

Unlocking Tomorrow: Conference on Future Energy Solutions

24-26
SEPTEMBER
2025

Cluj-Napoca | Romania



FUTURE
ENERGY
SOLUTIONS
2025

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Join us for an enlightening conference dedicated to exploring the innovative solutions shaping the future of energy systems!

The 2nd edition of International Conference on Future Energy Solutions - FES – will be held in **Cluj-Napoca, Romania, on 24th – 26th September 2025**, and organized in collaboration between the Technical University of Cluj-Napoca (Romania), Eindhoven University of Technology (The Netherlands), University of Vaasa (Finland), Politecnica University Valencia (Spain), and Cracow University of Technology (Poland). FES 2025 is an international event sponsored by IEEE Romania.

FES2025 presents a fantastic opportunity to explore new research, ideas, and initiatives while engaging with influential leaders in the energy sector. Delegates will present their work and discuss a range of topics, including smart and sustainable solutions for future energy systems.

Key Dates

Submission of provisional version of the paper opens:

1 March, 2025

Notification of acceptance:

31 May, 2025

Submission of provisional version of the papers closes:

15 April, 2025

Deadline for uploading final full papers and conference forms:

30 June, 2025

ORGANIZERS



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Topics & Subtopics

Digitalization and Smart Technologies in Power Systems

- Digital substations and digital power system protection
- Digital twin technologies and its role in power system digital transformation
- Technologies enabling the digitalization of energy systems
- ICT, Data Analytics, and Artificial Intelligence applied to power systems

AI and Advanced Analytics in Energy Systems

- AI applications in energy conversion systems
- Intelligent monitoring and control of energy conversion processes through Machine Learning
- AI-Enhanced condition monitoring and predictive maintenance for industrial systems
- Machine Learning applications in predictive maintenance and reliability engineering
- Load and generation forecasting
- Optimization of energy conversion efficiency using AI

Electric Vehicles and the Future of Mobility in Energy

- Powering the future: integrating EVs, V2G, and V2X, and future management infrastructure
- Exploring the intersection of EVs, energy markets, and advanced AI
- Future management infrastructure for EVs and demand response

Energy Storage and Renewable Integration

- Energy storage systems and multi-energy systems and networks
- Renewable energy systems, distributed generation, and smart grids
- Diagnosis and condition monitoring of energy conversion systems

Market Evolution and Energy Transition

- The role of demand response and AI in the evolving energy ecosystem
- Transforming the future of electricity markets and AI-driven techniques
- The role of AI in transforming electricity markets
- Net Zero, energy transition, and sustainable e-transition

Power System Modelling, Analysis, and Applications

- Power electronics devices and applications
- New use cases and special applications
- Power system modeling and analysis
- Electrical building services

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General Co-Chairs

Claudia Steluta Martis, Technical University of Cluj-Napoca, Romania

Dan Doru Micu, Technical University of Cluj-Napoca, Romania

Miadreza Shafie-khah, RMIT University, Melbourne, Australia