

Carbon inequality of in the U.S.

Topic: (2.2) Environmental IO Modelling (2)

Author: Kuishuang Feng

Co-Authors: Klaus HUBACEK

Consumption-based CO₂ emissions have been highlighted as an important indicator for global climate change mitigation in the past decade. Household consumption and associated CO₂ emissions for different income groups in the US vary significantly which leads to the critical discussion on environmental and income inequality. By linking the US consumer expenditure survey data with multi-regional input-output analysis, this study is to estimate the consumption-based CO₂ emissions for 13 US income groups and assess the carbon inequality in the US. Our results show that carbon intensities of different consumption categories varies significantly and with increased income spending additional income on less carbon intensive services, which may help to prevent a fast growth of household carbon footprint. However, per capita carbon footprint of rich household is more than 5 times of the footprint of poor household. Our result highlight that the rich households in the US have much larger potential contribution to US emissions mitigation through changing their consumption behaviors.