

## **Carbon emissions – the relevance of consumption-based accounting and policy**

Topic: Consumption-Based Carbon Policies and IO Modeling

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This is a paper for the special session on "Consumption-based carbon policies and IO modelling"  
Kirsten Wiebe is not an author of this paper. It is a paper by Arnold Tukker and will be presented by Arnold Tukker

### **Abstract**

Climate change mitigation policies are currently focused on production processes within national borders. However, all production ultimately serves consumption. Consumption rather than production is the ultimate driver of increases in greenhouse gas emissions, reducing the likelihood of keeping global average temperature increase below 2 °C with respect to pre-industrial levels. Mitigation policies that include a consumption- and trade perspective thus bear the promise of providing new, cost-effective and efficient solutions complementing existing production and territorial oriented policies.

This talk will first review some important findings about past analyses of carbon emissions by country related to final consumption of goods and services in a country. The talk then will explain the approach of a new EU FP7 funded project called CARBON-CAP ([www.carboncap.eu](http://www.carboncap.eu)), that aims to:

- a) Improve and harmonize global MR EE IO databases that often are used for consumption based accounting
- b) Propose consumption based policy options to mitigate climate emissions
- c) Assess the economic and environmental impacts of such policies, with the models FIDELIO, EXIOBASE and E3MG