Special Issue

Advanced Data Modeling for Sustainable Energy Systems

Message from the Guest Editors

The substitution of fossil fuels with renewable energy sources is rapidly increasing due to the urgency of mitigating climate change; most research efforts have focused on sustainable fuels and renewable systems for electricity and heat generation. However, the operation of these systems presents intermittency due to their strong dependence on the environmental conditions of the installation site, resulting in potential risks of disruption of the energy supply or strain of the energy grid. Applications of artificial intelligence (AI) methods coupled to earth observation (EO) data are promising solutions for a more robust and stable operation of renewable energy systems (solar energy, wind energy, geothermal energy, biomass, and others). This Special Issue aims to collect the most recent AI and EO applications for energy systems installed in buildings and industries. The final goal is to contribute to the current design practice of renewable energy systems by identifying the critical points, choosing optimal components and configurations, identifying best practices, and assessing the environmental benefits.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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