

**Call for Papers
for the Conference Stream on**

Theoretical and Conceptual Background of Sustainable Development

within the
11th Annual International Sustainable Development Research Conference
June 6-8, 2005 in Helsinki at Finlandia Hall, Finland
Conference Website: www.erpenvironment.org

This conference stream on theoretical and conceptual background of sustainable development will be devoted to understanding how sustainable solutions can be regarded and applied as interplay of scientific research, value decisions and socio-political progress.

The main idea is to investigate the core elements of the sustainable development and discuss its theoretical background as well as its practical impact on academia, industry and society.

Industrial Ecology is sometimes referred to as “the science of sustainability”, which gives the opportunity to link both approaches and explore similarities and differences.

Industrial Ecology aims to enable management of human activity on a sustainable basis by minimising energy and materials usage, ensuring acceptable quality of life for people, minimising ecological impacts of human activity to levels natural systems can sustain, and maintaining economic viability of systems for industry, trade and commerce.

Industrial Ecology and sustainable development document a paradigm shift towards the 21st Century with the core credo that it is possible to smooth the contradiction between nature and culture with appropriate technology and management. The implications of this belief are visible in different areas. In the Humanities the idea that Homo sapiens is apart from nature has transformed into a co-evolutive view of natural ecosystems and human cultures. Connected with this view is the assumption that a balance between human and the rest of nature is possible, which has replaced the view of man as dominator of nature. Ethically, the demand for a macro ethics is emphasized, which shall overcome the limitations of contemporary ethics. Several authors strive also to solve the problem between determination through nature and self-autonomy, while the modernistic paradigm anticipated a dilemma of sensual desires on one hand and rational and moral claims on the other. Epistemologically, IE and SD imply that methods and results of the Natural Sciences and the Humanities should be seen complementary rather than exclusive.

Finally, both concepts recognize the dialectics of industrialism, which are a. a. visible in the correspondence of increasing complexity of technological systems and increasing vulnerability of human beings and society.

Papers and presentations for this conference stream are invited in the following areas but may also address related themes:

- Defining Sustainable Development
- Sustainable development and paradigm shift
- SD and (scientific) discourses
- SD and interdisciplinarity
- Metaphors used in SD/IE context

- SD/IE and environmental ethics
- Philosophy of technology
- Sustainability oriented future research

The conference stream will be chaired by Dr. Martina Maria Keitsch, editor of the special issue on Industrial Ecology - Philosophical and Epistemological Framework of *Progress in Industrial Ecology – An International Journal (PIE)* Inderscience Publishers. The conference stream seeks to bring together international and interdisciplinary scholars working in this field and to initiate an exciting dialogue on the potentials and limitations of sustainability networks.

Initial abstracts of approximately 200 words should be emailed to Martina Maria Keitsch (martina.keitsch@ntnu.no) and to Jouni Korhonen (jouni.korhonen@uta.fi) by February 11, 2005.