

Association for Research and Promotion of Energy  
Efficiency and Sustainable Development  
SKEEOR - Skopje

Fifth student conference Energy  
Efficiency and Sustainable  
Development



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**FIRST CALL FOR  
PAPERS**



Association for Research and Promotion of Energy  
Efficiency and Sustainable Development



Faculty of Electrical Engineering and Information  
Technologies – Skopje



IEEE Republic of Macedonia Section

MAKO CIGRE



Invite you to take part in the 5<sup>th</sup> student conference

# **ENERGY EFFICIENCY AND SUSTAINABLE DEVELOPMENT**

■23-25 November 2017■

■Skopje, Republic of Macedonia■

## ● **Conference goals and objectives**

By motivating the students to work on projects related to energy efficiency and sustainable development, a significant contribution towards their creativity in these areas can be made. This is one of the crucial aspects of reaching the currently existing goals in these fields and overcoming the challenges we will have to face in the future. The Student Conference Energy Efficiency and Sustainable Development presents a great opportunity for the students to take part in this process and by presentation of their research, discussion and collaboration- to contribute furthermore towards development of ideas about the wide range of possibilities that these areas have to offer. The conference as an event of this type will also have a huge positive impact on the people's awareness of this issue.

## ● **Scientific fields of the conference**

### **A. RENEWABLE ENERGY SOURCES**

- A1. Direct and indirect usage of renewable energy
- A2. Design and construction of renewable energy power plants
- A3. Hybrid renewable energy systems for electric power generation
- A4. Distributed power generation from renewable energy sources
- A5. Power grid integration of renewable energy sources
- A6. Renewable energy storage technologies

### **B. ENERGY EFFICIENT DEVICES, MEASUREMENTS AND DIAGNOSTICS**

- B1. Energy efficient electric machines, devices and apparatus
- B2. Energy efficiency in electric drives
- B3. Power control devices and possibilities for power quality improvement
- B4. Measuring the energy efficiency of facilities and processes
- B5. Energy efficient electronic consumers influences over the electric power system
- B6. Electrical energy savings in households and industries

### **C. SMART GRIDS AND AUTOMATION OF BUILDINGS**

- C1. Energy efficient networking
- C2. Smart grids - concepts and trends
- C3. Computer applications and supported design of electric power systems and renewable energy systems
- C4. Automation of processes and facilities to ensure the utilization of RES

- C5. Automation of buildings for improving energy efficiency and savings
- C6. Possibilities for using ICT for renewable energy and information technologies

## **D. ELECTRIC VEHICLES AND ENERGY EFFICIENT TRANSPORTATION**

- D1. Electric and hybrid vehicles
- D2. Fuel cell vehicles (FCV)
- D3. Energy efficient transportation
- D4. Managing energy for transportation
- D5. Internal transport and storage facilities

## **E. ENERGY EFFICIENCY IN CIVIL ENGINEERING AND ARCHITECTURE**

- E1. Passive and zero energy buildings
- E2. Energy efficient materials in civil engineering and architecture
- E3. Energy efficient buildings control and standardization
- E4. Building structures and environment

## **F. CONTROL OF SUSTAINABLE SYSTEMS AND ELECTRICAL ENERGY CONSUMPTION**

- F1. Control and monitoring of sustainable systems
- F2. Management and control of power quality
- F3. Planning of efficient electrical energy consumption
- F4. Energy systems sustainability assessment
- F5. Legal framework in energy efficiency and sustainable development
- F6. Socioeconomic and ecological aspects of sustainable development

## **G. UP TO DATE AND CURRENT TECHNOLOGIES AND MATERIALS**

- G1. Application of new materials in the renewable energy field
- G2. New ways for utilization of nanomaterials
- G3. Biofuels – production, properties and usage
- G4. New technologies for biomass
- G5. Landfills, storage and utilization of waste

## **H. ENVIRONMENTAL IMPACTS**

- H1. Greenhouse gas emission reduction policies
- H2. Working towards an energy efficient environment
- H3. Global warming and climate change
- H4. Environmental sustainability
- H5. Global environmental change and ecosystems management

## ● Participants

- Undergraduate students
- Postgraduate students
- Academic members
- Companies whose work is related to the conference theme

## ● Official languages of the conference

- Macedonian
- English

## ● Instructions for participants

- Participants that are currently in their undergraduate studies have to write their papers under a mentorship of a professor.
- For participants that are currently in their postgraduate studies, having a professor as a coauthor of their paper is recommended.
- To take part in the conference, authors have to apply by sending a completely filled application form including an abstract on the following e-mail: [skeeor@feit.ukim.edu.mk](mailto:skeeor@feit.ukim.edu.mk) until **30.09.2017**. The application form can be found on the official website of the conference <http://skeeor.feit.ukim.edu.mk>
- Abstracts should be written according to the instructions posted on the official website of the conference <http://skeeor.feit.ukim.edu.mk>
- The deadline for submission of the full paper text is **30.10.2017**.

## ● Papers review

Papers will be reviewed by the Scientific Board. If necessary, meetings between conference participants and the Scientific Board will be organized for paper correction.

## ● Conference proceedings

The papers that are written according to the official instructions and sent until the deadline, if accepted by the Scientific Board will be published in the conference proceedings.

## ● Location

- Faculty of Electrical Engineering and Information Technologies, Skopje, Republic of Macedonia.

## ● Information about the organizers

- SCEESD – Student Conference “Energy Efficiency and Sustainable Development”  
[skeeor@feit.ukim.edu.mk](mailto:skeeor@feit.ukim.edu.mk)
- FEEIT – Faculty of Electrical Engineering and Information Technologies Rugjer Boshkovik bb, 1000 Skopje, Republic of Macedonia [www.feit.ukim.edu.mk](http://www.feit.ukim.edu.mk)
- IEEE Republic of Macedonia Section  
Rugjer Boshkovik bb, 1000 Skopje, Republic of Macedonia  
[https://webinabox.vtools.ieee.org/wibp\\_home/index/R80077](https://webinabox.vtools.ieee.org/wibp_home/index/R80077)
- MAKO CIGRE  
Rugjer Boshkovik bb, 1000 Skopje, Republic of Macedonia  
<https://mako-cigre.mk/>

## ● Important dates

**30.09.2017** –Deadline for sending an application

**30.10.2017** – Deadline for submission of the full paper text

**23.11.2017 – 25.11.2017** – Conference