amp;Ds for development of renewable energy</b></p> <p>Russian-Swiss cooperation in the field of RES is based on two important factors:  a) The existence of a mechanism for rapid joint development of R&amp;D, supported by the leading research centers of the two countries and industrial partners of both large and small businesses;  b) The development of bilateral financing mechanisms for R&amp;D. What are the best practices of financing and implementing innovative applied R&amp;D in the field of RES? What conditions should the projects for regional development of renewable energy match for successful creation of a consortium and obtaining financing?</p> <p><b>Participants:</b>  Meyer Burger Mechanical engineering company, R&amp;D Center TFTE (Hevel), Andreas Dreisiebner - Project Manager of Arosa/ Yakutsk project, PEP Solutions, FlowGen, Wepfer Technics AG, Zurich University of Applied Sciences</p>
<p><b>13.30 – 14.30</b></p>	<p>Lunch</p>
<p><b>Panel discussion</b></p> <p><b>Hall 1</b></p> <p><b>14.30 – 16.00</b></p> <p>(duration 1.30)</p>	<p><b>Practical cooperation of German and Russian companies on creation of new RES generation facilities in the regions - implementation of the project “Enabling PV in Russia»</b></p> <p>The German Energy Agency (dena), NP "EUROSOLAR Russia" in partnership with the German Solar Energy Association "BSW-Solar" provide ready-made solutions for the creation of small projects for renewable energy generation in the regions. Growth and development of commercial consumers, project owners, use of various technologies are creating preconditions for formation of a new market for independent projects. How to create a consortium to launch a RES project? What are the possibilities of attracting project holders and investors to initiate a regional renewable energy projects?</p> <p><b>Participants:</b>  German Energy Agency (dena), Solar23, BAE Batterien GmbH, Kraftwerk RSP, JSC “BES” (electric grid company), Fraunhofer ISE</p>
<p><b>Panel discussion</b></p> <p><b>Hall 2</b></p> <p><b>14.30 – 16.00</b></p> <p>(duration 1.30)</p>	<p><b>Electric vehicles and new energy infrastructure</b></p> <p>Recently, widespread adoption of electric vehicles seemed to be something out of science fiction. In Russia very few people took this idea seriously. Traditionally, in our country happenings related to the hydrocarbon market, e.g., when a new equilibrium oil price will be established, or a discussion about how to survive the "shale revolution", have aroused much greater interest.</p> <p>It seems that during the discussion of all these, of course, important issues, we run the risk of not noticing the onset of truly revolutionary changes associated with the "greening" of the world energy in general and the massive abandonment of cars with ICE, which in its scale can only be compared to the transition from coal to oil in the early XX century.</p> <p>What does portend such epochal changes in the global energy sector and how ready is Russia to follow this global trend? How much will the global electric transport market grow in 2020 and in the next 5-10 years? What factors hinder the development of the electric car market in Russia? What incentives do investors need to implement investment programmes to develop an appropriate infrastructure?</p> <p><b>Participants:</b>  “Neosun Energy” LLC, Russian Energy Agency, Gazprombank, Rosseti, IHS Markit, RystadEnergy, VYGON Consulting, Ernst &amp; Young, Institute for Energy and Finance, Skolkovo Foundation groups, TeslaClub, ABB, Sollers, Central Scientific Research Automobile and Automotive Engines Institute (NAMI), Moscow government</p>