How can an input-output model support local environmental policy? Opportunities, limitations and challenges

Topic: IOâ€™s role in covering environmental policy needs
Author: Willem Raes

Historically environmental policy was mainly focused on local problems, e.g. oil spills, polluted streams, air pollution by a factoryâ€¦ These problems could be looked at from a territorial perspective only. However, the current environmental challenges are often global. Nevertheless, the focus of most policies remains unchanged. How can we reduce the greenhouse gas emissions within our borders? How can we improve the resource efficiency of our businesses?

It is necessary for local environmental policy to adapt to global challenges, like climate change and resource scarcity. The Public Waste Agency of Flanders (OVAM) and the Flanders Environment Agency (VMM) commissioned VITO and the Federal Planning Bureau to develop the Flemish environmentally extended input-output model (EE-IO model) embed in the EXIOBASE IO-model. This multi-regional EE-IO model started to widen the scope of the Flemish policy to a consumer or footprint perspective. How can we reduce the impact of the Flemish consumption on climate change and raw material extraction?

A better understanding of the carbon and material footprint of Flemish consumption is important when deciding on policy actions to enhance consumer and producer behaviour. Together with VITO, OVAM is currently using the EE-IO model to better understand and measure the global and local effects of circular economy strategies. What does a circular economy mean for Flanders and what are the effects on Flanders and worldwide?

However, the development of the EE-IO model is challenging and the model has its limitations. The presentation will start with a few cases where the EE-IO model calculations are used in policy-making. In the second part, expectations and possible limitations of IO models will be brought up. The session will end with a discussion on whether these challenges can be met by developers of IO models.

Title special session: IOâ€™s role in covering environmental policy needs.