1. AIMS AND SCOPE

The assessment and promotion of sustainable development is an issue with growing importance among scientific and policy-making communities. Efforts from the academy and governmental institutions lead to a better understanding of how local communities, industries, cities, and countries are performing compared to their peers and encouraging the monitoring of progress over time.

Since the late '80s, the definition of sustainable development proposed by the World Commission on Environment and Development is widely accepted. It states that sustainable development implies *meeting the needs of the present without compromising the ability of future generations to meet their own needs*. Sustainable development is often presented as the integration of three interdependent components: economic, social, and environmental. In the past few years, efforts to monitor these components have generated many indicators intended to measure performance on aspects about emissions, waste production, green space, safety, income, health, education, etc.

The majority of countries and supranational organizations (such as the European Union, World Bank, or the United Nations) collect data on these indicators. Still, the amount of data generated is often too large, and it is not sufficiently clear to provide helpful information and practical guidance to attend to the needs of the policymakers. So, efforts to measure and quantify the results of policies aiming at sustainable development improvements are necessary to guide decision-making.

Many attempts have been made so far that employ different techniques, including, among other things, optimization, statistical methods, computational intelligence, and information systems efforts to make data readily available to tackle sustainability challenges. In recent years, there has been significant progress in developing frontier models based on Data Envelopment Analysis (DEA) and Stochastic Frontier Analysis (SFA) to monitor the evolution of sustainability, focusing on specific sectors, targets, or dimensions (people, planet, prosperity).

However, the general scientific consensus is that there is a lot more that can be done. Furthermore, the growth in this research direction has been exponential, and this trend is likely to be sustained in the future. Thus, there is still room for advancing the existing tools and designing new ones for promoting sustainability improvements.

This special issue aims to explore and advance Frontier Methods' latest achievements to tackle sustainability challenges. It offers a scientific venue for researchers who wish to share their ideas and innovative research findings that leverage the role of DEA and SFA (and other topics covered in the call) in the development of our societies. We invite researchers and experts worldwide to submit their high-quality, innovative research papers on the possible topics below.

2. TOPICS COVERED

The topics include but are not limited to:

- Theoretical developments of frontier estimation models addressing sustainability challenges
- Innovative applications of Data Envelopment Analysis and Stochastic Frontier Analysis to Sustainable Development challenges
- Quantitative methods targeting the assessment of the three pillars of Sustainable Development: People (social sustainability), Planet (environmental sustainability), and Prosperity (economic sustainability)
- Assessments focused on the Sustainable Development Goals of the UN Agenda 2030.
- Cross-national comparisons in the examination of sustainable development
- Theoretical and methodological challenges in understanding the determinants of sustainable development in the key sectors (e.g., education, health, justice, water and sanitation, energy, or others)
- Convergence in the achievement of Sustainable Development at regional, national, or worldwide level

3. SUBMISSION GUIDELINES

The APC (Article Publishing Charge) will be covered by IFORS for all papers submitted by 31st December 2021. Submitted papers should be original works and should not have been previously published or currently considered for publication elsewhere. The manuscripts should be prepared according to the Guide for Authors available at:

https://www.elsevier.com/journals/sustainability-analytics-and-modeling/2667-2596/guide-for-authors.

All manuscripts should be submitted electronically using the journal's online manuscript submission system at:

https://www.editorialmanager.com/samod/default.aspx.

When prompted for the article type, please select "**Special issue on Frontier Methods for Sustainability Challenges**".

On the Attach Files screen, please submit the Manuscript, Highlights, Cover Letter summarizing the contributions of the paper, and Conflict of Interest Declaration (template available at https://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing/).

In the review preferences screen, you may suggest potential reviewers for this submission and provide specific reasons for your suggestion in the comments box for each person.

Manuscripts submitted after the deadline may not be considered for the special issue and may be transferred, if accepted, to a regular issue.

4. IMPORTANT DATES

31 December 2021	Submission deadline	
1 April 2022	Notification of the first round review	(for guidance only)
1 June 2022	Revised submission due	(for guidance only)
1 August 2022	Final notice of acceptance/reject	(for guidance only)

Papers will be subject to a review process managed by the Guest Editors. The primary acceptance criteria for submission are the quality and originality of the research, the paper's analytical contributions, and the relevance of the research topic.

Early submission is encouraged. The referee process will start upon submission of the paper. Accepted papers will be published individually online as they are accepted, before print publication. All inquiries concerning the submission to the special issue will be addressed directly by the Guest Editors.

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