

## INVITED SESSION SUMMARY

## Title of Session:

Business model innovation for sustainable design and manufacturing

## Name, Title and Affiliation of Chair:

Professor Peter Wells, Professor of Business and Sustainability Director, Centre for Automotive Industry Research Cardiff Business School Cardiff University

### Details of Session (including aim and scope):

The **aim** of this session is to explore the diverse intersections of business models and business model innovation, representing primarily entrepreneurial and managerial concepts, and notions of sustainable design and manufacturing with their focus on how e.g. processes, products and services – production and consumption in general – can become more ecologically sound, long-lasting and also accessible for neglected social groups.

While the interplay between business models and entrepreneurial approaches to sustainability innovations have been studied in general (e.g. Bocken et al., 2014; Boons & Lüdeke-Freund, 2013; Wells, 2013), this session highlights the particular area where sustainable design and manufacturing paradigms and principles (e.g. cradle-to-cradle; industrial symbiosis; reusing, repairing, recycling; servitization) meet new business models to create, deliver and capture value from their market introduction.

The aim is to foster practice-theory and theory-practice learning for the next generation of green and socially sound business models. A broad range of market studies and journal articles in this area has been published in the past few years (e.g. Beltramello et al., 2013; Bisgaard et al., 2012). With this session we aim to go beyond the state of the art and create real learnings that can be translated into relevant scientific publications and valuable guidance for business practitioners.

Based on these aims, the **scope** of this session covers contributions that link business model innovation with sustainable design and manufacturing. Papers can be theoretical, empirical or case studies, or a combination of these, with a particular focus on the ways in which business model innovation in new or existing business organisations provides the framework to inspire, create, enable or capture sustainable value.

A selection criterion for relevant session contributions is that they provide a clear understanding of the business model concept (for reviews see e.g. Wirtz et al., 2016, Zott et al., 2011), relate it to issues of sustainable design and manufacturing (general overviews of business models for sustainability can found in a recent Organization & Environment special issue), and provide clear recommendations for theory, business practice and policy making, Specific themes may include but are not limited to:

- Normative values in business model innovation
- Corporate governance structure innovation
- The development of parallel, over-lapping or transitionary business models for existing business organisations
- Business models and corporate strategy to enhance sustainable design and manufacturing
- Sector case studies (e.g. single, multiple, comparative, longitudinal, cross-sectional)
- Small scale business organisations and sustainable design and manufacturing

- The role of government in nurturing and protecting innovative business models to enable sustainable design and manufacturing
- Business models that directly translate paradigms such as cradle-to-cradle, industrial symbioses, industrial ecology, flourishing, design for sustainability
- Examples of how ecological and social concerns can be addressed simultaneously
- Studies that compare industrialised and developing countries and how these approach sustainable design and manufacturing
- Managing business models for sustainable design and manufacturing along development, implementation, operation, assessment, scaling and revision
- The role of information and communication technologies (ICT), such as internet-enabled platforms, for the development and diffusion of sustainable design and manufacturing

In this session the notion of sustainability may extend to e.g. issues of worker empowerment and job enrichment; locality; economic resilience; network structures in the distributed economy; the circular economy; and degrowth.

#### References

Beltramello, A.; Haie-Fayle, L. & Pilat, D. (2013): Why New Business Models Matter for Green Growth. Paris: OECD Publishing.

Bisgaard, T.; Henriksen, K. & Bjerre, M. (2012): Green Business Model Innovation - Conceptualisation, Next Practice and Policy. Oslo: Nordic Innovation.

Bocken, N.; Short, S.; Rana, P. & Evans, S. (2014): A literature and practice review to develop sustainable business model archetypes, Journal of Cleaner Production, Vol. 65, 42–56.

Boons, F. & Lüdeke-Freund, F. (2013): Business models for sustainable innovation: state-of-the-art and steps towards a research agenda, Journal of Cleaner Production, Vol. 45, 9–19.

Wells, P. (2013): Business Models for Sustainability. Cheltenham: Edward Elgar Publishing.

Wirtz, B.; Pistoia, A.; Ullrich, S. & Göttel, V. (2016): Business Models: Origin, Development and Future Research Perspectives, Long Range Planning, Vol. 49, No. 1, 36–54.

Zott, C.; Amit, R. & Massa, L. (2011): The Business Model: Recent Developments and Future Research, Journal of Management, Vol. 37, No. 4, 1019–1042.

## Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Florian Lüdeke-Freund, University of Hamburg
Nancy Bocken, TU Delft & University of Cambridge
Frank Boons, University of Manchester
Arnold Tukker, Netherlands Organisation for Applied Scientific Research TNO,
Erik Hansen, Johannes Kepler University of Linz
Alexandre Joyce, Institut de developpement de produits
Martin Charter, The Centre for Sustainable Design

# Website URL of Call for Papers (if any):

[E.g. a dedicated posting on www.sustainablebusinessmodel.org]

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