

An Environmentally Extended Input-Output database for the EU25

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Arnold Tukker, Program manager Sustainable Innovation, TNO, Delft, Netherlands, Arnold.tukker@tno.nl
(other partners in EXIOPOL may act as co-author)

This paper seeks to present and receive feedback on the strategy of an EU –funded Integrated Project of various million Euros: EXIOPOL (“A New Environmental Accounting Framework Using Externality Data and Input-Output Tools for Policy Analysis”). This particularly with regard to its part on environmentally extended input output analysis. The project consists of 37 institutes, is lead by FEEM and TNO, and will run between 2006 and 2010. The project has three principal objectives:

- (a) synthesise and develop further **estimates of the external costs of key environmental impacts** for Europe;
- (b) set up an **environmentally extended (EE) Input-Output (I-O) framework** for the EU-25 in a global context which as many of these estimates as possible are included, allowing the **estimation of environmental impacts (expressed as LCA themes, material requirement indicators, ecological footprints and external costs) of different economic sector activities, final consumption activities and resource consumption** for countries in the EU;
- (c) apply the results of the external cost estimates and EE I-O analysis for the **analysis of policy questions** of importance, as well as for the **evaluation of the value and impact of past research on external costs on policy-making in the EU.**

The EE I-O tool, particularly when linked with dynamic models, will be an extremely powerful support for a great variety of EU environmental and general economic policies. It will allow for analysis, monitoring and improvement assessment of issues such as the total environmental impacts and external costs per industry sector, per final consumption activity, per final product group, related to imports to and exports from the EU25 and per resource used. By splitting up the total consumption into consumption patterns of different target groups, analysis of the life cycle impacts and external costs per target group, life style pattern, etc. becomes possible. The tool will allow for a structural path analysis and contribution analysis (i.e. which sectors or processes contribute to what extent to impacts or external costs related to products or resources used, and if these processes are located in the EU or are related to imports). To date, the EU’s Commission’s services such as EEA, Eurostat or DG JRC IPTS have not yet been in the position to develop an integrated IO table for the EU, let alone one that integrates environmental extensions and external costs. It is an explicit goal of the project that the tool should be handed over for structural maintenance and use to one of the relevant Commission’s services.

References

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Note: this paper can be presented in various sessions, like 1.2 Modelling environment-economy relations , 4.1 Societal metabolism, 4.2 Green accounting, or 11 Theory and method development