

## Special Issue

# The Role of Digitalization and Artificial Intelligence in Low-Carbon Energy Transition and Achieving Carbon Neutrality: Interdisciplinary Perspectives

### Message from the Guest Editors

Achieving carbon neutrality requires addressing complex, interdisciplinary challenges across natural sciences, engineering, economics and management. Digitalization and intelligent systems play pivotal roles in this transformation through three key contributions: Optimization & Monitoring: Digital technologies enable real-time carbon emission tracking, dynamic indicators, and prioritization of reduction strategies across industries and regions. AI and IoT enhance precision in emission management. Business Model Innovation: Digital platforms integrate enterprises and individuals into carbon neutrality efforts, promoting sustainable consumption patterns and decentralized energy systems. Market Efficiency: Data analytics and algorithms improve carbon pricing models, transparency, and rights allocation, fostering fairer market mechanisms. Research priorities include technological integration, policy analysis, behavioral studies, and sectoral case studies. This Issue seeks interdisciplinary research on digitalization's role in low-carbon transitions, prioritizing novel methodologies and practical implications.

---

### Guest Editors

Dr. Linwei Ma

Dr. Xiaoyong Zhou

Dr. Chin Hao Chong

---

### Deadline for manuscript submissions

30 June 2026



## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/si/228934](https://mdpi.com/si/228934)

*Sustainability*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)

[mdpi.com/journal/  
sustainability](https://mdpi.com/journal/sustainability)





## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/journal/  
sustainability](https://mdpi.com/journal/sustainability)



# About the Journal

## 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.

---

## Editor-in-Chief

Prof. Dr. Steve W. Lyon

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

---

## Author Benefits

### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

### High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

### Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1  
(Geography, Planning and Development)