

Special Issue

Geothermal Energy Innovations: Perspectives and Challenges on Development

Message from the Guest Editors

Shallow and deep geothermal projects aim at providing energy for heating, cooling and electricity production. They can be applied to individual housing, urban networks or industry. Numerous geothermal projects, either shallow or deep, are in operation all around the world. In addition, this Special Issue of *Energies* is dedicated to the many geothermal developments currently being processed, such as the following:

- Specific drilling operations;
- Metal extraction (e.g., lithium) from geothermal brines;
- Deep closed loops;
- Lowering of the temperature of reinjection (to increase the production of energy), and its impact on the geothermal reservoir and surface installations;
- Use of captured CO₂ as a working fluid to reinforce the geothermal contribution against climate change;
- Aquifer thermal storage systems (ATES);
- Enhanced or engineered geothermal systems (EGS);
- Supercritical geothermal systems;
- De-risking of geothermal operations;
- Assessment of environmental impacts of geothermal operations;
- Socio-economic evaluation

Guest Editors

Prof. Dr. Béatrice A. Ledésert

Laboratoire Géosciences et Environnement Cergy (GEC), CY Cergy
Paris Université, F-95000 Neuville-sur-Oise, France

Prof. Dr. Ronan L. Hébert

Laboratoire Géosciences et Environnement Cergy (GEC), CY Cergy
Paris Université, F-95000 Neuville-sur-Oise, France

Deadline for manuscript submissions

closed (22 April 2025)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/204026

Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

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, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)