Special Issue

Sustainable Water Resource Management in the Water– Energy–Food Nexus under Climate Change

Message from the Guest Editor

The main goal of the Water-Energy-Food Nexus (WEFN) is to increase environmental resilience by taking advantage of the synergies between the three interdependent socioeconomic sectors. In this Special Issue (SI), we focus on water sustainability under climate change, which is the main factor for environmental safety. We can consider the WEFN as a particular case of the Integrated Water Resource Management (IWRM) framework because the inter-sector integration is restricted to water, energy, and food. The main difficulty in implementing the WEFN is that winners and losers appear among the three interacting sectors. Between multiple acceptable solutions, we may choose the most preferable option by ensuring water security (through the use of recyclable water only), obtaining energy sufficiency (avoiding energy overuse), and producing sufficient food. A resilient WEFN may lead to human and environmental sustainability. Case studies, success stories, and papers demonstrating the co-benefits of the WEFFN on renewable energy, solar pumping for irrigation, smart agriculture based on a precise water supply, and saving water by planting less waterdemanding crops are welcome.

Guest Editor

Prof. Dr. Jacques Ganoulis

Department of Civil Engineering, Aristotle University of Thessaloniki, 541 24 Thessaloniki, Greece

Deadline for manuscript submissions

closed (29 October 2024)



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/198042

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. *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 OC5, 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)

