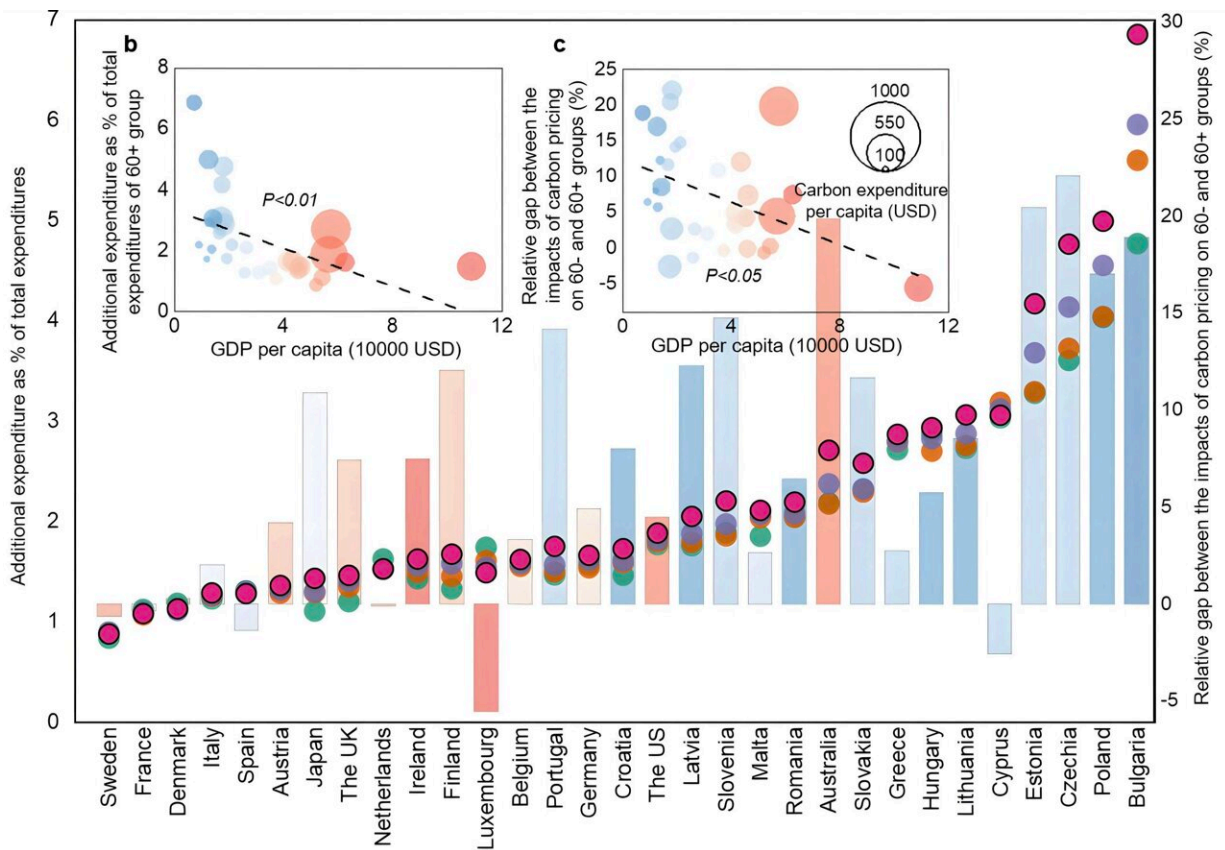


Carbon pricing disproportionately harms the elderly: Study

July 19 2023



Impacts of a \$40 per ton global carbon price on different age groups in 31 countries. Credit: Tiana et al.

As the human population ages, carbon pricing policies may disproportionately harm low-income seniors, according to a study

published in *PNAS Nexus*.

Carbon pricing policies are designed to reduce [carbon emissions](#) by improving the competitiveness of renewable energy and other low carbon technologies as well as by collecting revenue to finance climate change mitigation efforts.

Laixiang Sun and colleagues modeled the consequences of proposed carbon pricing policies on different age-income groups in the US, the UK and Japan—and on different age classes for 28 other countries, using a global multi-regional input-output model combined with household expenditure survey data.

The authors find that because carbon pricing will increase the cost of heating and cooling, these policies would harm the low-income elderly and elderly in less wealthy countries more than other groups. There are two main drivers of the finding. Firstly, [elderly people](#) stay at home for more of the day, on average, and are more sensitive to temperature, and therefore require more heating and cooling and more stable heating and cooling than younger individuals.

Secondly, the [low-income](#) elderly and the elderly in less wealthy countries are often on fixed incomes that cannot increase to compensate for a higher cost of living. The [global population](#) is aging, with over 1 billion people already over age 60, a demographic group projected to number 2.1 billion by 2050.

According to the authors, a targeted social protection is called for to buffer the impacts on the elderly as the world works to mitigate climate change.

More information: Peipei Tian et al, Implementation of carbon pricing in an aging world calls for targeted protection schemes, *PNAS*

Nexus (2023). [DOI: 10.1093/pnasnexus/pgad209](https://doi.org/10.1093/pnasnexus/pgad209)

Provided by PNAS Nexus

Citation: Carbon pricing disproportionately harms the elderly: Study (2023, July 19) retrieved 14 May 2024 from <https://phys.org/news/2023-07-carbon-pricing-disproportionately-elderly.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.