An Introduction to the Research Group “Sustainable Production and Consumption”

The Wuppertal Institute explores and develops environmental policy guidelines, strategies and instruments in order to promote sustainability at the regional, national and international level. Among four research groups of the Wuppertal Institute, the Research Group “Sustainable Production and Consumption” specifically aims at contributing to sustainable development of production and consumption patterns. The Research Group does this by analyzing current structures of production and consumption and developing alternative concepts and strategies ranging from optimization through gradual change to fundamentally new solutions.

In the centre of the Research Group’s research agenda lies the product and service chain. Achieving a sustainable development of complex production and consumption patterns requires addressing the entire life cycle – from the extraction of raw materials and generation of energy through the production of primary and finished products, trade, and consumption, to recycling and waste disposal. Production and consumption patterns are complex and must be viewed in relation to other systems. They revolve around many and diverse product-service chains. Different actors and networks of actors, whose interests can diverge, shape patterns of production and consumption. At the same time, they themselves influence flows of material, emissions, money and information. They are also affected by the structural conditions such as infrastructure, knowledge, innovations, values and patterns of thought. The Research Group focuses its work on actors and networks of actors in specific product-service chains, looking at their scope for action and the potential scale of their contribution towards sustainable development. The actor groups studied include stakeholders, who support and influence the product and service chain (e.g. political parties, initiatives, associations and NGOs).

Sustainable production and consumption presuppose that all actors in the production and consumption system (are able to) live up to their responsibility (sustainability performance). With every specific case the task is to concretize sets of goals, develop suitable criteria, point out imbalances in the distribution of burdens and opportunities for influence along the product-service chain and to evaluate them thoroughly. The final task is to pinpoint the responsibilities and to identify the starting point for initiating change.

Changes in non-sustainable systems of production and consumption target the level of individual actors (micro-level), the level of their interactions and institutions (meso-level), and the level of the social, political and legal framework (macro-level). Implementing change requires that concepts be developed at all levels so that alternative patterns of perception and action can be initiated and then stabilized.
Research Fields of the Research Group “Sustainable Production and Consumption”

The Research Group “Sustainable Production and Consumption” has four major research fields, which are in continuous development:

Research Field 1 – Sustainability evaluation along the product chain: The goal is to develop and test a set of sustainability indicators including ecological, social, economic, cultural and integrated indicators. Special attention is given to the congruence and comparability of indicators, which should be able to chart the distribution of sustainable performance within and between product chains and the relationships between material and non-material flows.

The results are of key significance for work in other research fields. The approach in this research field is threefold: (1) Theoretical and empirical studies of ways of analyzing and evaluating the sustainable performance of product chains are conducted so as to satisfy the information requirements of different stakeholders; (2) the Research Group also explores new technologies and evaluates their specific problems; (3) and finally the linkage between resource efficiency and employment is examined.

Research Field 2 – Sustainability potential of actors and areas of demand: The goal here is to investigate actors’ options for promoting sustainability within selected areas of demand and/or branches of the production and consumption system. The Research Group identifies the requisite conditions for sustainable production and consumption and develops innovative concepts on the basis of analytical and theoretical approaches and detailed practical case studies so as to enable actors and networks of actors to contribute more effectively towards sustainability in the production and consumption system. This research focuses on a specific type of actor (e.g. businesses, consumers) and seeks to find out how selected actors contribute towards sustainability in the production and consumption system, and how their possibilities are limited, which instruments they need and which structural conditions are conducive to this. At the level of the product-service system the Research Group examines how integrated and sustainability-oriented production and consumption can help achieve a more sustainable economy and way of life.

Research Field 3 – Governance structures for production and consumption: The goal here is to analyze existing governance structures on the basis of current theories and, from there, to develop approaches for making them more sustainable. Governance is a form of politics in which actors from government and non-government organizations, business and civil society are interconnected through various types of networks and work together systematically to develop solutions to problems. The Research Group examines governance structures for sustainable production and consumption patterns along the product-service chain and from different angles, i.e. governance of businesses, governance at the interface between production and consumption, and consumer governance.

Research Field 4 – Change in thought patterns and values: The starting point is the hypothesis that a sustainable development of patterns of production and consumption is only possible if sustainability becomes a guiding principle in all individual and social decision-making processes, i.e. in the cultural praxis of society and its institutions. The key research question is how to anchor sustainability in cultural praxis. The Research Group therefore investigates the (non-)sustainable aspects and trends of (socio-)cultural practice in the production and consumption system (e.g. social institutions, models, the acquisition of cultural values and norms, the conditions for social change). The resulting theoretical and empirical insights provide the basis for developing and shaping communication and information flows as well as reflection and learning processes in a way that adequately reflects actors’ needs and concerns.