

Special Issue

Optimizing the Energy and Carbon Footprint in Wastewater Treatment Plants

Message from the Guest Editors

There are inviting submissions to a Special Issue of *Energies* on the subject area of “Optimizing the Energy and Carbon Footprint in Wastewater Treatment Plants”. Municipal wastewater treatment is a significant energy consumer. It is estimated that in developed countries, approximately 1–3% of the total electrical energy consumption on a country level is allocated to wastewater treatment. Furthermore, it is expected that these energy requirements will increase over time due to population growth and the employment of advanced treatment technologies to achieve the increasingly stringent treated effluent limit values. Therefore, the optimization of the energy footprint of wastewater treatment plants (WWTPs) is a major driver toward the achievement of zero-energy or energy-positive plants. This Special Issue will focus on studies targeted at novel processes which aim at a decrease in energy consumption and/or increase in energy production either directly from wastewater or through sewage sludge treatment, thus promoting the optimization of the total energy footprint of WWTPs.

Guest Editors

Prof. Dr. Constantinos Noutsopoulos

Department of Water Resources and Environmental Engineering,
School of Civil Engineering, National Technical University of Athens,
Athens, Greece

Dr. Panagiotis G. Kougias

Soil and Water Resources Institute, Hellenic Agricultural Organisation-DIMITRA, Themi, 57001 Thessaloniki, Greece

Deadline for manuscript submissions

closed (31 December 2023)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/91842

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)