

# IISE ENGINEERING ECONOMY DIVISION PRESENTS

## Towards Net-Zero: Circular Economy Concepts and Implementation

(moderated by Dr. Noha Mostafa, Associate Professor, The British University in Egypt, Egypt)



Dr. Alejandro Gallego Schmid  
Associate Professor  
The University of Manchester,  
UK



Mr. Stefan Buettner  
Director of Global Strategy & Impact  
Institute for Energy Efficiency in  
Production, Germany

Tuesday, Dec. 10  
2 p.m. ET

Register Today!  
[link.iise.org/Net-Zero](https://link.iise.org/Net-Zero)



Across sectors such as industry, agriculture, housing, and mobility, the challenge of meeting climate goals, managing access to resources and personnel, and enhancing resilience while staying cost-competitive is becoming increasingly complex. This webinar will explore the role of circular economy principles in addressing these challenges, with a particular focus on their implementation in the agricultural and industrial sectors.

### Speakers:

**Dr. Alejandro Gallego Schmid** is an Associate Professor in Circular Economy and Life Cycle Sustainability Assessment at the University of Manchester, UK, where he also serves as Head of Environmental Sustainability & Engagement in the School of Engineering. With over 20 years of professional experience, Dr. Gallego Schmid is a leading expert in sustainability, specializing in life cycle assessment, circular economy, social sustainability assessment, life cycle costing, and multi-criteria decision analysis. His current research addresses several critical areas at the intersection of sustainability and technology, including: i) the role of circular economy in mitigating climate change and achieving net-zero solutions; ii) the integration of circular economy principles within renewable energy systems; iii) the role of the informal waste sector in advancing circular economy practices in the Global South; and iv) the relationship between circular economy and digitalization. Dr. Gallego Schmid has authored more than 70 scientific publications, including high-impact papers with over 4,500 citations. He has delivered more than 60 presentations at national and international conferences and

universities, and has been awarded three prestigious research fellowships. In addition, he has led and contributed to 25 research projects, securing over £11 million in funding as both Principal Investigator and Co-Investigator. Through his academic and research leadership, Dr. Gallego Schmid is helping to shape the future of sustainable engineering and circular economy practices globally.

**Mr. Stefan M. Buettner** is the Director of Global Strategy and Impact at the Institute for Energy Efficiency in Production (EEP) in Germany, and Co-Lead for Circular Economy & Climate Neutral Manufacturing at Fraunhofer-Gesellschaft. He also serves as an International Low Carbon Consultant at the Edinburgh Centre for Carbon Innovation. With extensive experience across a wide range of areas contributing to the transition to a low-carbon economy, Mr. Buettner is a recognized thought leader and advocate for industrial decarbonization. In his role, Mr. Buettner works to inspire, enable, and connect stakeholders from all sectors to accelerate the transformation to a sustainable future. He has delivered over 200 speeches in more than 35 countries, emphasizing the importance of collaboration and action in achieving climate goals. His efforts focus on building networks, facilitating partnerships, and leading action groups that bring together organizations, companies, and experts to drive impactful change. Mr. Buettner is deeply committed to advancing the practical implementation of low-carbon strategies, while also educating the next generation of leaders in sustainability. He regularly involves students in his work, providing them with hands-on experience and insights into the complexities of the low-carbon transition. Beyond his work in industrial decarbonization, Mr. Buettner has a strong background in skills development, higher education, and institutional research. For over a decade, he has co-hosted a symposium on Europe and its regions, and he teaches seminars on data-driven decision making, equipping students with the tools to navigate the challenges of sustainability in an interconnected world. Through his leadership and commitment to global impact, Mr. Buettner is playing a pivotal role in shaping the future of energy efficiency, circular economy, and climate-neutral manufacturing.

## **Moderator:**

**Dr. Noha Mostafa** is an Associate Professor of Industrial Engineering and Management at the British University in Egypt, and the Board Director of Engineering Economy Division, IISE.