

## Special Issue

# Rethinking Waste: Life Cycle Thinking Approaches Towards a Circular and Regenerative Future

### Message from the Guest Editor

The transition to a circular and regenerative economy requires a fundamental shift in how we perceive and manage waste. Traditional linear models—based on extraction, production, consumption, and disposal—are increasingly unsustainable in the face of resource scarcity, climate change, and environmental degradation. Life Cycle Thinking (LCT) offers a holistic framework to evaluate environmental impacts across the entire life cycle of products, processes, and systems, enabling informed decisions that minimize waste and maximize resource efficiency. This Special Issue aims to explore innovative strategies, methodologies, and applications of LCT that support circularity and regeneration. Research areas and topics may include, but are not limited to, the following:

- Design for circularity;
- Responsible consumption;
- Life cycle assessment (LCA);
- Material recovery;
- Industrial symbiosis;
- Systemic approaches to waste prevention.

We encourage contributions from diverse sectors such as manufacturing, energy, construction, and environmental systems, as well as interdisciplinary studies that link technology, policy, and social innovation.

---

### Guest Editor

Dr. Ana Ramos

Institute of Science and Innovation in Mechanical and Industrial Engineering, University of Porto, 4200-465 Porto, Portugal

---

### Deadline for manuscript submissions

30 November 2026



Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/si/261687](https://mdpi.com/si/261687)

*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)