INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session:
Role and Significance of Technology and Digital Transformation in the Development of an Innovative Green Economy

Name, Title and Affiliation of Chair:

Chaired and organized by a group of researchers:

Chair: **Dr Łukasz Kozar**
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Co-chair: **Dr Aldona Podgórniak-Krzykacz**
Department of Labour and Social Policy, Institute of Logistics and Informatics, Faculty of Economics and Sociology, University of Lodz, Łódź, Poland

Co-chair: **Dr Justyna Przywojska**
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Co-chair: **Professor Azeta Tartaraj**
Faculty of Business, Aleksandër Moisiu University, Durrës, Albania,

Co-chair: **Dr Monika Wodnicka**
Department of Business Analysis and Strategy, Institute of Logistics and Informatics, Faculty of Economics and Sociology, University of Lodz, Łódź, Poland

Co-chair: **Mgr Szymon Bolimowski (PhD Student)**
Doctoral School of Social Sciences, University of Lodz, Łódź, Poland

Details of Session (including aim and scope):

The objective of the session, 'Role and Significance of Technology and Digital Transformation in the Development of an Innovative Green Economy', is to critically examine the ways in which technological advancements and digital transformation processes contribute to fostering an innovative green economy. This session seeks to convene experts from diverse disciplines to engage in a comprehensive discourse on the pivotal role of contemporary technologies in advancing the Sustainable Development Goals and facilitating the transition to a green economy. Participants will be afforded the opportunity to exchange knowledge, share empirical insights, and discuss best practices across domains such as artificial intelligence, the Internet of Things (IoT), blockchain, and FinTech, among others. This session aspires to provide a platform for in-depth analysis and dialogue, emphasizing the transformative potential of technology as a catalyst for achieving a more sustainable and resilient economic model.

The key topics of interest for this session include, but are not limited to:

- **Empowering Green Entrepreneurship through Technology:** Supporting self-employment, including green self-employment, and the development of green startups using digital tools.
- **Reskilling and Upskilling for Green Economies:** The role of digital educational platforms in facilitating workforce requalification towards green jobs of the future.
- **Digital Tools for Creating Green Jobs**: Using digital technologies to identify, create and support green jobs across economic sectors.
- **Green Self-Employment through Technology:** How digital transformation is enabling the growth of green self-employment, including remote working models and green micro-enterprises.
- **Social Enterprises and Green Digital Innovation**: The role of technology in supporting green

social enterprises and their impact on local communities and global environmental goals.

- **Green Jobs in the Digital Era:** How digital transformation is creating new job opportunities in green economy sectors.
- **Green E-commerce:** Using e-commerce platforms and digital tools to promote and sell environmentally friendly products and services, supporting responsible supply chains, green business models and conscious green consumer choices.
- **Ecosystems for Green Entrepreneurship:** Digital platforms to support green entrepreneurship and technology incubators for sustainable start-ups.
- **Artificial Intelligence in Resource Optimization:** The application of artificial intelligence in increasing natural resource efficiency and reducing waste.
- **IoT for Smart Cities, 15-minute City and Green City:** The role of the Internet of Things in shaping sustainable cities.
- **Digital Solutions for Waste Management in Smart Cities:** innovative digital technologies for urban waste management to support recycling and waste minimisation.
- **Blockchain for Sustainability:** How blockchain supports transparency and sustainable supply chains.
- **Blockchain for Enhancing Corporate Sustainability Reporting and Green Business Certification:** Applying blockchain technology in improving the transparency of sustainability reporting and green business certification, enabling verification of compliance with environmental standards and sustainable practices, providing greater credibility and accountability in the area of environmental performance.
- **Digital Twins in Green Infrastructure:** Applying digital twin technology to the design and management of sustainable infrastructure.
- **Circular Economy Enabled by Digital Platforms:** How digital platforms support the circular economy.
- **Education and Awareness through Digital Transformation:** Digital education tools to raise awareness of sustainability.
- **Public-Private Partnerships in Green Tech Development:** The role of cross-sector collaboration in accelerating green technology transformation.
- **Policy Frameworks for Digital Green Transformation:** an analysis of policies supporting the digital transformation of the green economy.
- **Challenges and Opportunities in Digital Sustainability:** A discussion on the barriers and opportunities arising from the implementation of digital technologies in the context of sustainability.
- **FinTech Solutions for Green Investment and Sustainable Finance:** Using FinTech technology to support sustainability investment and financing of green economy projects.
- **Green Crowdfunding for Sustainable Development Projects:** The use of crowdfunding platforms in the financing of projects related to the green economy, sustainable development and environmental initiatives, enabling the engagement of communities in green projects.
- **Bridging the Green and Digital Skills Gap for a Sustainable Economy:** Bridging the green and digital skills gap through education and training to support the development of a green economy and prepare the workforce for the challenges of green and digital transformation.
- **Leveraging Technology to Enhance ESG Reporting and Transparency:** The use of digital technologies in improving ESG reporting, enhancing transparency and corporate sustainability accountability.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

- Institute of Logistics and Informatics, Faculty of Economics and Sociology, University of Lodz
- Department of Labour and Social Policy, Faculty of Economics and Sociology, University of Lodz,
- Department of Business Analysis and Strategy, Faculty of Economics and Sociology, University of Lodz
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