



## Large-Scale Production Systems: Sustainable Manufacturing and Service

Guest Editors:

**Dr. Simone Arena**

Department of Mechanical,  
Chemical and Materials  
Engineering, University of  
Cagliari, Via Marengo 2, 09123  
Cagliari, Italy

**Dr. Alessandra Cantini**

Department of Management,  
Economics and Industrial  
Engineering, Politecnico di  
Milano, Via Lambruschini 4B,  
20156 Milan, Italy

**Dr. Filippo De Carlo**

Department of Industrial  
Engineering (DIEF), University of  
Florence, 50134 Florence, Italy

Deadline for manuscript  
submissions:

**closed (30 September 2025)**

### Message from the Guest Editors

Dear Colleagues,

Large-scale manufacturing facilities consume many environmental, energetic, and economic resources due to wide spatial distribution, division of labor, extensive use of machinery, and multitude of components. Consequently, it is imperative to develop new strategies for enhancing the efficiency of manufacturing activities and services within large-scale production systems (LSPSs), mitigating the negative impact of LSPSs on global sustainability. Examples of LSPSs include water distribution systems, large automotive manufacturing plants, large dairy production systems, textile industries, iron and steel industries, oil and gas systems, food processing systems, etc.

Sustainable development within LSPSs pose the need to investigate new progress and trends to increase the sustainability of LSPSs. Therefore, this Special Issue aims to present novel ideas and experimental results in the domain of the sustainable development of manufacturing and services within LSPSs, including both theoretical and practical investigations. Additionally, ideas conceived for improving the sustainability of lower-scale industrial plants, extensible to LSPSs, are appreciated.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Steve W. Lyon**

School of Environment and  
Natural Resources, Ohio State  
University, Columbus, OH 43210,  
USA

## 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.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE](#) and [SSCI \(Web of Science\)](#), [GEOBASE](#), [GeoRef](#), [Inspec](#), [RePEc](#), [CAPlus / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

## Contact Us

---

*Sustainability* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sustainability](http://mdpi.com/journal/sustainability)  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)  
[X@Sus\\_MDPI](#)