

# Designing a Supply Chain Emissions Management Platform for an E-commerce Logistics Company



## Prof. Xiande Zhao

JD.com Chair Professor of Operations and Supply Chain Management, Director of the CEIBS Institute of Supply Chain Innovations

**Professor Xiande Zhao** is the JD.com Chair Professor of Operations and Supply Chain Management and Director of the CEIBS Institute of Supply Chain Innovations. He has been consistently recognized as one of Elsevier's "Most Cited Chinese Scholars" and is listed among Stanford University's "Global Top 2% Scientists 2024." Professor Zhao is a Fellow of both the Decision Sciences Institute (DSI) and the Association of Supply Chain and Operations Management (ASCOM). He has also received the CEIBS Medal for Research Excellence and the CEIBS 30th Anniversary Outstanding Faculty Contribution Award. He specializes in supply chain integration, digital supply chains, business model innovation, and supply chain finance. He collaborates extensively with industry partners, developing case studies, innovative teaching programs, and publishing in top-tier journals. Professor Zhao has provided training and consulting for companies including JD.com, Haier, CATL, SAIC Volkswagen, COFCO, China Construction Bank, China Mobile, DHL, Japan Airlines, GSK, and others. Professor Xiande Zhao has published over 200 journal articles in leading journals including Journal of Operations Management, Production and Operations Management, Journal of Consumer Research, European Journal of Operations Research, International Journal of Production Research, and International Journal of Production Economics. He is also the Associate Editor and Special Issue Editor of Journal of Operations Management, the Associate Editor of Journal of Decision Sciences, The Journal of Supply Chain Management, and the Senior Editor of Production and Operations Management.

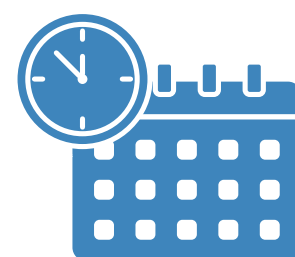


## Prof. Min Zhang

Professor in Operations Management, Queen's Business School, Queen's University Belfast

**Dr Min Zhang** is a Professor in Operations Management at the Queen's Business School, Queen's University Belfast. His research interests have been in Operations and Supply Chain Management, Innovation and Business Analytics. He has published extensively in leading international journals, including Journal of Operations Management, Production and Operations Management, International Journal of Operations and Production Management, International Journal of Production Economics, British Journal of Management, and International Journal of Production Research.

Scope 3 emissions constitute the majority of corporate greenhouse gas emissions, yet their accurate calculation and effective management remain particularly challenging in logistics and e-commerce supply chains. This study adopts a design science research approach to develop and theorise a Supply Chain Carbon Emissions Management Platform (SCEMP) that supports precise Scope 3 carbon accounting and collaborative decarbonisation. Drawing on a longitudinal, multi-cycle design and implementation process within a leading Chinese e-commerce logistics enterprise, the study derives design principles for supply chain carbon management systems. The platform integrates real-time logistics data, refined emission factor libraries, and supply chain-wide interoperability to improve calculation accuracy and enable actionable reduction strategies. Beyond accounting, SCEMP evolves into an ecosystem that links logistics flows, carbon data, and commercial mechanisms, thereby incentivising participation across supply chain stakeholders, including end consumers. This research contributes prescriptive design knowledge for Scope 3 carbon management systems and demonstrates how digital platforms can transform carbon reporting from a compliance activity into a driver of collaborative value creation and supply chain decarbonisation.



**11 May 2026**  
**3:00 pm – 4:00 pm**



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