



XVI International Scientific Conference of Environmental and Climate Technologies

BOOK OF ABSTRACTS

10–12 May 2023 | Riga, Latvia

CONECT 2023
XVI International Scientific Conference of
Environmental and Climate Technologies

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CONECT 2023 CONFERENCE

It is a great pleasure to welcome you to the CONECT 2023 – XVI International Scientific Conference of Environmental and Climate Technologies.

CONECT Conference has been held since 2008. The conference annually brings together scientists, researchers, PhD students and professionals from all over the world. The purpose of the conference is to acquaint participants with recent achievements in energy systems and environmental engineering, as well as to give them an excellent opportunity to share experiences and publish research results. The three-day event brings together an impressive line-up of speakers from more than 20 countries around the world.

CONECT offers Plenary and Panel sessions on the following, but not limited with, topics:

- Environmental and Energy Policies and Frameworks
- District Heating
- Energy Efficiency
- Renewable Energy Technologies
- Biotechnologies
- Low Carbon Development and Bioeconomy
- Bioresources
- Sustainability and Resilience

The conference papers are published in the international scientific journal “Environmental and Climate Technologies” (ISSN: 2255-8837) indexed in SCOPUS and Web of Science.





In addition to Plenary and Panel sessions, the CONECT conference hosts a number of social events, including: Innovative Industrial Pilot tour, poster session and virtual exhibition, scientific workshop, social dinner and more.

The conference is organised by RTU IESE and takes place every year in the second week of May.



**WE WISH YOU ALL
A FRUITFUL CONFERENCE!**
CONECT 2023 Conference
Organising Committee

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CONFERENCE HERE:**



RTU IESE

The Institute of Energy Systems and Environment (IESE) of the Riga Technical University is gradually becoming a leader in Environmental Science and engineering science in Latvia.

This is testified by the unwavering interest of partners to cooperate with us both in research sectors well-balanced in climate technologies and resilience, energy and environmental policy, environmental governance and energy management and resolution of engineering-technical issues in industrial, agricultural, energy and waste management companies through the application and adaptation of various computer models in process simulations.

Lately, systems dynamics modelling has become that which is most prominent both for mathematical description and simulation of processes, as well as for the analysis of policy instruments in many

sectors of the economy. Research on increasing the energy efficiency in buildings, including biomimicry and studies on problems related to the heating of historical buildings, are also in demand, as well as on heating and mass exchange technologies, including drying, burning and gasification, the main influence being placed on the scientific research of innovative technological processes. The guarantee for the sustainability of the IESE is in searching for new areas which results in interesting future projects. In the past years, our experience has allowed us to acquire more in-depth knowledge of bioeconomy and research its role in the development of a country, its regions, and society.





Without a doubt the balanced advancement in the IESE scientific research capacities is made sustainable through cooperation with strong partners in Latvia, the European Union member states, Norway, the USA, Colombia, Canada, Taiwan, India, and other countries. We participate in joint projects within the Baltic Sea Region, HORIZON, and the Nordic Energy Research programmes,

which have resulted in investments in the development in environmental science and engineering and have contributed to resolving environmental and engineering issues. We continue to be open to new cooperation in research and studies.

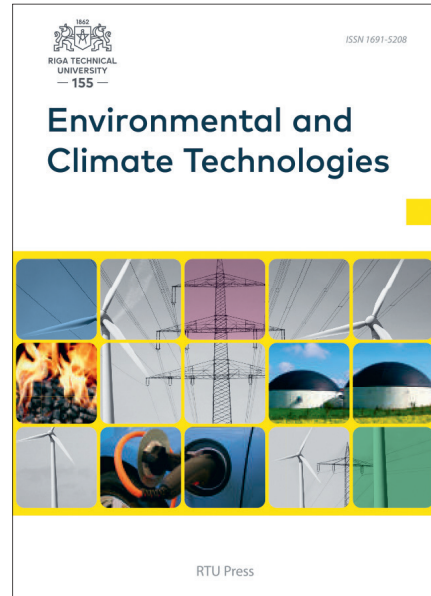
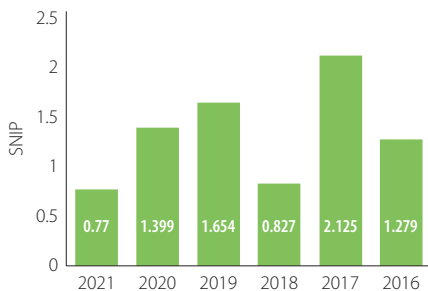
At the IESE we set ambitious goals and are convinced that we can reach them.



JOURNAL OF ENVIRONMENTAL AND CLIMATE TECHNOLOGIES

The journal Environmental and Climate Technologies is an international scientific journal, which is published by the RTU IESE. The journal provides international publicity for original research and innovative work. It covers a variety of topics for all aspects of Environmental science:

- Renewable energy technologies,
- Cleaner production and industrial symbiosis,
- Ecodesign and Life Cycle Assessment,
- Climate technologies,
- Climate change and resilience,
- Circular economy,
- Environmental monitoring and remediation.



The print version of the journal is published by RTU Press and the electronic version by De Gruyter Open (formerly Versita).

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Office in Latvia

The Nordic Council of Ministers' Office in Latvia is a representation of Nordic cooperation and has been in Latvia since 1991. The Nordic Council of Ministers' Office in Latvia works with various cooperation projects and support programs and helps to maintain and create networks to make the Nordic-Baltic region a front-runner in a globalised world. Openness to new thoughts, ideas, and partnerships is one of the fundamental principles of Nordic cooperation.



The French Institute in Latvia is a structural unit of the French Embassy in Latvia and, together with other services of the Embassy, is actively involved in the diplomacy of French influence. Its aim is to present French excellence in various fields (new technologies, cultural and creative industries, digital sphere, cultural heritage, climate for debate on societal issues, etc.) to a wide range of stakeholders through an innovative and interdisciplinary approach. It also offers French language courses and internationally recognised French proficiency tests. To achieve its objectives, the French Institute in Latvia works closely with the French Institute in Paris, the implementing agency for French cultural diplomacy abroad.



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The Embassy of Italy in Latvia actively promotes economic ties between Latvia and Italy by organizing trade missions, business and scientific conferences, and other events to connect businesses, entrepreneurs, and scientists from both countries.

At the same time, the Embassy promotes cultural and educational exchanges between the two countries by facilitating study-abroad programs, hosting exhibitions, and encouraging other cultural and educational events.

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