

 Content archived on 2023-03-09

EU project develops advanced data management system

An EU-funded team of researchers has succeeded in developing a novel accounting framework that uses sophisticated tools for policy analysis. The EXIOPOL ('A new environmental accounting framework using externality data and input-output tools for policy analysis') project is ba...



An EU-funded team of researchers has succeeded in developing a novel accounting framework that uses sophisticated tools for policy analysis. The EXIOPOL ('A new environmental accounting framework using externality data and input-output tools for policy analysis') project is backed under the 'Sustainable development, global change and

ecosystems' Thematic area of the EU's Sixth Framework Programme (FP6) to the tune of EUR 5 million.

Because every country is interrelated with others in the global economy, it is important to understand the true impacts of consumption in each country. However, many impacts of consumption are generated abroad. The tools developed by EXIOPOL support our need to comprehend the complex pattern between cause and effect, and to understand the trade and competitiveness implications for policies.

The EXIOPOL consortium transformed and harmonised data, and developed an advanced data management and analysis system. The project partners linked data on external costs that were established at the micro level, with estimates at the national level. For the first time ever, the databases then incorporated information on the environmental impacts.

The project partners developed the detailed global input-output database that impacts all countries, where 43 countries represent 95% of the global economy and 160 countries make up the remainder. EXIOPOL distinguished 130 sectors and

products, and recorded 30 emissions and 80 types of primary resource extractions for each industry. The team also inventoried the use of 60 energy carriers by industry, using the database.

The EXIOPOL consortium also updated and detailed external costs by type of emissions, industry sector and country, and for a range of themes: health, agriculture, biodiversity, forestry and wastes.

Coordinated by the Fondazione Eni Enrico Mattei (FEEM) in Italy, the EXIOPOL partners set off with three objectives in mind. The first was to synthesise and develop estimates of the external costs of key environmental impacts for Europe. The second was to establish an operational and detailed output table for all 25 EU Member States that includes environmental extensions comprising as many of these estimates as possible. The third objective was to apply the findings of the external cost estimates and environmentally extended input-output analysis in order to evaluate key policy questions, and assess the value and effect of past research in external costs on policymaking.

Going beyond the EU-25, however, the EXIOPOL team said the input-output table would be embedded in a global context as well. This would allow policymakers to assess the effects of Europe-based sustainability measures on the economic competitiveness of the 25 EU Member States.

The EXIOPOL team has made it possible to make worldwide estimates of external costs of global production, to evaluate how final consumption in a country also affects the global value chains, and how the effects vary across countries.

Ultimately, the project helped expand and synthesise the database on environmental costs within the EU, measured in monetary terms.

The EXIOPOL team comprised experts from Austria, Belgium, China, the Czech Republic, Denmark, Finland, France, Germany, India, the Netherlands, Norway, Poland, Spain, Sweden and the United Kingdom. For more information, please visit:

EXIOPOL:

<http://www.feem-project.net/exiopoli/> 

Fondazione Eni Enrico Mattei (FEEM):

<http://www.feem.it/getpage.aspx?id=62> 

Countries

Belgium, China, Czechia, Germany, Denmark, Spain, Finland, France, India, Italy, Netherlands, Norway, Poland, Sweden, United Kingdom

This article is featured in...

RESEARCH*EU MAGAZINE

Through the looking
glass: search engines,
data and the semantic
adventure

Last update: 1 December 2011

Permalink: <https://cordis.europa.eu/article/id/34090-eu-project-develops-advanced-data-management-system>

European Union, 2025