



## Call for papers

## Call for papers for a Special Volume of the Journal of Cleaner Production on “Innovative Products and Services for Sustainable Societal Development”

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### ARTICLE INFO

#### Article history:

Received 15 January 2015

Accepted 15 January 2015

Available online 14 February 2015

Sustainable development is a broad conceptual framework, which requires innovative approaches to help societies to make sustainable improvements. The challenges facing us to achieve sustainable development are complex and no single innovation will be sufficient to make the necessary transitions to equitable, post-fossil carbon societies. Therefore, societies require a wide diversity of innovations based upon multi-disciplinary thinking, research and practice are needed. This is essential to break away from the old ways of thinking to create sustainable and equitable solutions. The objectives of this Special Volume (SV) of the Journal of Cleaner Production (JCLP) are based on this common sense reasoning.

The first objective of the SV is to explore new innovations and their management in several thematic areas, which in different ways can contribute to sustainable societal development. The second objective of the SV is to explore holistic and innovative ways to combine advancements in different fields, and to develop overarching sustainable solutions.

To achieve these objectives several thematic areas will be addressed. The themes cover products and services as well as their production, operations and supply chains. Parallel to these themes, Innovation management, Knowledge management and

Information technology will be investigated. These themes cover tangible and intangible elements that are needed to develop, test and implement sustainable solutions.

The papers of the ICIM2014 – International Conference on Innovation and Management – are potential candidates for this SV. Between 15 and 20% of the ICIM2014 papers will be selected as candidates for this SV, and the authors of the selected papers will be invited to develop full peer review-ready documents according to the attached schedule. The authors of the selected papers will have about three months to improve and upgrade their conference papers to a high quality journal article, which is peer review ready, according to the guidelines of the Journal of Cleaner Production. **This Call for Papers (CFPs) is also open to colleagues who did not attend the ICIM2014 conference.**

### Theme 1: Sustainable operations and supply chain management

During recent decades, growing societal and governmental pressures have challenged businesses to focus on the environmental and resource consequences of their production processes and of their products and services (Kleindorfer et al., 2009). More attention is needed for them to optimize their supply chains, from product design, raw materials selection, processing of the raw materials into products, to delivery and providing customer services and in management of the products at the end of their lifetimes (Linton et al., 2007). To succeed within the context of global competition and to fulfill sustainable development requirements, company operations must be optimized for sustainable competitive advantage (Liu, 2013), and sustainable supply chain management must integrate optimization strategies and methods to focus on social, economic and environmental concerns (Govindan et al., 2014). For this CFPs, authors are invited to submit papers about innovative strategies, methodologies and models for

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Sustainable Supply Chain Management. Topics of interest in this theme include but are not limited to:

- Innovative strategies and methodologies for sustainable supply chain configuration, implementation and monitoring
- New models and methods for logistics and supply chain management
- “BIG DATA” based strategies and methodologies for product lifecycle and sustainable supply chain management

### Theme 2: Remanufacturing and networked manufacturing

Remanufacturing and networked manufacturing are some advanced modes for more sustainable, green and lean production. Remanufacturing is an important approach for companies wishing to implement sustainable business plans to achieve long term success (Goodall et al., 2014). It is designed to provide value-added through remanufacturing of products to ‘as good-as-new’ quality (Tian et al., 2014). Other approaches for improved management include waste prevention/avoidance, material’s recovery, and other closed-loop systems designed to help to achieve more environmentally and economically sustainable societal systems (Guide, 2000). Networked manufacturing builds upon the resources of enterprise groups, including visions, policies, management, design, manufacturing, and marketing resources, to improve their integrated competency (Iwamura et al., 2006).

As a result, the new strategies and methodologies of remanufacturing and networked manufacturing are playing increasingly important roles in improving productivity, safety, reducing energy consumption, and in reducing negative environmental and human health impacts. For example, emerging real-time manufacturing management frameworks such as the Internet of Manufacturing Things (Zhang et al., 2014) can promote dynamic optimization to enhance the productivity based on real-time data.

Within this context, authors are invited to submit papers about innovative strategies, methodologies and models for remanufacturing and networked manufacturing management. Topics of interest in this theme include but are not limited to:

- Innovative production scheduling strategies and models for remanufacturing and networked manufacturing
- Real-time decision-making strategies and models for remanufacturing and networked manufacturing
- Manufacturing resource configuration methods that are designed to catalyze the transition to equitable, post-fossil carbon societies

### Theme 3: Knowledge management for sustainable societal development

In order to achieve sustainable societal development, it is essential to ensure equitable access to knowledge, sharing of knowledge, transfer of knowledge and use of knowledge. Consequently, knowledge managers should build knowledge management systems, which can assemble, use, store knowledge in ways that it can be effectively accessed and built upon. Breakthrough knowledge management approaches must be developed, tested, implemented and publicized. Lessons learned must be documented and an institutional memory should be developed to support corporate and societal systems in sustainable pathways for the short and long-term future.

Knowledge management for sustainable societal development must involve ‘value’ management. The value management of companies or of other types of organizations should be used to

facilitate knowledge usage. Vision, mission and values, co-developed by all stakeholders within the company and its supply chain, should be communicated and uniformly implemented as an integral part of its organizational performance.

Another important dimension of sustainable societal development cooperation is human resources development, which must be linked to knowledge transfer, capacity building and empowerment, because this helps people to have control over their future. Development cooperation ought to be designed to create real partnerships wherein information is not a one-way road, but should be based upon dialogues among all partners. Topics of interest for this theme include but are not limited to:

- Knowledge management with regard to cooperation in sustainable societal development
- Multi-stakeholder development, communication, and consistent implementation of the organization’s values
- Human resource development for sustainable societal development

### Theme 4: Information and service technology for sustainable development

Information and service based technology have reached a crucial phase whereby, companies are increasingly strengthening their core expertise by using information technologies in product design, testing, production, supply chain logistics and providing customer services.

The global nature of Information and service technologies is providing many opportunities and challenges and is creating new-networked economic structures for supporting different production models. Topics of interest within this theme include but are not limited to:

- Service and implementation of information technologies
- Information modeling delivery through deployment and maintenance of product services
- Service-based grid/cloud/autonomic computing
- Ontology and semantic web for product services
- Information and provision of services
- Commercialization of information and service technologies
- Information credibility and service fault-tolerance

### Theme 5: Sustainable energy innovations, green products and services

Sustainable Energy (SE) has become one of the key concepts in reforming the energy sector in the EU and worldwide. As the production of energy has caused major impacts on the environment, “Renewable energy is one of the most efficient ways to achieve sustainable development” (Goldemberg, 2007), and “One of the main tasks in this century (...) will be to manage the transition process to sustainable energy systems” (Haas et al., 2008). The concept of SE was recently reviewed, and redefined by Peura (2013) as follows:

- 1 Rational Use of Energy (RUE); energy efficiency and energy saving;
- 2 Renewable Energy Sources (RES); materials and other sources (biomass, wood, hydro, solar, geo, wind, wave, tidal, otec, etc.)
- 3 Integration of RUE and RES
- 4 Sustainability management

There are a number of technologies for both RUE and producing and utilizing RES. They can be implemented as separate solutions or

be designed and used in integrated systems. The integration of RUE and RES technologies and management will be the key to planning and implementing complete solutions. With different combinations of the RUE and RES technologies and regional RES energy, it will be possible to develop, implement, monitor and manage 'solutions' with different degrees of energy self-sufficiency. This concept can be applied to any building, company, community, region, or nation or groups of nations. It is essential to establish management systems for avoiding a new field of ecological colonialism in the name of SE. The novelties in this field will arise from integrating separate technologies into systemic level innovations including green products and services. Topics of interest in this theme include but are not limited to:

- Innovative strategies for developing and implementing 100% RES regional energy systems
- Integration of sustainable energy technologies in different scales: from buildings to regions
- Green technologies and services in focus: towards sustainable production and efficient and effective use of renewable energy to support sustainable societal development

### Theme 6: Open innovation and collaboration for sustainable societal development

Sustainable societal development has become, and increasingly is, one of the strategic focal points of organizations. With the objective to help to ensure that sustainable development organizations can innovate their products and services, it is important to realize that fewer innovations will be due to internal research and development activities of organizations, while more will be due to the use of open-source innovations, in which organizations collaborate with other organizations to develop their new products and services. Due to the complexity of sustainable societal development collaboration among different organizations (i.e., inter-organizational relations) is essential. Research on Inter-Organizational Relations (IOR) can be categorized into different levels; the dyadic level (a relationship between two organizations), the ego-network of an organization (i.e., the portfolio level: all direct relationships of a focal organization) and the whole network level (all organizations in an industrial sector or in a supply chain).

We solicit papers on all three levels. Across these three levels, researchers may focus, on IOR characteristics, IOR with different partner types (e.g., buyers, suppliers, research institutes etc.), and/or on the modes of IOR (e.g., non-equity alliances, corporate venture investments, joint ventures, minority investments, mergers/acquisitions). Although interesting work has been done in this field, much remains to be done. Topics of interest in this theme include but are not limited to:

- Assessing antecedences of IOR with regard to sustainable societal development
- Assessing performance implications of IOR with regard sustainable societal development
- Incorporating moderation or mediation variables in (one of) the above two relationships
- Investigating the role of the network positions of an organization (e.g., centrality, brokering) on sustainable societal development
- Investigating the role of different diversity aspects with regard to the ego-network (portfolio level) and sustainable societal development

### Tentative schedule for the development of this SV

- Call for papers (CfPs) issued during February 2015.

- By February 28, 2015, selected authors from the ICIM2014 – International Conference on Innovation and Management will be invited to develop full, peer review-ready papers.
- Those authors will be expected to submit their 'peer-review ready' documents to Elsevier via the EES system by July 30, 2015.
- Authors, **who did not** attend the ICIM2014–International Conference on Innovation and Management, should submit their extended abstracts by April 15, 2015. They will receive feedback from the SV team by April 30, 2015 to develop and submit full, peer-review ready papers by July 30, 2015.
- Peer review/paper revision process will be performed from August 2015 to November 2015.
- Submission of the final versions of accepted papers by December 31, 2015.
- Authors will be informed of the need for minor revisions by January 31, 2016.
- Deadline for revisions of all papers, including the introductory paper for the SV will be submitted and in the corrected proof phase by April 15, 2016.
- Publication of this SV is projected to be during May 2016.

### Paper submission

Authors should select '**Innovative Products and Services**' as the article type for this "SV on Innovative Products and Services for Sustainable Societal Development," when they wish to submit their manuscript to Elsevier's EES system.

Authors are invited to submit different types of papers for potential publication in this Special Volume. Papers should be between 9000 and 12,000 words for 'comprehensive reviews,' between 7000 and 8500 words for 'theoretical papers based upon empirical studies' and between 5500 and 7500 words for 'case studies'.

Papers must be written in good English. Authors with limitations in the command of written English are recommended to have their papers edited by a **Native English Science Editor** before the first submission because poorly written documents can compromise the decisions during the review process. Similarly, they should have their final document edited by a **Native English Science Editor** before they submit it to the editorial team for the final review and for publication within the Journal of Cleaner Production.

All authors must follow the editorial guidelines provided in the Instructions For Authors for the Journal of Cleaner Production, which can be accessed via the [website](#). Authors should submit their manuscripts in MSWord via the [Elsevier Editorial System](#) (EES) site for the Journal.

By submitting a manuscript, the author(s) must certify that the contribution is original and has not been published or is not under consideration for publication elsewhere and that no part of the material breaches the copyrights of others. All articles will be first evaluated by the editors of this SV to ensure suitability with the scope of both the SV and of the JCLP. After the first screening, suitable papers will be submitted to a single blind, peer review process according to the standards of the JCLP. The review/revision process may need to be repeated several times for some articles to ensure that all authors or author teams achieve top quality manuscripts.

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