

## Special Session

### **REDUCTIONS: Reducing Environmental Degradation & Unsustainable Consumption Trends & Impacts On Nature & Society**

Dr. Sylvia Lorek, Sustainable Europe Research Institute

One of the wonderful (and sometimes unwieldy and troublesome) characteristics of the concept of sustainable consumption and production is that it can be used to create interlinkages and connect the dots in the complexity of sustainable development challenges: resource scarcity, environmental justice, global health, biodiversity loss, atmospheric pollution, waste generation, etc. This makes SCP the mainstay of sustainable development and in fact brings it around to serving as the "overarching objective" that the 2002 United Nations Johannesburg Summit declared it to be.

Thus, getting serious about sustainable development means getting serious about SCP (or, is it the other way around)? In light of our current ecological footprint (2+ planets), and given the magnitude and urgency of the sustainable development challenge, how about getting serious about the need for absolute reductions to a one-planet level.

Can absolute reductions in material throughput and energy use be achieved within a "reasonable" timeframe? Are there examples where reductions have been demonstrated? What materials are critical and which are substitutable? What targets can be set for resources consumption; what methods would be used to measure this? What structural changes would be needed in society; what institutions? What about regions or populations where consumption needs to increase to meet minimum needs of people? Is a new sustainability science approach needed? ...

This session intends to reflect on this questions. It starts with briefly introducing the REDUCTIONS project and relates it to ongoing research and political activities.

Session Chair: **Sylvia Lorek**

#### **Speakers**

**Lewis Akenji**, IGES, Japan

*REDUCTIONS – different and much more than absolute decoupling only*

**Veronika Kiss**, Resource Cap Coalition, Hungary

*Reducing energy use through quota*

**Katharina Umpfenbach, Martin Hirschnitz-Garbers**

Ecologic Institute, Germany

*Exploring consumption-focused policy mixes for absolute decoupling of well-being from resource use and environmental impacts*

Long Abstract (1200 words max):

The overall environmental impact of consumption of goods, services and resources by households and companies in the EU continues to grow. The impact of the European economy is now nearly twice as large than what is required for a sustainable world (WWF International et al. 2012). According to an EEA-analysis, food, housing and mobility are responsible for a large part of the pressures and impacts caused by consumption in the EU (EEA 2012). These three broad consumption areas are estimated to contribute approximately two-thirds of consumption-related material use, greenhouse gas emissions, acidifying emissions and ozone precursor emissions. Thus, some of the key areas with the highest potential for lowering resource use are linked to lifestyle-based consumption choices such as diet choice, number of people per household, living area per person, distance travelled and choice of transport mode.

The trends towards increasing consumption of resource-intensive goods and services observed in the EU over the last decades have no single driver. Rather, a web of interrelated drivers, each fuelled by a set of causes leads to the observed trends. Causes include inter alia demography, rising affluence, decreasing production prices, innovation, social norms and consumerist values nourished by advertisement (Tan et al. 2013).

On the production side, causes driving overuse of resources include demand for high profits and short pay-back periods of investment, inadequate resource pricing (to reflect the provision of the resource and its resource value) and a lack of internalisation of external costs of resource use. This is exacerbated by limited liability rules for the private sector and the existence of environmentally harmful subsidies. Together, production and consumption-side actors are facing technological and social lock-in, i.e. systematic linkages between technology, existing infrastructure and behaviour patterns that appear hard to break.

An increasing number of scientists argues that the trends are unlikely to change to the extent needed without profound systemic changes, including a reconsideration of growth as a central policy objective (Costanza et al. 2014, Kubiszewski et al. 2013). An opposing school of thought argues that growth can be redirected to give rise to a green economy dominated by sustainable products.

In the context of the ongoing European research project DYNAMIX (Dynamic policy mixes for absolute decoupling, <http://dynamix-project.eu/>) promising policy mixes are being identified that could contribute to absolutely decoupling EU economic development from resource use and environmental impact. Building on the mounting evidence planetary boundaries (Rockström et al. 2009) and taking global justice concerns into account, the project starts from the assumption that absolute decoupling alone will not be sufficient. Rather the EU and all other industrialised countries should aim for reducing global impacts of their consumption and production so as to stay within limits while allowing poorer countries to increase their consumption (Umpfenbach 2013).

While assessing potential future policy mixes for decoupling, the DYNAMIX team does not take either the need for growth or de-growth as a given. Instead it is proposed to assess effectiveness of policy mixes based on their environmental impact and the effect on societal well-being. While various definitions of well-being exist, there are a few key components that any policy focusing on well-being should take into consideration: providing people with basic material needs for a good life, ensuring freedom and choice, guaranteeing health and personal security and enabling people to experience good social relations and participate in a social life (MA 2005). This approach implies that low growth or stagnation are not considered a policy failure as long as societal well-being can be maintained or improved.

In public policy, formidable **barriers** exist to shifting the focus from economic growth to well-being. The European (and global) socio-economic model and its institutions are built on and for economic growth driving (and resulting) from consumerism and profit maximisation. This does not only apply to businesses and the financial system, but also to social policies, public finances and – as a consequence – the political system. Proposals for major changes to this system are linked to fear of financial collapse, social and political instability, and loss of influence of vested interests. Moreover, the EU is an open economy interacting and competing with other world regions and any policy mix has to take into account impacts on trade and competitiveness.

A number of widely agreed policy proposals exist to alter the dynamics of the production side even though most of them still await full implementation. The most prominent examples include elimination of environmentally harmful subsidies, green tax reform and full internalization of external costs. If fully implemented, all of these policies would have tremendous impacts on the demand side, mainly through changing relative prices.

This paper argues, however, that in addition to these policies absolute decoupling to stay within sustainable limits would also require a policy mix addressing the web of underlying causes driving trends of escalating consumption. With the exception of information provision, awareness raising and financial support for green products (mostly limited in scope and volume), few concrete policies have been studied in full impact assessments, and an even smaller number has been tested under real-world condition. DYNAMIX will attempt to move into this uncharted territory by defining concrete policy instruments in dynamic sequencing to address the structural, underlying causes of unsustainable consumption trends and exploring their potential impacts up to 2050.

While the detailed policy mix is still work in progress and will be fully elaborated and analysed in a first ex-ante assessment by August 2014, interim findings show that the policy mix might encompass inter alia:

- Policy instrument to enable individuals to exchange increases in affluence to leisure,
- Policy instruments to reduce individuals' exposure to commercials,
- Policies addressing infrastructure-technology-behaviour lock-ins in a systematic fashion.

## References

Costanza, R. et al. (2014). Time to leave GDP behind. *Nature* 505, 283 – 285

EEA (2012). The European Environment State and Outlook 2010. Consumption and the Environment – 2012 UPDATE.

WWF International et al. (2012). Living Planet Report 2012. Biodiversity, biocapacity and better choices. Gland, Switzerland

Kubiszewski, I. et al. (2013). Beyond GDP: Measuring and achieving global genuine progress. *Ecological Economics* 93, 57–68

MA (Millennium Ecosystem Assessment) (2005). *Ecosystems and Human Well-being: Synthesis* Island Press, Washington, DC.

Rockström et al. (2009) A safe operating space for humanity. *Nature*. 461, 472–475

Tan, A. et al. (2013): The underlying reasons for resource (in)efficiencies? – DYNAMIX Deliverable D.2.2., Berlin: Ecologic Institute.

Umpfenbach, K. (2013): How will we know if absolute decoupling has been achieved? - Common Approach for DYNAMIX, DYNAMIX Deliverable D.1.2., Berlin: Ecologic Institute.

UNEP (2011) Decoupling natural resource use and environmental impacts from economic growth, A Report of the Working Group on Decoupling to the International Resource Panel.

Urhammer, E. and Ropke, I. (2013). Macroeconomic narratives in a world of crises: An analysis of stories about solving the system crisis. *Ecological Economics* 96, 62–70

#### Short abstract (170 words max)

The overall environmental impact of consumption of resources in the EU continues to grow, requiring more biocapacity than is globally available. This appears driven by the dominant economic model putting consumerism and GDP growth at the heart of our economic system, as well as in our cultural and political systems.

The paper will present attempts of the European research project DYNAMIX to define concrete policy instruments that address the structural, underlying causes of unsustainable consumption trends and to explore their potential impacts up to 2050.

While the detailed policy mix is still work in progress and will be fully elaborated and analysed in a first ex-ante assessment by August 2014, interim findings show that the policy mix might encompass inter alia:

- Policy instrument to enable individuals to exchange increases in affluence to leisure,
- Policy instruments to reduce individuals' exposure to commercials,
- Policies addressing infrastructure-technology-behaviour lock-ins in a systematic fashion.

**Philip Vergragt**, Global Research Forum for Sustainable Production and Consumption

*From Consumerism to Wellbeing: Towards a Cultural Transition?*

Note taker/facilitator: tba

The session will follow the SCORAI format with short presentations and explicit room for structured discussion. Short papers will be provided in advance according to the CfP. In addition we will document the main lines of discussion – findings as well as controversial points – as source for further scientific developments. This can be used for the documentation of the special session – but obviously ex post only.