Special Issue

Life Cycle Assessment and Economic Analysis on End-of-Life of Solar Photovoltaics

Message from the Guest Editors

Since PV is a relatively new technology and the lifetimes of the existing PV modules are about 20 to 30 years, the large volume of PV waste is yet to come. The International Renewable Energy Agency (IRENA) estimates that at a global scale, the recycling of PV solid waste can unlock 78 million tons of raw materials and other valuable components, globally, by 2050. If fully injected back into the economy, the value of the recovered material could exceed USD 15 billion by 2050. However, there is very little information on options for managing PV waste and their associated environmental and economic benefits to the society. This Special Issue focuses on environmental impacts and cost analysis of solar PV panels in their end-of-life. Topics of interest for publication include but are not limited to:

- Life cycle assessment of crystalline silicon photovoltaic waste
- Life cycle assessment of CIGS/CIS photovoltaic waste
- Life cycle assessment of CdTe photovoltaic waste
- Life cycle assessment of emerging photovoltaic waste
- Cost benefit analysis of photovoltaic waste
- Life cycle costing of photovoltaics end-of-life management

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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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