Sustainable consumption and production

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The links between unsustainable consumption and the planet's environmental degradation are not new realizations, as they already underpinned the Club of Rome's "Limits to Growth Agenda 21" and the World Summit on sustainable development, but the urgency of climate change has fostered a renewed emphasis on finding a workable pathway towards sustainable consumption and production. Business as usual will lead to climate change that will not stabilize in the foreseeable future, possibly changing the capacity of the planet to support human life.

The overarching hypothesis, which was emphasized at Rio +10 Summit in Johannesburg, is that sustainable consumption can drive sustainable production and lead to structural changes in the world economy. Sustainable consumption by UNEP is defined as "the use of services and related products which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life-cycle so as not to jeopardize the needs of future generations". In theory, sustainable consumption, by definition should lead to sustainable production, as someone concerned with sustainable consumption would not willingly consume a product that was produced unsustainably, or service that was delivered in an unsustainable way.

At the same time, Sustainable Production is defined by the Lowell Center as "the creation of goods and services using processes and systems that are nonpolluting, conserve energy and natural resources, are economically efficient, are safe and healthy for workers, communities, and

consumers, and are socially and creatively rewarding for all working people".

A rational systems approach for improving the chances for a long-term human existence on earth was elaborated by Friedrich Bio Schmidt-Bleek. The approach is based on the simple idea:

1. *to create* our wealth and well being with far less natural resources than hitherto the case, on the average to dematerialize Western economy by at least a factor 10. Technically this is achievable through systems innovation without losing end use satisfaction.
2. *to organize* a cost-neutral shift of overheads, charges and taxes from income to natural resources, in order to internalize the costs of using nature, stimulate eco-innovation, give incentives to producers for dematerializing goods and services, create a price structure on the market that rewards purchasing and using eco-efficient goods and services, and make labor less costly and thus create new jobs.
3. *to use* any other reasonable and cost-effective option available in order to lessen the use of natural resources, including through education, elimination of perverse subsidies, review of norms and standards, and on occasion new control legislation.

In brief, we need to add a new dimension to the traditional environmental protection:

rather than just fighting one symptom of our impact on the ecosphere after another, we must get to the root cause of our problems.

We must understand the currently fundamental mismatch between generating welfare for people and the stability of the carrier system earth.

In September 29–30, 2011 the 2nd international conference "Sustainable Consumption and Production...How

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to make it possible” was organized in Kaunas, Lithuania to discuss three main issues:

1. application of various measures related to sustainable consumption and production, for example, resource efficient and cleaner production, eco-design, green product procurement, environmental management, and their input to positive developments in economy;
2. possibilities to orient society towards sustainable consumption;
3. analysis of examples of good practice in sustainable consumption and production towards sustainability in different countries.

The selected papers are presented in this special issue of the journal “Clean Technologies and Environmental Policy”.