Implications of U.S. and China trade in the Green House Gases generation, 2000-2010

Topic: Environmental Input-Output Modeling
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Abstract

In the last two decades, two elements have shown upward growth rates, Green House Gases (GHG) emissions and trade. In a globalized environment, several countries, especially developing countries, have bought low cost inputs, which at the same time are high pollution inputs. The later allow them to increase their competitiveness in commerce and to become suppliers of certain types of goods.

In this paper we verify which are the sectors and countries that have increased their dependency of foreign inputs to export and at the same time have increased their GHG emissions to export, with the objective of identifying the higher polluting sectors due to the acquisition of foreign inputs with low levels of environmental efficiency. This is achieved through the use of value added trade matrices and GHGs for export matrices, considering the methodologies proposed by UNCTAD and De Backer and Miroudot (2012) in the first case, and an adaptation for GHGs of the proposal for employment matrices of Dominguez, et al. (2008).

References:

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