

ABSTRACT:

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**Optimal Fiscal Policy in a Climate-Economy Model with  
Heterogeneous Households**

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We study optimal fiscal policy to address climate change and inequality. We theoretically characterize optimal carbon and income taxes, and quantify them for the U.S. economy with the climate model calibrated to DICE. In contrast to the representative-agent setting, we find that (i) the optimal carbon tax is on average equal to the Pigouvian level, and hardly ever deviates from it; (ii) inequality reduces the Pigouvian level, by 4% in our baseline calibration; (iii) the revenue from carbon taxes is optimally split halfway between reducing tax distortions and increasing transfers.

Introducing optimal carbon taxation has progressive welfare effects and low-income households benefit even in the short run.