

# INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS

*Special Issue on*

## *Sustainable Development of Manufacturing and Services*

### **Guest Editors**

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Developments in the global economy and environmental concerns have promoted companies around the world to seriously think about their business processes and operations. In recent years, global warming and the carbon footprint have received a lot of attention from both public and private organizations. There are multiple views of sustainable development depending upon the type of organizations. We are interested in sustainable business development. This can be defined as the development and management of a business (either in manufacturing or services) so that it not only satisfies the current needs of the market and society, but also the future needs of them. This means companies should select the materials and processes that will reduce their contribution to global warming, the degradation of natural resources and carbon footprint. The challenge is for companies in both manufacturing and services to design products, services and delivery processes that will result in less global warming and carbon footprint, and at the same time stay competitive in the global market.

Manufacturing and services play a major role in sustainable business development. The sustainability of business depends upon: (i) materials, (ii) processes and (iii) recycling. Life cycle costing is a basic approach for making decisions considering the costs and benefits of using particular material and process combinations in both manufacturing and services with a view to safeguarding the environment and preventing global warming.

Understanding the role of sustainable business development and its implications on manufacturing and service operations, this special issue of the *International Journal of Production Economics (IJPE)* attempts to motivate the state-of-the-art research in the areas of sustainable manufacturing and services with the objective of helping companies with their sustainability and hence to be competitive in the 21<sup>st</sup> century global market. The objective of this special issue is to generate research that proposes suitable strategies, and relevant methods and technologies for the development of sustainable manufacturing and services. Managing sustainable development in new enterprise environment requires a suitable control system, performance measures and metrics. These issues will be given special emphasis in the special issue.

This special issue will cover a range of issues in the development and implementation of sustainable manufacturing and services. Articles covering the following topics are welcome for the special issue of *IJPE* (but not limited to):

- *Strategic Planning for sustainable development*  
This should include business models, strategic alliances, and partnership formation with the objective of developing a sustainable supply chain that is flexible and responsive to changing market requirements, but at the same time meets the environmental regulations. The emphasis

would include methodologies/tools for formulating or developing strategies for sustainable business development in both manufacturing and services. Some of the strategies would include green supply chain, corporate and social responsibility, and green marketing and logistics.

- *Tactics for sustainable business development*  
Various programs and actions that are required to develop sustainable business development in manufacturing and services are encouraged. Some of the tactics include outsourcing, just-in-time, six-sigma, recycling, reverse logistics, etc.
- *Operations for sustainable business development*  
What types of manufacturing and service control would be suitable for sustainable business development? This includes quality control, scheduling, and inventory control should be considered.

The following specific topics are encouraged:

- Organizational structure and information systems for sustainable business development in manufacturing and services
- Partnership formation/network of partners for sustainable business development
- Business models and information system architecture for sustainable business development
- Performance measurements and metrics in sustainable business development
- Evaluating the impact of sustainable manufacturing and service strategies
- Performance measures and metrics in sustainable business development
- Implications of sustainability on a global supply chain
- Qualitative and quantitative evaluation techniques
- Technology management in sustainability
- Greening supply chain and logistics
- Capital budgeting and financial appraisal of sustainable business decisions
- Cost/benefit and risk considerations/realizations in sustainability
- Social/human aspects of decision making
- Macro-economic or industry-wide assessment of sustainable business development
- IT/IS projects in sustainability and global supply chains
- Justification of sustainability reasons and benefits
- Strategic Vs. tactical sustainable business development
- Selecting the sustainability alternatives
- Evaluating the impact of sustainability on global supply chain configuration
- Performance measures and tools and costing systems in sustainable business development

Articles should clearly bring out the problem associated with sustainable supply chain and logistics with the objective of improving flexibility and responsiveness of organizations in the global market. Innovative and high quality conceptual, analytical (models), empirical and case studies addressing the issues of design and implementation of sustainable development strategies and techniques or related issues are welcome.

### **Manuscript Preparation and Submission**

To prepare their manuscripts, authors are asked to closely follow the “Instructions to Authors” in <http://authors.elsevier.com/GuideForAuthors.html?PubID=505647&dc=GFA> or at the back of any recent issue of the *International Journal of Production Economics*. Authors should submit their papers electronically via the EES. Please check and follow the instructions of the electronic

submission: <http://ees.elsevier.com/ijpe/> and select “Special Issue: *Sustainable Development of Manufacturing and Services*” when asked to indicate the “Article Type” in the submission process. Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Manuscripts will be refereed according to the standards of *IJPE*. Manuscripts must be submitted no later than October 30, 2010.

*Please send any enquiries related to this special issue to one of the guest editors:*

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