

Special Issue on
Hydropower Sustainability, Resettlement and Future Climatic Risks

CALL FOR PAPERS

Over the past decade, there has been an increase in interest and concern in the hydropower sector regarding the 'sustainable performance' of the industry. This includes the formulation of an industry protocol that delineates the indicators and targets that must be achieved to adhere to best practices for the planning, construction, and operation of hydroelectric projects.

A crucial aspect of this is the evaluation of the role of hydropower development in terms of its social and environmental performance. The potential social and environmental impacts and opportunities that arise from a hydroelectric project must be evaluated in the context of the benefits it provides to society at large. Sustainable development, a process that fulfills the needs of the present generation without jeopardizing the ability of future generations to meet their own needs, encompasses three integral dimensions: environmental protection, social development, and economic growth.

In this Special Issue, we invite original research and review articles that focus on the role of hydropower in addressing these three dimensions of sustainability, necessitating an interdisciplinary approach in all submissions. In particular, this Special Issue is interested in the multifunctional role of reservoirs in providing services such as flood protection, irrigation water, and secure drinking water supply. Although more traditional studies on the environmental and social performance of hydropower projects are welcome, they must be related to the full dimension of sustainable development. We emphasize that the application of sustainability tools is encouraged, provided that they adhere to scientific research standards, that is, the application itself is thoroughly evaluated and discussed in the context of prior research within related scientific fields. We also encourage authors working on innovative approaches, such as habitat offset, ecosystem services, forced migration, involuntary resettlement, and environmental justice, to submit articles for this Special Issue. Studies on climate change and the role of hydropower in achieving sustainability development goals (SDGs) are particularly welcome.

Potential topics include but are not limited to the following:

- ▶ New financial mechanisms and policy announcements: Governments are recognizing the importance of renewable energy technologies, especially in hydropower.
- ▶ Sustainable development and operation: To maximize their role in mitigating climate change, hydropower projects must be developed and operated sustainably.
- ▶ Climate change and displacement: There is a consensus that climate change will lead to population displacement and migration.
- ▶ Land use change impacts: Sustainable hydropower production can lead to significant changes in land use.
- ▶ Sustainable land use management: Authorities must emphasize the efficiency and sustainability of hydroelectric energy with land use management to achieve international commitments to climate, biodiversity and sustainable development and energy insecurity.
- ▶ Mitigation and adaptation actions: Climate change mitigation and adaptation actions, which will also result in significant population displacements, have not received sufficient attention.
- ▶ Organized resettlement: Policy approaches to facilitate migration and guidelines for organized resettlement will be discussed.
- ▶ New data highlight the need for accelerated hydropower growth
- ▶ Potential for greenhouse gas reduction

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=582130>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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