Special Issue

Role of Digitization in the Transition toward a Circular Economy

Message from the Guest Editors

The potential role of Industry 4.0 in driving the transition towards a circular economy by harnessing the power of digital technologies, data analytics, and automation has already been established. Recent advancements in technology and Internet of Things have empowered industries to optimize resource usage, reduce waste, and enhance sustainability across the entire value chain. IoT-enabled product tracking facilitates efficient product recovery, refurbishment, and recycling, thereby promoting circularity. Moreover, Industry 4.0 enables agile, localized production, and supports circular business models such as product-as-a-service and sharing platforms. With data-driven insights, collaborative ecosystems, and circular design innovation, Industry 4.0 can become a driving force in reshaping industries toward a more sustainable and circular future, aligning economic growth with environmental protection. This Special Issue aims to publish original papers, reviews, as well as pilot studies on innovative technological developments, new knowledge and near-to market solutions in the domain of circular economy in the modern digital era.

Guest Editors

Dr. Charisios Achillas

Department of Supply Chain Management, International Hellenic University, 60100 Katerini, Greece

Dr. Dimitrios Aidonis

Department of Supply Chain Management, International Hellenic University, 60100 Katerini, Greece

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

mdpi.com/journal/environments





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Message from the Editor-in-Chief

Environmental issues are quickly becoming central political, economic and academic topics of the twenty-first century. A large number of modern challenges are directly or indirectly caused by complex interactions between environmental issues. Such issues require interdisciplinary research, knowledge and insights to understand and, ultimately, for solutions to be found. Through the journal Environments, we strive to create a platform for meaningful discourse by accepting contributions from a wide range of fields. We sincerely hope you will consider publishing your distinguished work in this highly-accessible, peer-reviewed journal.

Editor-in-Chief

Prof. Dr. Sergio Ulgiati

- 1. Department of Science and Technology, Parthenope University of Naples, Centro Direzionale, Isola C4, 80143 Napoli, Italy
- School of Environment, State Key Joint Laboratory of Environment Simulation and Pollution Control, Beijing Normal University, No. 19 Xinjiekouwai Street, Beijing 100875, China

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