

Who gains and who emits? Value added and embodied carbon across Japan's inbound source markets

Topic: Input-Output Analysis: Sustainable Production and Consumption policies (6)

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Tourism is a major part of many economies and a significant source of greenhouse-gas emissions. Yet a destination's post-pandemic recovery is still judged mainly by arrivals and spending, which speak to the economic side but not the carbon side. Visitors also come from different countries, and these totals hide what each market is worth: the income its visitors leave behind, and the carbon their spending causes. This study weighs a destination's main source markets on both at once. For Japan's five largest markets (China, Taiwan, Korea, Hong Kong and the United States), we trace their spending using OECD input-output and greenhouse-gas data, counting only what is spent inside Japan. Every market brings about the same income per dollar spent (around USD 0.96), because all draw on the same Japanese supply chain. Their carbon differs much more, and how large it looks turns on one accounting choice: whether tourist shopping is treated as a retail service or as demand for the goods themselves. That choice alone moves the figure from about 0.27 to 0.40 kg of CO₂e per dollar. Most of the income stays in Japan, but most of the carbon is released abroad, in the supply chains behind what visitors buy. The 2024 mix of visitors is also more carbon-intensive than the 2019 mix. A destination should therefore judge its markets by both the income they leave and the carbon they cause, not by spending alone. The method is shown for Japan but works for any destination with similar data.