Special Issue

Economic Growth and Environmental Sustainability: Quantitative Methods and Machine Learning Applications

Message from the Guest Editors

The relationship between economic growth and environmental sustainability remains a crucial challenge in contemporary research, as nations seek to balance development with ecological responsibility. Traditional economic models have provided valuable insights into this relationship, yet the increasing availability of big data, advanced quantitative methods, and machine learning (ML) techniques offers new opportunities for deeper, more accurate analysis. This Special Issue aims to explore data-driven approaches to understanding and modeling the interplay between economic expansion and sustainability goals. The focus of this issue is on innovative quantitative methodologies, including statistical modeling, econometric techniques, artificial intelligence, and ML algorithms, that contribute to sustainability analysis. We welcome research that applies these methods to topics such as carbon emission forecasting, green finance, circular economy modeling, climate change mitigation strategies, and policy evaluation. The goal is to enhance predictive capabilities, optimize decision making, and provide policymakers with evidence-based strategies for sustainable economic development.

Guest Editors

Dr. Marcin Nowak

Faculty of Engineering Management, Poznan University of Technology, Poznan, Poland

Dr. Marta Pawłowska-Nowak

Faculty of Engineering Management, Poznan University of Technology, Poznan, Poland

Deadline for manuscript submissions

10 January 2026

Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 7.7

mdpi.com/si/233572

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

mdpi.com/journal/sustainability

MDPI

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. *Sustainability* publishes original research articles, review 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. Marc A. Rosen
Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G 0C5, Canada

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)