

## **Analysis of the Lifecycle Environmental Impacts from Consumption in Europe**

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The paper provides an analysis of the lifecycle environmental impacts from consumption in Europe - focusing on the production-consumption areas of food, clothing and electrical and electronic goods. It places the challenge of production-consumption systems in a green and circular economy perspective, where product policies and waste minimisation/prevention approaches feature centrally, and the global environmental dimension of European economic activities more broadly are addressed. This is relevant for a green economy because consumption and production activities in Europe are fuelled by imports (and exports) of resources, goods and services. Environmental pressures related to these therefore largely impact the environment outside of Europe via trade, they are indirectly 'embedded' in the imported (and exported) goods and are thus outside direct control of European environmental policies. In addition, both benefits and negative social and economic impacts associated with the imports also occur outside of Europe. These impacts will thus influence indirectly the wellbeing and health of the population in the producing countries. Focus is on three production-consumption systems characterised by high shares of trade and significant lifecycle environmental impacts: Food, clothing and electrical and electronic goods. Since European production and consumption in these areas relies heavily on imported goods and resources, the associated impacts (both positive and negative) are dispersed across global supply chains. For each of these areas, the paper summarises the trends in European consumption and production, their environmental and other impacts and review the governance mechanisms and opportunities to alleviate these impacts - both within Europe's borders and elsewhere. Finally, the paper provides systemic reflections on the trends and opportunities, exposing the complexity of and the need for a long-term transitions perspective on the governance and responsibility challenge. How can society meet future sustainability visions and live well, while mitigating the environmental and social harms? How can Europeans influence globalised consumption-production systems when the main mechanisms for governance - government policy and enforcement - primarily operate within state or regional boundaries? Which consumption patterns can be globalised within the boundaries of the planet? What are the potentials and limitations of different options for changing production and consumption systems? How can the transition be organised and what is the role of governance and of business models and civil society activities?