

## **The Exiobase DBMS for the storage SUTs and transformation into trade-linked input-output tables: some illustrative applications**

Topic: Organized session: EXIOPOL

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Within the European FP6 funded project Exiopool, a database management system has been developed. The purpose of Exiobase is to:

- Store the collected single country supply–use tables and extensions.
- Transform the single country tables into a trade-linked international supply–use table.
- Transform the international supply–use table into several different kinds of input–output tables ready for analysis.

The actual analysis is carried out in CMLCA; the life cycle analysis software tool developed by CML which is suitable for LCA, EIOA and combinations thereof. Focus points during the development of Exiobase were: portability between different platforms, speed and memory performance, exchange of data with other tools and flexibility.

The final result of Exiobase as imported in CMLCA can be analyzed easily. One example of such an analysis is a contribution analysis, a break-down of the results into its constituents. If one decomposes the CO<sub>2</sub> emissions as a result of the final consumption expenditure by private households in Austria in 2000 by the country in which these emissions take place, we see that domestic sources (industries plus households) are responsible for 63% of the CO<sub>2</sub>. 37% of the CO<sub>2</sub> emission is thus embodied in imports. Main foreign countries where CO<sub>2</sub> is emitted for Austrian private consumption are Germany (7.7%), Russia (4.5%), and Italy (2.2%).