EXIOPOL: Philosophy and Main Approach

Topic: EXIOPOL: Latest progress and preliminary results of work on a global, detailed MR EE SUT/IOT database
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The Integrated Project (IP) EXIOPOL (A New Environmental Accounting Framework Using Externality Data and Input-Output Tools for Policy Analysis) has been set up by FEEM and TNO (being co-ordinator and scientific director) under the EU's 6th Framework Program. It has a budget of 5 Mio Euro and runs between Spring 2007 and 2011. A key goal is to to set up an environmentally extended (EE) Input-Output (I-O) framework with environmental extensions in which as many of these estimates as possible are included, allowing the estimation of environmental impacts and external costs of different economic sector activities, final consumption activities and resource consumption for countries in the EU.

The EE I-O work in project also forces scientists that worked on rather separate fields such as IO analysis (IOA) Material Flow Analysis (MFA) and Life cycle assessment of products (LCA), to organise their approaches and data in a unified framework. Where in theory such unified frameworks have been developed (e.g. SEEA, UN et al, 2003), EXIOPOL is probably one of the first projects that integrates data on such a broad scale. In this paper we want to discuss the architecture of the project, and the results of EXIOPOL's scoping phase, that brought to the fore a number of inconsistencies in brings together This paper discusses the architecture of the proposed database, and our experiences and proposed solutions for problems related to integrating data and indicators systems that have been set up using different conventions (FEEM&TNO, 2006; Tukker et al., 2007).

In the scoping phase of the project and later in the development of the databas a great number of choices has been made. This paper introduces the project, indicates main methodological choices, and provides the 'big picture' of the project. Subsequent talks will go in more depth into key activities in the project (transforming/harmonizing SUT and IOTs; gathering extensions; linking SUT and IOT via trade, the development of a relational database system, and how the database can be used for policy applications and used with models).