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# Carbon transfers through International Trade: A Case Study from Greece, Germany and France

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## Résumé

Our analysis follows the tradition of Unequal Ecological Exchange, arguing that global trade leads to unequal transfers of resources and emissions from the less developed towards more developed countries, transforming the first to natural resource pools and/or pollution dumps. While a series of recent studies established that these transfers take place and favour the global North, a big part of them remains descriptive and does not reveal the underlying mechanisms. Our paper examines empirically the carbon emissions transfers through global intra-EU trade.

In particular, we draw from the Marxian theoretical framework and employ network and input-output analysis so as to investigate the trade vis a vis carbon emissions in periphery (Greece), and core EU countries (Germany and France). We

1. Identify the mechanisms of embodied emissions using the Marxian approach for competition
2. Estimate the embodied emission of tradable goods.
3. Estimate the transfers of carbon emissions mutatis mutandis the labour transfers of value
4. Attempt to develop an index focusing on carbon emissions, by using the classical approach of organic composition of capital.

We argue that this index, in conjunction with the organic composition of capital, provides a sound theoretical and analytical framework which can reveal the causes of Unequal Ecological Exchange. Finally, we test the analytical strength of the proposed framework by presenting a structural decomposition analysis.

Our results lend support the above-mentioned assumptions corroborating previous empirical work on carbon transfer through global trade.

**Mots-Clés:** carbon emissions, input, output analysis, organic composition of capital, EU policies, bilateral trade, intra EU trade

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