



Future of Clean Energy: Prospects of Nuclear Fusion

Guest Editors:

Dr. Naoko Ashikawa

National Institute for Fusion
Science, Toki, Japan

Dr. Hirotaka Chikaraishi

National Institute for Fusion
Science, Toki, Japan

Deadline for manuscript
submissions:

closed (30 September 2024)

Message from the Guest Editors

The development of practical fusion reactors would have a profound impact on global energy systems, potentially helping to reduce greenhouse gas emissions, air pollution, and dependence on fossil fuels. It would also increase energy security by reducing the need for imports of fuel from unstable regions. Despite the potential benefits, there are still significant technical challenges to overcome before fusion can be commercialized. Currently, in order to realize the safe future fusion reactor, there is a need to develop the engineering technology, including the fuel breeding system and the control system that encompasses them, to sustain the burning plasma.

The aim of this Special Issue is to shed light on new research in nuclear fusion, as it has the potential to be a game-changer in the world of energy production, offering a clean, safe, and nearly unlimited source of power. The development of fusion technology is an important step towards a more sustainable energy future and a crucial component of efforts to address climate change.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Steve W. Lyon

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

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.

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)

Contact Us

Sustainability Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
[X@Sus_MDPI](#)