Preface

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Supply chain management (SCM) is an enterprise management idea and mode, which plans, organises, coordinates and controls the commercial flow and logistics generated by the supply chain, so as to achieve the effect of improving the quality and efficiency of enterprises. However, parts of SCM, such as manufacturing/remanufacturing, processing and transportation and so on, will produce significant carbon emissions (Seuring et al., 2022). According to the World Economic Forum, eight kinds of supply chains account for more than 50% of global emissions: food, construction, fashion, fast moving consumer goods, electronics, automobiles, professional services and freight (Wu et al., 2022).

Under the background of carbon neutrality, manufacturing/remanufacturing and service enterprises should improve their awareness of the carbon emissions in the supply chain, strengthen the management of carbon emissions in the supply chain, and achieve the goal of carbon neutrality in the supply chain. Therefore, it is imperative for enterprises to make decisions on low-carbon production and operation, low-carbon transformation of manufacturing/remanufacturing mode and the optimal path (Jin, 2021).

Manufacturing/remanufacturing, as a production mode that takes into account both economic benefits and low carbon emissions, is one of the important ways to realise low-carbon transformation of production and operation (Rejeb et al., 2020). At the same time, with the service industry playing an increasingly important role in the national economy, service SCM has received greater attention than the traditional product SCM. Service supply chain is different from the traditional product supply chain. One of its advantages is that it can better match the supply and demand of logistics services such as transportation and storage to achieve sustainable development (Lin et al., 2021).

Nowadays, high performance algorithms have made it possible to discover various disciplines and patterns of the SCM (Wisetsri et al., 2022). The entire industrial world is trying to acquire the situational intelligence of high performance in order to discover various new disciplines of supply chain networks (Gen et al., 2018). Therefore, it is necessary to use new technologies such as intelligent algorithms in manufacturing/ remanufacturing and service industry SCM applications through the integration of modelling and decision-making technology. This goal has been targeted through the special issue on *Intelligent Algorithms for Manufacturing/Remanufacturing and Service SCM under the Background of Carbon Neutrality*.

This SI contains many keywords and academic hot topics related to low-carbon development (carbon neutrality) such as environmental regulation, green technology innovation, green and low-carbon economy, green financial development, etc.

Moreover, the articles in this issue focus on many high performance algorithms, methods and models, such as plant growth simulation algorithm, high-fidelity modelling, DANP model, heuristic algorithm, NSGA-II-based study, improved Shapley value method, etc.

Besides, this SI encompasses research fields (scenarios) such as hospital emergency services, multiple transporters block transportation, perishable products multi-period logistics network, manufacturing industry, service-based manufacturing supply chains, distribution of on-site logistics alliance and urban material distribution during the COVID-19 pandemic, etc.

Overall, with its numerous managerial and practical implications, this SI facilitates industrial practitioners to strengthen their low-carbon operations and schedules to better respond to the global context of carbon neutrality.

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