

## Special Issue

# Opportunities, Challenges and Solutions for the Development of the Hydrogen Economy

### Message from the Guest Editor

It is now abundantly clear that we need to restructure the use of energy across our society to avoid catastrophic climate change. Hydrogen is widely anticipated to play at least some role in the decarbonisation of industry, transport and building energy systems, although it is quite clear that there are also a number of challenges associated with such a transition. Hydrogen may also play a critical role in industries that are challenging to decarbonise in other ways, including steel making and processes requiring combustion temperatures. This Special Issue, therefore, seeks to contribute to the understanding of hydrogen technologies through enhanced scientific and multidisciplinary knowledge that can highlight some of the challenges—and opportunities—associated with the uptake of hydrogen for decarbonisation. We therefore invite papers on innovative technical developments, reviews, case studies, analytical, as well as assessment, papers from different disciplines, which are relevant to hydrogen energy systems.

### Guest Editor

Dr. James Trevor Hinkley

School of Engineering and Computer Science, Victoria University of Wellington, Kelburn, Wellington 6012, New Zealand

### Deadline for manuscript submissions

closed (20 April 2021)



## Energies

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/si/37261](https://mdpi.com/si/37261)

*Energies*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[energies@mdpi.com](mailto: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)