RREDA
RUSSIA RENEWABLE ENERGY DEVELOPMENT ASSOCIATION

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МИНИСТЕРСТВО ЭНЕРГЕТИКИ РОССИЙСКОЙ ФЕДЕРАЦИИ

РЭА
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Hard Talk on Renewable Energy in Russia

(October 14-15, Moscow, World Trade Center, Gostiny Dvor)

About the event

The global renewable energy sector demonstrated record growth rates in 2024, with new capacity additions surging by 24%. A total of 670 GW of new solar and wind power plants were commissioned (according to the IEA). Renewable energy sources now account for 93% of all new power generation capacity commissioned worldwide. The energy transition continues to be a major global trend, and Russia is no exception in this regard.

Since 2024, the single-rate price of wind and solar generation from new investment projects in Russia has consistently remained below that of other generation facilities. At the same time, Russia's existing economic potential for renewable energy generation cannot be fully realized without measures aimed at comprehensive planning for the integration of large volumes of energy transition technologies into the national power system.

The United Nations Economic Commission for Europe (UNECE), together with the International Renewable Energy Agency (IRENA), the Ministry of Energy of Russia, and the Russia Renewable Energy Development Association (RREDA), are initiating an ad-hoc discussion to address key issues in renewable energy development in Russia and to identify the sector's potential 'growth points.'

Key topics

- Integrating RES generation capacity into medium- and long-term electricity and capacity planning / the contribution of RES to supply balance reliability.
- Developing medium- and long-term power system planning documents with a growing share of RES generation.
- Planning of renewable energy facilities allocation (concentration vs. distribution, green energy zones) and related grid infrastructure development.
- Forecasting and balancing renewable energy output from weather-dependent facilities (use of BESS, balancing markets).

Day 1, October 14, World Trade Center (10.00 – 20.00), City Lounge Hall, Entrance 10, Floor 20.

SESSION 1. Opening and Setting the Agenda based on RREDA Status Report (10:00 – 11:30)

Topics of the session:

- Status and prospects of renewable sector in Russia.
- Current issues related to increasing the efficiency of integrating RES into the power grid
- Setting tasks to the experts for drafting the recommendations for further consideration

Moderator:

Alexey Zhikharev, Director, RREDA (overview of the Russian renewables market)

Discussion participants:

Gianluca Sambucini, Secretary of the UNECE Group of Experts on Renewable Energy (setting the tasks)

Alberto Biancardi, Chair of the UNECE Group of Experts on Renewable Energy *(Zoom)*

Andrey Maksimov, Director of the Electric Power Development Department, Ministry of Energy of Russia

Alexey Kulapin, General Director, Russian Energy Agency, Ministry of Energy of Russia

Andrey Kataev, Member of the Management Board, Director for Energy Markets and External Relations of JSC "SO UES" (System Operator)

Oleg Barkin, Deputy Chairman of the Board, NP Market Council

Taras Kupchikov, Chairman of the Executive Committee of the Electric Power Council of the Commonwealth of Independent States (CIS)

Francisco Gafaro, Team Lead Power Sector Transformation, IRENA

Coffee break (11:30 – 12:00)

SESSION 2. Medium- and Long-Term Planning of the Power System with a Growing Share of Renewables (Part 1) (12:00 – 13:30)

Topics of the session:

- Incorporating RES generation into electricity and capacity balance planning
- Assessment of the capacity value of RES and their contribution to system reliability / the role of BESS
- Sales of RES generation capacity in the capacity market.

Moderator:

– Alexey Zhikharev, Director, RREDA

Discussion participants:

– Ian Cherepanov, Head of Analytical Department, RREDA

Presentation on Current Challenges and Setting the Task

– Alberto Biancardi, Chair of the UNECE Group of Experts on Renewable Energy *(Zoom)*

Presentation on best practices for transforming approaches in countries with a growing share of RES generation

– Alina Gilmanova, Consultant on Solar Energy, Energy and Industrial Policy, IRENA

Presentation on Promising Approaches to Defining the Capacity Value of Renewables with Examples from Various Capacity Markets

– Andreas Dreisiebner, Vice-Chair of the UNECE Group of Experts on Renewable Energy *(Zoom)*

Presentation on the Synergistic Effects Between Hydropower and Renewables in Determining the Capacity Value of Renewables

– Branko Milicevic, Secretary of the UNECE Group of Experts on Gas

Presentation on the Synergistic Effects Between Gas Power Generation and Renewables in Determining the Capacity Value of Renewables

– Zhang Zhenyu, Deputy Director, National Electric Power Dispatching Center, State Grid Corporation of China

Presentation on China's Experience in Accounting Synergistic Effects Between Renewables, Hydropower, and Energy Storage Systems in Determining the Capacity Value of Renewables, and in Integrating "Green Energy Hubs" into the Power System

– Francisco Gafaro, Team Lead Power Sector Transformation, IRENA

Expert opinion

– Denis Pilenieks, Director for UPS Development, JSC "SO UES" (System Operator)

Expert Opinion

– Alexey Guber, Head of the Competitive Pricing Development Department, "NP Market Council" Association

Expert Opinion

Lunch (13:30 – 14:30)

SESSION 3. Medium- and Long-Term Planning of the Power System with a Growing Share of Renewables (Part 2) (14:30 – 16:00)

Topics of the session:

- Assessment and forecasting the economic efficiency of RES projects.
- Approaches to developing strategic medium- and long-term power system planning documents (scenario approach, project selection).
- Inclusion of advanced network development in long-term planning documents for RES integration.
- Formation of special zones for integrated RES development (clusters)

Moderator:

– Gianluca Sambucini, Secretary of the UNECE Group of Experts on Renewable Energy

Discussion participants:

– Alexey Zhikharev, Director, RREDA

Presentation on the existing long-term planning system and proposals for its improvement

– Francisco Gafaro, Team Lead Power Sector Transformation, IRENA

Presentation on Global Best Practices in Long-Term Power System Planning with a Growing Share of Renewables

– Kolluru Krishan, Chairman, CVC India Infrastructure Pvt Ltd

Presentation on India's Experience in Integrating Large-Scale Renewable Energy Projects into the Power System

– Branko Milicevic, Secretary of the UNECE Group of Experts on Gas **(Presentation on Synchronizing the Development of Gas Transportation Infrastructure with the Launch of Major Energy Projects)**

– Andreas Dreisiebner, Vice-Chair of the UNECE Group of Experts on Renewable Energy *(Zoom)*

Presentation on Switzerland's Experience in Long-Term Power System Planning with a Growing Share of Renewables

– Ian Cherepanov, Head of Analytics Department, Renewable Energy Development Association

Expert Opinion

– Alina Gilmanova, Consultant on Solar Energy, Energy and Industrial Policy, IRENA

Expert opinion

Coffee break (16:00 – 16:15)

SESSION 4. Forecasting and balancing of RES generation (16:15 – 18:00)

Topics of the session:

- Forecasting RES output: centralized vs. decentralized approaches
- Available solutions and incentive systems for improving forecast accuracy

Moderator:

Gianluca Sambucini, Secretary of the UNECE Group of Experts on Renewable Energy

Discussion participants:

Ian Cherepanov, Head of Analytical Department, RREDA

Presentation on the Status of the Forecasting System and Incentives for Improving its Quality

Evgeniya Franke, Director Electric Utilities, JSC Euler Analytical Technologies

Presentation on the EU forecasting practices in RES generation

Francisco Gafaro, Team Lead Power Sector Transformation, IRENA

Expert Opinion on Global Best Practices for Designing Incentive Systems to Improve Renewable Energy Forecasting Accuracy and for Leveraging the Potential of Renewables in Providing System Services

Alina Gilmanova, Consultant on Solar Energy, Energy and Industrial Policy, IRENA

Presentation on the Impact of Digitalization on Renewable Generation Forecasting Systems

Mikhail Govorun, Director for UPS Operational Control, Chief Dispatcher of the System Operator, JSC "SO UES" *(TBC)*

Presentation on the Development Prospects of a Centralized Renewable Generation Forecasting System

Dinner (18:00 – 20:00)

Day 2. October 15, Gostiny Dvor, Territory of Energy Dialogue (TED), Russian Energy Week (09:30 – 11.30)

FINAL SESSION. Summarizing the results of the Hard Talk and formulating recommendations for RES sector development in Russia

Format:

Round table, open discussion

Moderator:

– Alexey Zhikharev, Director of the Russia Renewable Energy Development Association

Discussion participants:

– Alexey Zhikharev, Director, RREDA *(report summarizing the Hard Talk)*

– Andrey Maksimov, Director of the Electric Power Development Department, Ministry of Energy of Russia

– Alexey Kulapin, General Director, Russian Energy Agency, Ministry of Energy of Russia

– Fyodor Opadchiy, Chairman of the Management Board, JSC "SO UES" (System Operator)

– Oleg Barkin, Deputy Chairman of the Management Board, NP Market Council

– Mikhail Rasstrigin, First Vice President, Head of the Center for Economic Analysis and Forecasting, Center for Strategic Research Foundation

– Alberto Biancardi, Chair of the UNECE Group of Experts on Renewable Energy *(videoconference)*

– Gianluca Sambucini, Secretary of the UNECE Group of Experts on Renewable Energy

– Francisco Gafaro, Head of the Power Sector Transformation Program, IRENA

– Kolluru Krishan, Chairman, CVC India Infrastructure Pvt Ltd