

A time series of global carbon footprints at high country and sector detail

Topic: International trade and environment

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During the past decade, our understanding of climate change has improved, but with it, the future outlook has worsened. The problem of climate change is now perceived as more severe, more urgent, and as a result more political. The latter is reflected in increasing debates about the national responsibilities for the damages expected from climate change. In particular, exporters of emissions-intensive commodities now argue more strongly than ever for a consumer-responsibility principle. This principle has recently been underpinned by the concept of a carbon footprint, which is now highly topical both in academic and policy-making circles. Especially the carbon footprint of international trade is becoming a central issue in the debate about which nations should be shouldering the main burden for reducing global emissions. Multi-Region Input-Output (MRIO) analysis has played an important role in informing this debate. In this paper, we present the current state of a new Australian project aimed at calculating the carbon footprint of the global economy. This project distinguishes itself in that a) it provides a harmonised time series, b) our results can be deployed more rapidly thus supporting decision-making becoming more and more urgent, and c) our MRIO features unrivalled country and industry sector detail.