THIAGARAJAR SCHOOL OF MANAGEMENT
(Autonomous)
MADURAI, TAMIL NADU
REACCREDITED BY NAAC WITH 'A+' GRADE

FOS 2026 GRIE

International Conference on Frontiers of Sustainability- Global Responsibility for Innovation & Entrepreneurship [FOS 2026-GRIE] [Hybrid]

22 - 24 JANUARY 2026

In collaboration with

Track 9

Sustainability Impact Measurement, Scalability & Growth Strategies

Dr. Isotilia Costa Melo
ICN Business School, France
Email id isotilia.costa-melo@icn-artem.com
Linkedin ID: https://www.linkedin.com/in/isotilia-costa-melo-phd-49657211/

Dr. Camila Fabrício Poltronieri
Universidade de São Paulo (USP), Brazil
Email id :camilafp@usp.br
Linkedin ID:
https://www.linkedin.com/in/camilafabriciopoltronieri/

Dr. Ana Carolina Bertassini
Chalmers University of Technology, Sweden
Email id :anacarol@chalmers.se
Linkedin ID: https://www.linkedin.com/in/ana-carolina-bertassini-1a445368/

Track Information

We invite contributions that show how sustainability impacts can be measured rigorously and translated into strategies that scale, from small pilot projects to entire portfolios, across regions, supply networks, and product lines. Beyond product or process metrics, we are especially interested in the environmental and social performance of (sustainable) business models and how those insights inform decisions under real-world constraints.

We welcome work grounded in life-cycle thinking; including attributional, consequential, process-based, input–output, hybrid, prospective or dynamic Life Cycle Assessment - LCA (Kiehle et al., 2023; Stridsland et al., 2023). We are also eager to see research on footprinting methods that capture carbon, water, materials, land use, biodiversity, or social dimensions, with attention to uncertainty and sensitivity (Andika et al., 2025). Studies using organizational LCA (O-LCA), Social LCA (S-LCA), and Business Model LCA (BM-LCA) are also encouraged, especially when they evaluate whether Sustainable Business Models (SBMs) deliver realized environmental performance.

We believe efficiency benchmarking plays a key role, so we are keen on frontier-based methods such as Data Envelopment Analysis (DEA), Stochastic DEA (SDEA), Stochastic Frontier Analysis (SFA) are of particular interest, especially when applied to eco-efficiency, frontier performance, or productivity change (Alves Junior et al., 2025). We equally welcome hybrid methodologies that combine these tools with life-cycle based methods, footprinting, multi-criteria decision methods (MCDM), econometrics, system dynamics or agent-based modeling, optimization, big data and business analytics, artificial intelligence (AI), machine learning (ML), among other methods to help bridge the gap between evidence and action.

Scaling impact matters, so, at the same time, we invite studies on technology roadmaps, portfolio prioritization, modular scale-up strategies, policy instruments, financing models, and governance mechanisms that enable growth without losing integrity. We also encourage how digital solutions, such as tracking and tracing systems, digital product passports, internet of things (IoT) data, and interoperable standards, can make large-scale measurement and reporting more robust and transparent. In this regard, digital technologies, including IoT, big data, and data analytics, are increasingly recognized as essential enablers of circular economy practices and as critical tools for advancing sustainability transitions (Kristoffersen et al., 2020).

Most of all, we seek practical contributions that make these methods valuable for decision-makers. Whether it is linking impact baselines to meaningful targets, turning benchmarking results into actionable levers, or showing how sustainability can scale under real-world constraints such as capital, capacity, or policy, we want to learn from your insights. Studies that focus on hard-to-abate sectors, small and middle-sized enterprises (SMEs), and emerging markets are particularly welcome, as they provide crucial perspectives on where transformation is most needed.

Topics of interest include, but are not limited to

- **Life cycle–based approaches**: Life Cycle Assessment (LCA), hybrid LCA, dynamic/prospective LCA, Business Model LCA (BM-LCA), and applications across products, processes, business models, organizations, and networks.
- **Footprint measurement**: carbon (including Scope 1–3), water, material, biodiversity/land use, and social footprints, including novel propositions of uncertainty and sensitivity analysis.
- **Efficiency and benchmarking methods**: Data Envelopment Analysis (DEA), Stochastic DEA (SDEA), Stochastic Frontier Analysis (SFA), Malmquist indices, and frontier-based eco-efficiency evaluation.
- **Hybrid and advanced methodologies**: combinations of LCA/footprinting with DEA(SDEA), multi-criteria decision making (MCDM), econometrics, system dynamics, agent-based modeling, optimization, big data analytics, artificial intelligence, and machine learning.
- **Circular economy strategies**: measuring and scaling circular practices through LCA, and frontier methods (DEA/SDEA), with applications in several sectors and contexts.
- **Digital and data infrastructure**: tracking and tracing systems, digital product passports, IoT and sensor data streams, interoperable data standards, and auditable reporting pipelines to enable measurement at scale.
- **Actionable insights for decision-making**: linking impact baselines to target-setting, translating frontier results into operational levers, and demonstrating scale-up under real-world constraints (capital, capacity, policy, and equity).
- **Scalability and growth strategies**: technology roadmapping, portfolio prioritization, modular scale-up, policy and market instruments, financing models, risk management, and governance mechanisms for scaling sustainability.
- **Sectoral and contextual applications**: studies addressing hard-to-abate sectors (e.g., steel, cement, chemicals), particular and strategically relevant sectors (e.g., big tech, professional telescopes, research-intensive organizations, etc.), small and medium-sized enterprises (SMEs), and emerging markets.

Methodological diversity is welcome. We welcome rigorous and creative methodologies that turn measurement into decisions at scale—ranging from theory building and analytical models to simulations, field experiments, comparative and single-case studies, surveys, and data-driven evaluations across sectors and geographies. Mixed-methods designs that blend LCA/LCSA, footprinting, and frontier approaches (DEA/SDEA/SFA) with MCDM, econometrics, system dynamics, agent-based modeling, optimization, and AI/ML are particularly encouraged. We value transparent uncertainty treatment, reproducible workflows, and open datasets, as well as replication studies and meta-analyses that strengthen external validity. Studies centered on SMEs, emerging markets, and hard-to-abate value chains are especially welcome when they demonstrate pathways from pilots to portfolio-level scale-up and governance

Major Keywords
Life Cycle Sustainability Assessment (LCSA); Circular Economy; Carbon and Social Footprints; Data Envelopment Analysis (DEA/SDEA); Eco-efficiency; Scalability and Growth Strategies; Digital Product Passports

Uniqueness of the track SDG goals connected:
This track operationalizes the SDGs at the business model level, not just the product or process level. By using life cycle based methods, footprinting, and frontier-based methods such as DEA, we turn SDG intent into decision-useful metrics for portfolio choices with uncertainty made explicit. Direct contributions are to SDG 12 (Responsible Consumption and Production) via resource efficiency, waste prevention, and corporate performance disclosure; SDG 13 (Climate Action) via science-based baselines, mitigation pathways and learning; while enabling SDG 9 (Industry, Innovation and Infrastructure) through technology roadmaps and data standards, and SDG 8 (Decent Work and Economic Growth) and SDG 5 (Gender Equality) via productivity and fair-transition lenses. Depending on application domains, we also support SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 11 (Sustainable Cities and Communities), SDG 14 (Life below Water) and SDG 15 (Life on Land) through robust footprinting and circularity metrics.

SUBMISSION TYPES

Research Pitch: Extended Abstract (1500 Words) It will be published in FOS 2026-GRIE conference Proceeding book with ISBN

Full Length Paper: (5,000 to 6,000 Words) It will be published in Springer proceedings (Scopus Indexed)

Publication outlet:

- All submissions will undergo a rigorous peer-review process. Based on the review outcomes:
- · Selected ideas and abstracts will be included in the Book of Abstracts (with ISSN).
- · Conference Full length papers will be published in the Springer Proceedings (Scopus Indexed).
- Selected full papers, as recommended by the conference peer-review team, will be invited for submission to one of the listed journals, in alignment with the scope of the work.

Note: For more details, please refer author guidelines in conference website
Website link: https://fos.tsm.ac.in/
Submission link: https://forms.gle/BZ4kipxiDbJpu7aj6

Major Reference

- Alves Junior, P. N., Pinto, F. S., Ravelojaona, P., & Costa Melo, I. (2025). Performance assessment in the water utilities sector in Portugal: A stochastic data envelopment analysis approach. Business Strategy and the Environment. https://doi.org/10.1002/bse.70127
- Andika, A., Perdana, T., Chaerani, D., & Utomo, D. S. (2025). Transitioning towards zero waste in the agri-food supply chain: A review of sustainable circular agri-food supply chain. Sustainable Futures, 100917. https://doi.org/10.1016/j.sftr.2025.100917
- Böckin, D., Goffetti, G., Baumann, H., Tillman, A. M., & Zobel, T. (2022). Business model life cycle assessment: A method for analysing the environmental performance of business. Sustainable Production and Consumption, 32, 112–124. https://doi.org/10.1016/j.spc.2022.04.014
- Goffetti, G., Böckin, D., Baumann, H., Tillman, A. M., & Zobel, T. (2022). Towards sustainable business models with a novel life cycle assessment method. Business Strategy and the Environment, 31(5), 2019–2035. https://doi.org/10.1002/bse.3005
- Kiehle, J., Kopsakangas-Savolainen, M., Hilli, M., & Pongrácz, E. (2023). Carbon footprint at institutions of higher education: The case of the University of Oulu. Journal of Environmental Management, 329, 117056. https://doi.org/10.1016/j.jenvman.2022.117056
- Kristoffersen, E., Blomsma, F., Mikalef, P., & Li, J. (2020). The smart circular economy: A digital-enabled circular strategies framework for manufacturing companies. Journal of Business Research, 120, 241–261. https://doi.org/10.1016/j.jbusres.2020.07.044
- Stridsland, T., Stounbjerg, A., & Sanderson, H. (2023). A hybrid approach to a more complete emissions inventory: A case study of Aarhus University. Carbon Management, 14(1), 2275579. https://doi.org/10.1080/17583004.2023.2275579