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**11th IFAC Conference on Manufacturing Modelling, Management and Control** Trondheim, Norway, 30 June - 3 July 2025 *Research and Innovation on Manufacturing and Logistics for a better world* 

## Invitation to Special Session on: Operations and SCM in Energy-Intensive Production for a Sustainable Future

Organized by:

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The energy and climate crises have significantly increased the attention of practitioners and academics towards improving the generation of renewable energy sources and energy consumption in production sites, and the transposition of energy in supply chains. Innovative technologies, digitalization, and smart decision-making support the deep transformation towards clean, decarbonized, and more efficient energy generation and consumption in the industrial sector.

This special session invites studies investigating novel strategical and planning frameworks, production strategies and optimization methods, and supply chain design and management, to increase flexibility, energy efficiency, and resilience in energy-intensive production and energy sectors of the future, such as hydrogen production and supply chain.

This special session offers a venue for the presentation of research results either as regular papers (6 pages) and as extended abstract (max 4pages) in a more flexible way. Based on the submissions, it will be organized as a panel discussion, a workshop or a round table led by the session chair(s), to motivate the exchange of opinions among presenters and participants.

Topics may include, but are not limited to:	INVITATION CODE: 9bjri
<ul> <li>Strategic Energy Supply Chain Planning and Optimization</li> <li>Production Strategies for Energy Efficiency</li> <li>Supply Chain Design and Management for Energy Resilience</li> <li>Renewable Energy Production and Supply Chains (Hydrogen, Wind, Hydro, Solar)</li> <li>Digitalization and Smart Decision Making for Energy Efficiency</li> </ul>	Draft papers reporting original research (limited to 6 pages in IFAC format) and extended abstracts are welcome. When you submit your paper to the IFAC system, you will be required the invitation code <b>9bjri</b> in order to associate your paper to the special session: https://ifac.papercept.net
<ul> <li>Technologies for Energy Efficiency</li> <li>Decision Making at strategic and planning level</li> <li>Data-driven approaches (ML, AI, GenAI)</li> <li>Case Studies and Best Practices</li> </ul>	Draft papers/ extended abstract submission deadline: 30.11.2024 Final papers submission deadline: 28.02.2025 Early registration opens: 28.02.2025 Conference website: https://conferences.ifac-control.org/mim2025/

Accepted papers will be published open access in Elsevier's IFAC-PapersOnLine. Post-conference special issues for extended versions of accepted papers are planned in IFAC and other high-ranked journals.

> IFAC TC 5.2. - Management and Control in Manufacturing and Logistics Proposal 85 submitted to 11th IFAC Conference on Manufacturing Modelling, Management and Control. Uploaded October 5, 2024.