

Special Issue

Towards Net-Zero Industry X.0: Sustainable Governance, Smart Operations and Digital Twins

Message from the Guest Editors

This Special Issue aims to explore how emerging technologies and governance models can accelerate the transition toward **net-zero industrial systems** in the context of **Industry X.0**. As digitalization, automation, and digital twin strategies reshape the industrial landscape, enterprises are under growing pressure to align innovation with the Sustainable Development Goals. Central to this transformation are **smart operations, digital twins, and sustainable governance frameworks**, which together enable integrated planning, lifecycle optimization, and ESG-oriented decision-making. This Special Issue seeks to compile interdisciplinary contributions from the fields of **industrial engineering, sustainability science, systems management, and information technologies**. We welcome **conceptual, empirical, and methodological papers** that address the integration of digital tools and sustainable practices in manufacturing, supply chain operations, product–service systems, and enterprise governance.

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Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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