

Organised by

Prof. Dr. John Grin
Department of Political Science at the
University of Amsterdam (UvA)/
Netherlands (j.grin@uva.nl)

Dr. Harald Rohrer
Inter-University Research Centre for
Technology, Work and Culture (IFZ), Graz/
Austria (rohrer@ifz.tugraz.at)

Prof. Dr. Jan Rotmans
Dutch Research Institute for Transitions
(DRIFT) at the Erasmus University
Rotterdam/ Netherlands
(rotmans@fsw.eur.nl)

Dr. Adrian Smith
Science and Technology Policy Research
(SPRU), University of Sussex/ United
Kingdom (a.g.smith@sussex.ac.uk)

PD Dr. Bernhard Truffer
Innovation Research in Utility Sectors
(Cirrus). EAWAG, Dübendorf/ Switzerland
(bernhard.truffer@eawag.ch)

Jan-Peter Voß
Institute for Applied Ecology (Öko-Institut),
Berlin/ Germany (j.voss@oeko.de)

Dr. Karl Matthias Weber
Austrian Research Center, Vienna (ARC-
sys) (matthias.weber@arcs.ac.at)

We acknowledge receipt of funding by the
German Federal Ministry for Education and
Research through its programme for socio-
ecological research ([www.sozial-
oekologische-forschung.org](http://www.sozial-oekologische-forschung.org)) and the
Netherlands Ministry of Housing, Spatial
Planning and the Environment through the
Knowledge Network for System innovations
and Transitions (www.ksinetwork.nl).

Each workshop addresses a key issue of
system innovations for sustainable
development and links up to discussions of
the respective research communities.

Workshop 1 on complexity:

*"Transitions to Sustainable Development:
complexity, co-evolution and governance"*

20-24 November 2006, Egmond aan Zee
organised by Jan Rotmans, DRIFT, and
Karl Matthias Weber, ARC-sys

Workshop 2 on innovation:

*"Innovation and Path Dependency.
Institutions for the management of diversity
in innovation systems"*

16-17 April 2007, Zurich
organised by Bernhard Truffer, EAWAG, and
Harald Rohrer, IFZ

Workshop 3 on governance:

*"Politics and governance in system in-
novations for sustainable development "*

20-21 September 2007, Berlin
organised by Jan-Peter Voß, Öko-Institut,
Adrian Smith, SPRU, and John Grin, UvA

Participation is restricted to 40 participants.
Plenty of time is allowed for discussion on
the issues and themes surfacing across the
presented papers. In addition to facilitating
dialogue, a more tangible outcome of each
workshop will be the publication of an
edited volume or special issue, which draws
upon contributions from the best papers.



System innovations for sustainable development

A series of three international workshops addressing complexity, innovation and governance in restructuring sectoral systems of production and consumption



The challenge

It has been nearly twenty years since the World Commission on Sustainable Development popularised the basic tenets of sustainable development. In the meantime experience has demonstrated that sustainability requires structural change at the overall level of sectoral systems of production and consumption (e.g. in the realms of energy, mobility, water, food, shelter, health care, materials). Such innovation at system level provides a context for more specific innovations on the level of particular artefacts, institutions, ideas, and practices to diffuse and prosper. System innovations will thus become a core concern for sustainability policy.

Pioneers

“Transitions” is a concept through which government, business, science and civil society acknowledge that sustainability demands radical change at a systemic level. In the Netherlands, for instance, transitions towards sustainable systems for energy provision, agricultural production, manufacturing and water management have become a matter of political action, for which the concept of “transition management” is applied. In these transition processes, research activities go hand-in-hand with long-term policy orientation and practical experimentation. Transition management orchestrates these activities that take place in multiple contexts and at multiple levels, aiming to innovate systems of production and consumption and inducing a societal transition towards sustainable development.

These experiences are picked up and mingled with similar approaches by researchers and policy-makers in other

countries and on an international level. As such an international community of “system innovators” is currently emerging at the interface of scientific research, public policy and society.

Integration

Ideas from various scientific streams are being appropriated and adapted in an attempt to help us understand system innovation and transition processes on the macro level of society. Of special importance are complex systems science, innovation studies and governance analysis. Such a multi- and interdisciplinary approach is characteristic for this emerging field of science, which aims to analyse, describe and explain system innovations and transitions.

A purely scientific approach however does not suffice: a trans-disciplinary approach is necessary to gain the input of societal actors on practical knowledge and experience. Moreover, this exchange of knowledge between scientists and societal actors does not follow a linear path, as it rather forms a process of co-production between the parties involved. Social learning therefore forms an important point of departure for this new kind of science: learning in interaction with others, aimed at developing new perspectives on problems as well as alternative practices and patterns of organisation.

Dynamics in focus

Another point of departure for this new kind of science is to take complexity and uncertainty as a starting point, co-evolution being a key notion:

the processes driving system innovations and transitions follow their own internal dynamics and are at the same time interdependent and influencing each other.

Coupling these processes to each other can lead to an irreversible change. Sustainable development also provides a point of departure, as it forms the normative orientation for system innovation research, touching upon the key values in our lives: a balance between social-cultural, economic and ecological values. Thus, a new paradigm is emerging as the basis for a new interdisciplinary, namely that of “system innovation science”, pioneered by transition science and management as an already widely elaborated approach.

Objective of the workshop series

In this rapidly evolving context several research groups from different countries have taken the initiative of organising a series of international workshops on ‘system innovations for sustainable development’.

The objective of this series of workshops is to further explore the content of this new field of science and to make a significant contribution to the dialogue evolving around transitions and system innovations: to analyse overarching concepts, to discuss theoretical building blocks, to study the empirical material that is available, to draw lessons from transition research to date, to debate how a system innovation perspective is reframing the sustainability agenda and to identify key issues for future research.