

## Special Issue

# Toward Sustainable Energy Systems and Markets: Forecasting, Optimization, and Economic Decision-Making

### Message from the Guest Editors

This Special Issue seeks interdisciplinary contributions that bridge energy economics, energy finance, control and optimization, and broader institutional and policy perspectives to support clean-energy market integration in sustainable power systems. We welcome not only quantitative, data-driven, and methodological approaches, but also policy-relevant and multi-perspective economic analyses that address energy market design and decision-making under uncertainty. Topics of interest include, but are not limited to, the following:

- Electricity price, demand, and renewable-output forecasting;
- Risk management and derivative instruments for renewable producers;
- Design and simulation of sustainable market mechanisms and incentives;
- Model predictive control, optimal scheduling, and real-time operation of distributed energy resources;
- Data-driven methods (machine learning and statistical methods) for energy applications;
- Techno-economic assessment of PV/battery and district-energy systems;
- Policy and regulatory studies aimed at improving the efficiency and functionality of electricity markets;
- Investment and planning under uncertainty for sustainable energy transitions.

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### Guest Editors

Dr. Takuji Matsumoto

Dr. Hikaru Hoshino

Dr. Toru Hattori

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### Deadline for manuscript submissions

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### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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### Editor-in-Chief

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