

Input Output Life Cycle Assessment, From Theory to Applications
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From Input-Output Tables to Modelling Environmental Issues

Summary

The aim of this presentation is to give a brief overview of the development which occurred in taking into consideration of environmental issues in the framework of Input-Output analysis during the last thirty years of the twentieth century. The first attempt was made by Leontief himself in 1972 in a paper related to air pollution. This opened the way to a multitude of both theoretical and applied works. We will first consider the efforts made in order to describe the interaction between environment and economy in a pure Input-Output accounting framework and as an extension of National Accounts. Then we will show how these accounting frameworks allow us to evaluate the energy content of the final demand or the emission of pollutants and to study the evolution of these phenomena over time through structural decomposition techniques. We will finally focus our attention on modelling using the applied general equilibrium approach, concentrating on the way environmental issues can be introduced in these models.