

Special Issue

Mathematical Optimisation for Sustainable Supply Chains: From Network Design to Carbon Reduction

Message from the Guest Editor

Supply chains face growing pressure to reach net-zero emissions while maintaining performance and profitability. This Special Issue focuses on the mathematical and computational foundations of sustainable value chain design using advanced optimisation and exact solution methods. Unlike broader sustainability frameworks, it bridges operations research and sustainability science, applying quantitative tools such as mixed-integer programming, deterministic optimisation, and evolutionary algorithms to address network design, inventory policies, distribution strategies, and carbon reduction. The goal is to advance multi-objective optimisation approaches that balance financial performance with environmental impact. This includes methods for green vehicle routing, facility location, cost-emission-service trade-offs, and large-scale supply chain optimisation. We welcome strong theoretical models, computational studies, and real-world applications demonstrating emission reductions and efficiency. This Special Issue invites original research articles, reviews, and case studies. We look forward to your contributions.

Guest Editor

Dr. Reza Eslamipoor

Faculty of Business and Law, De Montfort University, Leicester LE1 9BH, UK

Deadline for manuscript submissions

14 July 2026



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/257758

Sustainability
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)