
Editorial

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Biographical notes: Arnold Tukker manages the Sustainable Innovation Programs at the Netherlands Organisation for Applied Scientific Research TNO. He has published widely in the fields of life cycle analysis, industrial ecology, and sustainable innovation and has edited or authored several books including *Partnership and Leadership: Building Alliances for a Sustainable Future* (with Theo de Bruijn; Springer, 2002); and *New Business for Old Europe: Product-Service Development, Competitiveness, and Sustainability* (with Ursula Tischner; Greenleaf, 2006). He is currently the director of SCORE! (Sustainable Consumption Research Exchange), a European Union-funded project to develop a research and policy network on sustainable consumption in support of the UN's 10 Year Framework of Programs on Sustainable Consumption and Production.

Ursula Tischner specialised in Eco- and Sustainable Design of products and services. After her master graduation she worked at the German Wuppertal Institute for Climate, Environment and Energy, where she was involved in developing concepts such as eco-efficiency, MIPS, Factor 4 and Factor 10, Ecodesign, Eco-innovation etc. In 1996 she founded her own company econcept in Cologne where she carries out design, research and consulting projects, as well as training and educational courses and programs, such as the Sustainable Design Program at Design Academy Eindhoven, The Netherlands. She publishes books and organises conferences and networks around Eco- and Sustainable Design, is member of design juries and standardisation bodies such as ISO, and evaluator in European research programs.

This special issue grew out of the proceedings of the first conference of the Sustainable Consumption Research Exchange (SCORE!) network, held between 23 and 25 November 2006 in Wuppertal, Germany. The SCORE! philosophy assumes that sustainable consumption and production structures can only be realised if experts that understand *business development, (sustainable) solution design, consumer behaviour and system innovation policy* work together in shaping them. Furthermore, this should be linked with experiences of actors (industry, consumer groups, NGOs, ecolabelling organisations) in real-life consumption areas: *Mobility, Agro-Food, and Energy/electronics*. These areas are responsible for 70% of the environmental impacts of Western societies. The conference saw contributions from all these perspectives, with in total about

100 platform presentations and 25 posters. One of the interesting features of the conference and the network as a whole is, that it manages to combine 'hard' contributions from natural science oriented specialists, and more 'soft' contributions from a range of social science perspectives.

This special issue brings together a selection of the most illustrative papers of the conference. In the first paper, Josef Kaenzig and Olivier Jolliet provide a priority setting of final consumption activities with regard to their life cycle environmental impacts, on the basis of a variety of studies for Switzerland and the EU. What is new, one would ask. As the authors indicate themselves, numerous authors have done such exercises before. Indeed, the interesting message of Kaenzig and Jolliet is not that mobility, agro-food and housing are important. The interesting point is that they try to link it to improvement options in the consumption-production chains, and to what type of actor is best placed to embark on this improvement.

The second paper, of Inge Røpke and Mirjam Godskesen provides a more domain oriented and qualitative view on the relation between environmental impact and consumption, in this case related to leisure activities. An interesting point, that this paper stresses, is the relevance of time as a scarce resource, sometimes forcing decisions that have negative impact on the environment.

In the third paper, Frieder Rubik, Paolo Frankl, Lucia Pietroni and Dirk Scheer give one example of an improvement mechanism, i.e., stimulating households to changed buying behaviour by information provision via ecolabels. They show convincingly that ecolabels are no panacea: there are conditions where they work, and also conditions where they are much less successful.

The fourth paper is a 'note from the field' of Lucia Reisch and Sabine Bietz, that reports interim results of a project that may be the ultimate challenge: how to convince consumers not interested at all in sustainable development, to change behaviour to sustainable lifestyles. In essence, it is attempted to measure the effectiveness of a TV program that tries to communicate options in sustainable consumption and production in an entertaining, emotionally positive, and fascinating way ('sustainment').

The fifth paper, authored by Oksana Mont, is also dealing with households. It discusses from a generic perspective the role and particularly limitations of households to change to sustainable lifestyles. The forces that influence behaviour into an unsustainable direction are discussed as well.

The sixth paper in fact expands on this systemic behaviour perspective. Helma Luiten and Emma van Sandick present a methodology that allows to design and develop alternative socio-technical systems at small scale, with more sustainable behaviour embedded. The method is exemplified with a case on developing a new accommodation and care system for the elderly.

Finally, Chris Church and Sylvia Lorek discuss the NGO contribution to SCP policy. Their paper discusses the barriers NGOs face in gaining influence, and their conclusion is that NGOs should

- appear more strategically
- link sustainable consumption to the current priorities
- ensure better links between global and local and
- strengthen links to other interest groups.

All these papers confirm a gut feeling that was already present in the first approaches to the SCORE! project, and that was elaborated in depth in another result of the project, the book *System Innovation For Sustainability I: Perspectives on Radical Changes to Sustainable Consumption and Production* (Greenleaf Publishing, December 2007). It is crystal clear that the change to SCP requires a systemic vision. Nor consumers, nor business, nor policymakers can do it on their own. They are all part of a system that limits their degree of freedom considerably. All papers in this issue in fact bring home that message. This has a number of implications. First, no actor, particularly government, can duck away from the challenge by ‘outsourcing politics’. Second, all actors should see how they can do their bit, but more importantly, how they can make alliances with other actors to create additional critical mass for change. The UK Sustainable Consumption Roundtable sees such a creation of a ‘Triangle of change’ as a *conditio sine qua non* for realising the shift to sustainability.

We think that this journal is particularly well placed to dwell further on this issue. As marked specifically in the paper of Luiten and van Sandick, the key issue is how to foster change in a complex system, in a normatively chosen direction. If this is not the equivalent of ‘Innovation for Sustainable Development’, nothing else is.