



*water*

an Open Access Journal by MDPI



## The Nexus of Water–Food–Land–Energy: An Approach to Improve System Sustainability

Guest Editors:

**Dr. Winnie Gerbens-Leenes**

Integrated Research on Energy,  
Environment and Society (IREES),  
University of Groningen, 9747 AG  
Groningen, The Netherlands

**Dr. S.D. Vaca Jimenez**

1. Department of Mechanical  
Engineering, Escuela Politécnica  
Nacional, Quito, Ecuador  
2. Integrated Research on Energy,  
Environment and Society (IREES),  
University of Groningen, 9747 AG  
Groningen, The Netherlands

Deadline for manuscript  
submissions:

**closed (13 December 2023)**

### Message from the Guest Editors

Dear Colleagues,

The nexus of water, food, land, and energy is an important topic. The rising demand for food and energy, e.g., larger electricity demand, or the use of some types of renewable energy sources, might require more freshwater, for example, for the cooling of power plants or the irrigation of energy crops. Additionally, hydropower might have a relatively large water footprint per unit of electricity when hydropower stations are located in areas with large amounts of water evaporation.

This Special Issue is open to papers advancing the knowledge on water, food, land, and energy relationships or showing innovative applications. We welcome, for example, papers that analyze ways to improve efficient water use or decrease water pollution. Papers comparing water footprints of different types of energy are also most welcome. We also encourage papers on global energy scenarios and water, including the role of new energy sources or on trade-offs between water, land, and carbon footprints related to food and energy production.



[mdpi.com/si/171389](https://mdpi.com/si/171389)

# Special Issue



*water*



an Open Access Journal by MDPI

## Editor-in-Chief

### Dr. Jean-Luc PROBST

Laboratory of Functional Ecology  
and Environment, Centre  
National de la Recherche  
Scientifique (CNRS), University of  
Toulouse, Campus ENSAT,  
Auzeville Tolosane, France

## Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Water Resources*) / CiteScore - Q1 (*Water Science and Technology*)

## Contact Us

---

Water Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/water](http://mdpi.com/journal/water)  
[water@mdpi.com](mailto:water@mdpi.com)  
[X@Water\\_MDPI](https://twitter.com/Water_MDPI)