Footprint analysis and the regressivity of emission taxes

Topic:
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We show that the incidence of emission taxes on consumer income classes is proportional to the footprints of their respective consumption bundles. The dimensions of the footprints are industry by product, but the literature employs industry-by-industry input-output coefficients. We rectify footprint analysis by returning to the underlying national accounts, the use and make tables. Bringing in budget shares data of the different income classes (Engel curves), we show that the carbon dioxide footprint per euro expenditure decreases with income. Our result renders an emission tax regressive and thus implies a tradeoff between environmental and income policies.