

Labandeira et al. (2022a): Distributional impact of carbon taxation in Mexico

Research question: Which is the effect on inequality and poverty of Mexican households of introducing a carbon tax? Which compensation schemes can be designed to reduce inequality and poverty?

Why is this important? Mexico is an unequal country with high levels of poverty affecting mainly rural households.

Key results: The reforms considered would reduce energy consumption and associated emissions, and would also have a progressive impact on welfare, affecting richer households more, because of the progressive effect of the gasoline tax, which offsets the regressive impact of the electricity tax. In any case, the reforms, by increasing the energy expenditure of poor households, would increase poverty and inequality in Mexico. The use of the revenue generated through lump sum transfers, especially if these are targeted to the poorest households, would reduce inequality and poverty relative to the baseline situation without reform, making the reforms with compensatory packages have a net progressive distributional impact.

Key policy relevant messages/conclusions: The implementation of a carbon tax on energy goods with properly defined compensation schemes would achieve reductions in energy consumption and associated CO₂ emissions of households, contributing to meet the Mexican commitments derived from the Paris agreement, while at the same time reducing inequality and poverty.

Lessons learnt/open points/challenges/gaps/next steps: The price and income effects estimated in this paper could be extended to climate events (as tropical cyclones) in order to transfer them to impacts on specific households in specific areas of Mexico. With an adequate correspondence between microdata and macrodata, the methodology could be applied to these alternative contexts.

Reference:

Labandeira, X., JM. Labeaga, X. López-Otero, T. Sterner: *Distributional impacts of carbon taxation in Mexico. [Impactos distributivos de la fiscalidad sobre el carbono en México]* In: *Cuadernos Económicos de ICE Núm. 104 (2022): The transition to a decarbonised society [La transición a sociedades descarbonizadas]* <https://doi.org/10.32796/cice.2022.104.7492> [Add to Citavi project by DOI]