

Income-based responsibility

Topic: Sustainable production and consumption 1

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Anthropogenic greenhouse gas emissions are an environmental pressure that currently raise serious concerns and that are subject to strong mitigation efforts. An allocation of the mitigation effort among multiple agents requires the prior allocation of emissions among those same agents by a metric of carbon responsibility. The metric adopted by current climate policy is production-based (or territorial) responsibility. However, other types of responsibility have been discussed in the literature, namely consumption-based (or upstream) responsibility and downstream responsibility. In this paper we study the latter type, which is little explored in the literature, with the aim of bringing it to the climate policy discussion. We clarify the term through a novel nomenclature, income-based responsibility and present a case-study, with the quantification of income-based responsibility for 112 world regions, we compare the results with production and consumption-based responsibilities.