



PROGRAMME

International Conference
EFFICIENT POWER GENERATION

19 - 20 September 2011
Russia, Moscow, World Trade Center

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The International Conference EFFICIENT POWER GENERATION

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World Trade Center, Moscow, Russia

Day 1 – September 19th

- 09.30 - 10.00** **Registration**
- 10.00 - 11.25** **Session 1: Opening remarks and keynote addresses**
- 10.00 - 10.05** **Opening remarks: Boris Kovalchuk**, Chief Executive, Inter RAO
- 10.05 - 10.25 Energy efficient power generation in support of the Russian 2030 Energy strategy.
Andrey Shishkin, Deputy Minister, Ministry of Energy of the Russian Federation
- 10.25 - 10.45 Russia's science and technology policy to advance energy technologies.
Sergey Mazurenko, Deputy Minister, Ministry of Education and Science of the Russian Federation
- 10.45 - 11.05 Improving energy efficiency and decarbonisation of the power sector in the international energy context: challenges and opportunities.
Ambassador Richard H. Jones, Deputy Executive Director, IEA
- 11.05 - 11.25 Efficient power generation in the Development strategy of Inter RAO.
Boris Kovalchuk, Chief Executive, Inter RAO
- 11.25 - 11.45** **Coffee Break**
- 11.45 - 13.00** **Session 2: The power sector today: efficient and environmentally clean electricity and heating power generation**
- Chairman:**
Ambassador Richard H. Jones, Deputy Executive Director, IEA
- 11.45 - 12.00 Electricity sector: a status report.
Laszlo Varro, Head of Gas, Coal and Power Market Division, IEA

- 12:00 - 12.15 Improving energy efficiency as a part of activities of the Inter RAO's Center for Energy Efficiency.
Tamara Merebashvili, Deputy Director of the Center for Energy Efficiency of Inter RAO
- 12:15 - 12.30 EBRD and power generation efficiency in Russia: achievements and challenges ahead.
Ioannis Papaioannou, Senior Engineer, Energy Efficiency and Climate Change, EBRD
- 12:30 - 12.45 Energy Management and maximizing production efficiency for existing and new plants: practical experience of a multinational energy company operating in the Russian market.
Dr. Enrico Viale, Chief Executive Officer of ENEL Russia and CIS
- 12:45 - 13.00 Questions and Answers. Discussion.
- 13:00 - 13.45 Lunch**
- 13:45 - 15:30 Session 3: The Russian Energy Technology Platforms as a means to advance the transition to a more efficient power generation and innovation**
- Chairman:**
Representative of the Ministry of Economy
- 13:45 - 14:00 Technology Platform «Environmentally friendly and efficient heating power generation».
Alexander Klimenko, VTI General Director, TP Coordinator
- 14:00 - 14:15 Smart Grid Technology Platform.
Alexey Konev, Russian Energy Agency, TP Coordinator
- 14:15 - 14:30 Technology platform: «Distributed power generation».
Sergey Kozhukhovskiy, General Director, APBE, TP Coordinator
- 14:30 - 14:45 Bioenergy Technology Platform.
Stepan Dudarev, Head of Innovative Energy Division, National Research Center «Kurchatov Institute»
- 14:45 - 15:00 Nuclear Power Sector in the Russian Federation.
Boris Bokarev, Head of Electricity Division, RosAtom
- 15.00 - 15.30 Questions and Answers. Discussion.
- 15:30 - 16.00 Technical break**

16.00 - 17.30 Session 4: International cooperation and other instruments to support innovation in the power sector

Chairman:

Peter Cuntz, Chair of the IEA Committee on Energy Research and Technology (CERT)

16:00 - 16:15 IEA clean technology cooperation initiatives: the International Low Carbon Energy Technology Platform and the Implementing Agreements.

Ambassador Richard H. Jones, Deputy Executive Director

16:15 - 16:30 International Cooperation Aspects and Instruments of the European Union Strategic Energy Technologies (SET) Plan.

Ismo Koskinen, Energy Counsellor, Delegation of the European Union to Russia

16:30 - 16:45 Roadmap for Russia-EU cooperation in the field of energy (up to 2050).

Pavel Ponkratyev, JSC «RUSHYDRO»

16:45 - 17:00 The Innovation Center Skolkovo and its activities in development and deployment of innovative technologies in Russia.

Ekaterina Dyachenko, Acting Head of the Cluster Development Fund for energy-efficient technologies, «Centre for Development and Commercialization of New Technologies»

17:00 - 17:15 Questions and Answers. Discussion.

17:15 - 17:30 Summing up the outcomes of the 1st day of the conference

18:00 - 21:00 Welcome dinner at the World Trade Center

Day 2 – September 20th

10:00 - 14:00 **Session 5: Breakout groups**

The meeting will split into four parallel roundtables focusing on different technology areas to exchange experience in developing and implementing efficient technologies in the power generation sector. Speakers will highlight international best practices how to scale up the implementation of such technologies in Russia and CIS.

Roundtable 1: Modern technologies for thermal power plants – efficiency, reliability and environmental security. The Russian and global experience

Roundtable 2: Distributed power generation systems: growth limits and system integration problems

Roundtable 3: Smart Grids development and deployment

Roundtable 4: Efficient use of energy in the end-use sector: Modern technology solutions and their effect on energy consumption

10:00 - 12:00 **Session 5A. Roundtable discussions**

12:00 - 12:45 **Lunch**

12:45 - 14:30 **Session 5B. Continuation of the roundtable discussions**

14:30 - 15:00 **Technical break**

15:00 - 16:30 **Session 6: Plenary meeting**

Co-Chairs:

Ambassador Richard H. Jones, Deputy Executive Director, IEA

Academician Oleg Favorsky, Chair of the S&T Council of Inter RAO

Tamara Merebashvili, Deputy Director of the Center for Energy Efficiency of Inter RAO

15:00 - 16:00 Chairmen from the four Roundtables will make a summary of the roundtable debates, to be followed by general discussion

16.00 - 16.30 **Wrap-up session**

- **Ambassador Richard H. Jones**, Deputy Executive Director, IEA
- **Academician Oleg Favorsky**, Chair of the S&T Council of Inter RAO
- **Tamara Merebashvili**, Deputy Director of the Center for Energy Efficiency of Inter RAO

Roundtable 1:

Modern technologies for thermal power plants – efficiency, reliability and environmental security: the Russian and global experience

Co-Chairs:

Alexander Klimenko, VTI General Director

Laszlo Varro, Head of Gas, Coal and Power Market Division, International Energy Agency

10:00 - 12:00 Session 5A: Thermal power plants in Russia and worldwide

- Introductory speech: the main challenges and goals in transitioning the Russian power sector – **Academician Oleg Favorsky**, member of the Russian Academy of Sciences, Chair of Inter RAO S&T Council
- Presentation of the IEA Clean coal roadmap – **Carlos Fernandez-Alvarez**, Senior Analyst, Coal IEA
- Development and deployment of innovative technologies to support the programme for modernizing the Russian power sector – **Dr. Michael Saporov**, Krzhizhanovsky Energy Institute, Head of Laboratory
- Development and introduction of model innovative power equipment – **A. Lapin**, General Director, ANO «Enginerring Center Power Engineering Industry»
- Operational problems and prospect for introduction of advanced technologies in the Russian thermal power sector – **Dmitry Bashuk**, Gazpromenergoholding
- New construction materials for power equipment – **Vladimir Skorobogatykh**, Deputy of the General Director, JSC «TsNIITMash»
- Prospects for use of technologies for surface strengthening and for new generation protective coverings to improve reliability and performance of the power equipment – **Dr. Vyacheslav Ryzhenkov**, Deputy of the VTI General Director
- **Questions & answers. Discussion.**

12:00 - 12:45 Lunch

12:45 - 14:30 Session 5B: Advanced technologies for heat and power generation

- Practical experience in construction and operation of the 660 MWt power unit with supercritical parameters in Check Republic – **Irji Soukal**, Technical Director, SIGMA (CH)
- Improving energy efficiency in power generation sector: boilers and their modernization – **Boris Firsov**, Vice-President for Innovation, JSC «EM-Alliance»

- Advanced technologies in the field of power generation – **Michael Turundaev**, Manager for Business Development, Alstom (Russia)
- An overview of GE gasification technologies – **I. Soloviev**, Director for Europe and CIS, GE, Gasification Division
- The legislation frameworks regulating thermal power plant emissions around the world: how it affects the operation of energy companies (with focus on EU companies) – **Dr. Lesley Sloss**, Principal Environmental Consultant, IEA Clean Coal Centre
- **Questions & answers. Discussion.**

Roundtable 2:

Distributed energy systems: growth limits and system integration problems

Co-Chairs:

Sergey Filippov, Deputy Director, Institute of Energy Research

Paolo Frankl, Head of Renewable Division, International Energy Agency

10:00 - 12:00 Session 5A: Distributed energy system in Russia and worldwide

- Modern technologies of distributed power generation – **Dr. Viktor Zaichenko**, Head of Laboratory, Energy Saving Problems, Joint Institute of High Temperatures of the Russian Academy of Sciences
- Co-generation in Russia: a case study of development and introduction of co-generation units, **Dmitry Sulimov**, General Director of JSC "Aviadvigatel"
- Improving quality of pellets and bricks for co-generation units – **Dr. Vera Myasoedova**, General Director, Engineering company GRANTEK, Ltd.
- District Heating/CHP opportunities and challenges in Russia and CIS – **Dr. Arto Nuorkivi**, District Heating and Cooling/CHP Implementing Agreement
- Strong and weak points of using the Russian made equipment for distributed power generation systems of low and middle capacity – Director, «Stroykonstructor», Ltd (Volgograd)
- Conversion of boiler-houses into mini-power generation plants – **A. Bogacheva, V. Okorokov, A. Shapovalov**, St.Petersburg state polytechnical university
- **Questions and answers. Discussion.**

10.00 - 10.25 Session 5B. Intergration of renewables into district energy systems. Heat pumps and use of geothermal energy

- Integration of renewable technologies into power systems – **Paolo Frankl**, Head of Renewable Division, International Energy Agency
- Pumping systems for use of low-heat energy of the upper layers of the Earth for heating buildings. Practical experience and prospects for making use of heat pumps in heat and cold supply – **G. Vassiliev**, Head of the Center for Energy Saving and efficient use of non-traditional sources of energy in construction, GUP NII Mosstroy (Moscow), Chair of the Board of Director, INSOLAR-INVEST Ltd (Moscow)
- Prospects for use of heat pumps in Russia – **Sergey Philippov, Marina Dilman, Michael Ionov**, Institute of Energy Research of the Russian Academy of Sciences
- The development of geothermal energy: the IEA geothermal roadmap and opportunities for geothermal energy in Russia and CIS – **Milou Beerepoot**, IEA
- Construction and operation of biogas stations in Belgorod region: experience and development strategy – **Maxim Timofeev**, General Director, Regional Biotechnology Center
- Modern technologies for pyrolysis of bio organic wastes – **E. Sulman**, Director of the Institute of nano- and biotechnologies, Tver University of Technologies
- **Questions and answers. Discussion.**

Roundtable 3:

Smart Grids: their development and deployment

Co-Chairs:

N. Voropai, general director of Meletyev Institute of Energy Systems (Irkutsk)
Michele DiNigris, Chair of ISGAN Implementing Agreement

10:00 - 12:00 Session 5A. Smart Grid Concepts in Russia and worldwide

- Overview of the IEA Smart Grid Roadmap – **Michele De Nigris**, Director - T&D Technologies Department, Ricerca sul Sistema Energetico (Italy), Chair of ISGAN Implementing Agreement
- Innovative Development Program of JSC «FSK UES» – **Yury Dementyev**, Head of Department for Technological Development and Innovation, JSC «FSK UES»
- Smart grid concept for the National united electricity network of Russia – **Y. Morzhin, Y. Shakaryan**, National Technology Center of Electrical Power Industry

- Organizational and technological innovation for «smart» power sector – **Vitaly Bushuev**, General Director, Institute of Energy Strategy
- Transition to smart Energy system of Russia: assessment of effects – **Fedor Veselov**, Head of Division, Development and Restructuring of the Electricity Sector, Institute of Energy Research of the Russian Academy of Sciences
- Technologies for smart on-line and emergency control in the Russian energy systems – **Nikolay Voropai, Yury Morzhin, Igor Yadykin** (National Technology Center of Electrical Power Industry, Institute of management problems of RAS, Institute of energy systems)
- **Questions and answers. Discussion.**

12:00 - 12:45 Lunch

12:00 - 14:00 Session 5D. How to enhance the development and deployment of Smart Grids

- International efforts in the development of smart grids: IGSAN's plan of action and related activities – **Michele De Nigris** (Italy), Chair of IGSAN Implementing Agreement
- Strategies and practical experiences of companies: the example of Alstom – **Philippe Simon**, Alstom
- Hitachi's experience in developing smart grids, **Shinichi Inage**, Hitachi Ltd Power Systems (Japan)
- Modern electricity grids: lessons learned from modernization of the electricity system of Armenia – **Narek Oganessian**, Head of Division, Armenian grid company
- High-voltage equipment for smart electricity systems – **Vladimir Varivodov**, 1st Deputy of the General Director, All- Russian Institute
- Technologies for smart on-line and emergency control in the Russian energy systems – **Y. Morzhin, I. Yadykin** (National Technology Center of Electrical Power Industry, Institute of management problems of RAS, Institute of energy systems)
- Promising research areas and projects in the field of smart grid technologies (an overview) – **D. Efimov**, Institute of Energy Systems, RAS (Irkutsk)
- Financing smart grids projects in Russia and CIS – **Igor Kovtun**, General representative in Russia, Nordic Investment Bank
- **Questions and answers. Discussion.**

Roundtable 4:

Efficient use of energy in the end-use sector: Modern solutions and technologies for improving energy efficiency in buildings

Co-Chairs:

Tamara Merebashvili, Deputy of the General Director, Inter RAO's Center for Energy Efficiency

Alexander Naumov, AVOC Vice President, General Director NP «TERMEK»

Nathalie Trudeau, Energy Technology Policy, International Energy Agency

10:00 - 12:00 **Session 5A: Energy Efficiency: challenges and opportunities in Russia and CIS**

- Development of Energy Efficiency indicators in Russia – **Nathalie Trudeau**, Energy Technology Policy, International Energy Agency
- From efficient equipment to efficient buildings – **Alexander Naumov**, AVOC Vice President, General Director NP «TERMEK»
- Improving energy efficiency in buildings: overview of the best practices worldwide – **Yamina Saheb**, Energy Efficiency Unit, International Energy Agency
- Improving Efficiency of heat supply systems through use of modern energy saving and environmentally friendly technologies – **Dr. Alexander Volkov**, Deputy National Research University «Moscow Power Institute»
- Innovative solutions for energy efficiency in buildings (private sector case study), **Bob Dixon**, Senior Vice-President and Global Head, Efficiency & Sustainability, Building Technologies Division, Siemens Industry

12:00 - 12:45 **Lunch**

12:45 - 14:30 **Session 5B: How to advance energy efficiency in industrial sector: best practices**

- Improving Energy Efficiency in the Industrial Sector: the practical solutions – **Vincent de Rule**, General Director, Fenice Rus
- Systems to assess quality of energy consumption for end-user of heat and electricity – **Alexander Bogdanov**, Chief Technology Engineer, E4 SibKOTES
- Energy Efficiency in buildings in Russia: case studies (North-West Buildings, Standards and Labels and Lighting), **John O'Brien**, Regional Technical Advisor, Energy and Environment Practice, UNDP
- Improving Energy Efficiency in Buildings: efficiency standards and labelling – **John O'Brien**, Regional technology adviser on energy and environmental issues, UNDP
- Labelling of energy efficient equipment as a means to raise energy efficiency – **Vyacheslav Popov**, Head of the Working Group of the Project co-funded by the Russian Ministry of Education and Science, UNDP and GEF
- **Questions and answers. Discussion.**