

Special Issue

Decentralized, Bottom-Up Electrification Approaches for Universal Energy Access

Message from the Guest Editors

Ensuring universal, affordable, and sustainable energy access is arguably one of the biggest societal challenges of our time. As of 2020, close to a billion people worldwide live without electricity, and another two billion have unreliable access. The centralized electricity grid is, due to cost, mismatch to user needs, and lack of financial feasibility, not always the optimal choice, especially for remote, rural contexts.

Decentralized, bottom-up approaches, such as solar home systems and microgrids, have emerged as a response, but affordability, scalability, and path to growth remain a challenge. This Special Issue invites researchers from academia, industry, government, NGOs, and developing agencies to present their latest findings concerning technologies enabling universal energy access. Topics include but are not limited to the following:

- Decentralized, ad-hoc microgrids
- Solar home systems
- Interoperability
- Productive energy use
- Ultra-efficient DC appliances
- Renewable energy generation (PV, biomass, wind, etc.)
- Sociotechnical integration
- Co-creation and localization
- Market mechanisms

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Deadline for manuscript submissions

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About the Journal

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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