

## Special Issue

# Utilization of Biomass: Energy, Catalysts, and Applications

### Message from the Guest Editors

In light of the global focus on reducing fossil fuel use and carbon emissions from combustion fuels, researchers are actively seeking alternative energy sources. Renewable energy is crucial in this effort due to its minimal environmental impact compared to non-renewable sources. Biomass, a prevalent form of renewable energy, can be converted into various usable energy forms, such as biofuels. To fully utilize biomass within a biorefinery, biocatalysts are essential. These catalysts are particularly effective in thermochemical processes and are also used in biomass pretreatment, hydrolysis in lignocellulosic ethanol production, and biodiesel production. This Special Issue of Sustainability will address biomass use, biocatalysts, and their applications. We invite you to submit manuscripts on these topics to advance the field and emphasize the role of biomass in achieving a more sustainable future.

---

### Guest Editors

Prof. Dr. Everaldo Silvino dos Santos  
Prof. Dr. Carlos Eduardo De Araújo Padilha  
Prof. Dr. Nathália Saraiva Rios

---

### Deadline for manuscript submissions

closed (30 December 2025)



## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/si/214674](https://mdpi.com/si/214674)

*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)