Special Issue

Sustainability Management Strategies and Practices for Zero-Carbon Datacenters

Message from the Guest Editors

Datacenters are energy intensive, requiring a great deal of energy and resources. Various estimates have suggested that datacenters account for 2% of the world's energy consumption—roughly equivalent to the aviation industry. Many organizations seek to cut back the energy consumption with the goal of eventually reaching net-zero carbon emissions. Hence, it is important and necessary to understand how to improve the datacenter sustainability with the right design and practices.

The goal of this Special Issue is to look at and share recent advances in the advancement of sustainability management in zero-carbon datacenters. Specifically, the aim of relevant research is to realize the all-round closed-loop of carbon management processes, such as carbon inventory, carbon verification, carbon trading, carbon transformation, and carbon evaluation in datacenters, to investigate the trading mechanism datacenters participating in the electricity-carbon market to achieve zero carbon targets, and to build a multi-faceted and multi-level intelligent governance system for zero-carbon datacenters.

Guest Editors

Dr. Xiaoying Wang

Prof. Dr. Yanbo Chen

Dr. Yujuan Fang

Dr. Hengrui Ma

Deadline for manuscript submissions

closed (12 March 2024)



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/165756

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

mdpi.com/journal/ sustainability





Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



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)

