# **Special Issue**

# The Future of Renewable Energy: The Role of Solar Power in Sustainable Development

## Message from the Guest Editors

The escalating urgency of climate change, coupled with the global drive toward carbon neutrality, underscores the pivotal role of solar energy within the broader renewable energy paradigm. This Special Issue aims to critically engage with and expand the scientific discourse surrounding the integration of solar technologies into sustainable development strategies. We invite theoretical and empirical contributions that rigorously investigate the technological frontiers, socioeconomic dimensions, and governance mechanisms associated with solar-based energy systems. Relevant topics include, but are not limited to, the following: advanced photovoltaic materials and efficiency enhancement; smart grid integration; energy storage solutions; life cycle and techno-economic assessments; decentralized and off-grid applications; integrated energy models; and regulatory or financial frameworks fostering widespread solar adoption.

#### **Guest Editors**

Dr. Stefania Perrella

Department of Mechanical, Energy and Management Engineering, University of Calabria, 87036 Rende, Italy

Dr. Daniela Cirone

Department of Mechanical, Energy and Management Engineering, University of Calabria, 87036 Rende, Italy

### Deadline for manuscript submissions

30 May 2026



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Sustainability Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 sustainability@mdpi.com

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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.

### Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University, Columbus, OH 43210, USA

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