

ENERGY-21: SUSTAINABLE DEVELOPMENT & SMART MANAGEMENT

International Conference

September 7-11, 2020, Irkutsk, Russia

<http://isem.irk.ru/energy21>



Dear Colleagues,

We are pleased to kindly invite you and your colleagues to participate in the international conference “Energy-21: Sustainable Development & Smart Management” which will be held on September 7-11, 2020 in the Irkutsk (Russia) - the largest Siberian city near Baikal Lake. The conference organized by Melentiev Energy Systems Institute SB RAS together with:

- [Global Energy Interconnection Development and Cooperation Organization \(GEIDCO\)](#)
- [Gas Exporting Countries Forum](#)
- [Global Energy Association](#)

The Conference is going to open a comprehensive discussion of the fundamental problems of sustainable energy development in the world and regions. This forum is expected to gather leading world scientists and specialists in the field of energy.

The main topics are:

- Sustainable energy development
- International energy cooperation
- Interstate energy systems, global energy interconnection
- Energy security
- Energy markets and energy policy
- Energy systems development and operation
- Smart control and management, cybersecurity
- Integrated energy supply systems
- Reliability and quality of power supply
- Environmental energy issues
- Innovative energy technologies, renewable energy sources, hydrogen energy
- Systems analysis, mathematical modeling, computational methods and information technology in the energy

The *working languages* of the Conference are English and Russian. Simultaneous translation will be provided.

We also invite you to take part in the Plenary session joint with Scientific Council meeting of MESI SB RAS of dedicated to the *60th anniversary* of the Melentiev Energy Systems Institute SB RAS, which will be held on September 7, 2020 at 14:00.

The conference organizing committee expresses the hope that the situation with the spread of coronavirus will be stabilized by the summer, and the conference will be held as scheduled.

Looking forward to meeting you at the Conference!

Organizing committee

Important dates

April 20, 2020	Abstract submission
May 10, 2020	Notification of abstract acceptance
July 1, 2020	Final paper submission
September 1, 2020	Deadline for registration
September 7, 2020	Plenary session joint with Scientific Council meeting of MESI SB RAS
September 8-10, 2020	Plenary and special sessions
September 11, 2020	Reserve day (free discussions, a trip)

Conference Sessions

Plenary session

Speeches by leading scientists on the main issues of energy development in the world.

Session 1. Intelligent energy systems under transformation

Key topics: Factors determining the transformation of energy systems, and a radical change in their properties. Advantages and problems of digitalization and smartization of cyber-physical energy systems. Intelligent control of energy systems. Integrated energy systems.

Session 2. Advanced energy technologies: environmentally friendly, resource-saving, and renewable energy.

Key topics: Backgrounds, trends, and problems in renewable energy development. Prospects for "clean" energy technologies. Environmental problems of the energy sector and ways to solve them.

Session 3. Interstate energy interconnections, global energy interconnections.

Key topics: Factors stimulating the development of interstate energy interconnections and factors inhibiting these processes. Global energy interconnection: prerequisites and challenges. Examples and implications of interstate cooperation. Promising ways of energy integration.

Session 4. Eastern vector of Russia's energy strategy: current state and look into the future

Key topics: Development of energy markets in Northeast Asia and the role of Russian energy resources. Strategic priorities for the development of the economy and energy in Russia's east. Priority prospective interstate projects and expected effects. Energy and fuel supply to the consumer in the northern and Arctic territories of eastern Russia.

Session 5. Reliability of fuel and energy supply to the consumer, energy security

Key topics: Problems of reliable fuel and energy supply in light of the growing requirements of the consumer. Studies on country-specific and region-specific energy security issues. Research into the vulnerability of critical energy infrastructures.

Session 6. Power quality

Key topics: Status of the power quality issue in light of the increasing demands of the consumer. Normative documents and their improvement. Methods of and approaches to providing power quality. Mechanisms for the implementation of activities.

Program Committee

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- **S.V. Alekseenko**, Kutateladze Institute of Thermophysics SB RAS, Russia
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- **Batmunkh Sereter**, Mongolian State University of Science and Technology, Mongolia
- **Van Binh Doan**, President of Institute of Energy Science of VAST, Vietnam
- **Pang Changwei**, Doctoral tutor Professor, China University of Petroleum, China
- **Yongsung Cho**, President of Korea Energy Economics Institute, Republic of Korea
- **Masahiro Kawai**, Representative Director and Director-General, Economic Research Institute for Northeast Asia, Japan
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- **Mikhael Negnevitsky**, Director of Centre for Renewable Energy and Power Systems School of Engineering, University of Tasmania, Australia
- **Saifur Rahman**, President of IEEE Power and Energy Society; Director of Virginia Tech Engineering, USA
- **Christian Rehtanz**, Director of the Institute of Energy Systems, Energy Economics and Energy Efficiency, Dortmund University of Technology, Germany
- **Masakazu Toyoda**, Chairman & CEO of Institute of Energy Economics, Japan
- **Makhbal Tumenjargal**, Director of Mongolian Energy Economic Institute, Mongolia
- **Jae-Young Yoon**, Principal Researcher, Korea Electrotechnology Research Institute, Korea

Abstract

Abstracts should be submitted in English through [the Conference site](#).

Please, fill in the [abstract submission form](#) and attach the abstract file according to the template in Microsoft Word format:

[Download abstract template](#)

Registration

Online registration is open on [the Conference site](#).

The registration fee is EUR 90 for participants.

Registration fee includes access to all sessions, a set of materials, coffee breaks, lunches on the Conference days, welcome reception, and Conference dinner.

Registration fee does not include Lake Baikal trip and publication of papers in the Conference Proceedings indexed in Scopus/Web of Science databases.

Documents on payment are provided upon request of participants.

Proceedings

The submitted papers will be published in the Conference Proceedings, provided the authors make a presentation and attend the Conference. Selected papers will be recommended to publish in special issue of the international peer-reviewed scientific journal [Energy Systems Research](#).

The publication fee is 90 EUR.

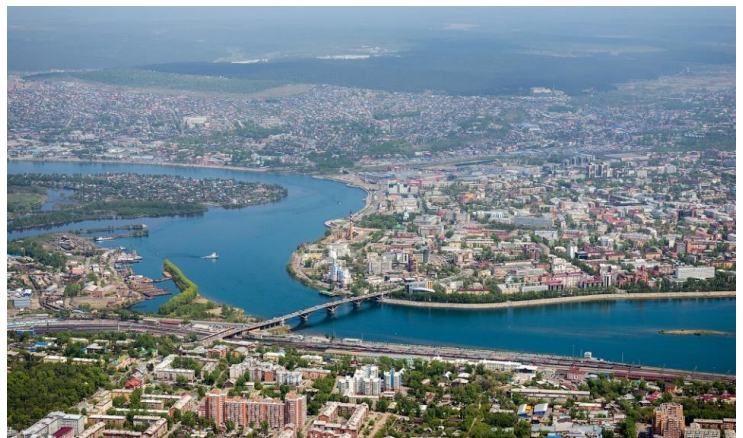
All papers are peer reviewed by at least two reviewers from the International Program Committee.

Papers should be designed according to the template - [download the template](#) and submitted to the Organizing Committee through the [Conference website](#) (preferably) or via e-mail: energy21.conf@gmail.com.

Venue

The Conference will be held in the city of Irkutsk, the capital of Eastern Siberia. The plenary and thematic sessions of the Conference will take place in comfortable spacious Conference rooms of the Melentiev Energy Systems Institute SB RAS at the address: 130 Lermontov St, Irkutsk. The city of Irkutsk is located on the Angara River, 66 km from Lake Baikal. The population of the city is more than 600 thousand people. The city was founded in 1661 and has a rich history. The coat of arms of the city, approved in 1690, is the mythical beast Babr (Siberian tiger), which holds a sable (animal) in its mouth. Babr, an ancient sacred animal, represents Siberia and sable symbolizes the wealth of the region.

Irkutsk can boast a great number of museums, theaters and shops that will make your stay unforgettable. Museums in Irkutsk hold unique collections of works of



art, historical and natural monuments. A short walk through the city center gives an idea of the old and modern city with its mixture of wooden houses and exquisite mansions of former Russian aristocrats in exile.

Lake Baikal is the deepest lake in the world and the largest freshwater reservoir on the planet. A one-day trip to Lake Baikal is provided for Conference participants.

Accommodation

The Organizing Committee recommends accommodation in the following Irkutsk hotels in the city center, where you can make early booking:

- [Courtyard Marriott Irkutsk City Center 4](#)
- [Ibis Irkutsk Center 3*](#)
- [Angara 3*](#)
- [Irkutsk 3*](#)

The organizing committee provides transport service for participants during the conference when placing in these hotels.

You can book rooms through Internet services, for example, <http://www.booking.com> or by contacting the hotel directly.

Organizing Committee

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