

Mapping effects of environmental policies (*MEEP*)

Submitter

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Abstract

MEEP proposes to assemble an open-science, public-service platform featuring interactive, Germany-wide maps of the effects of environmental policies. To this end, *MEEP* will conduct novel research to fill key knowledge gaps on environmental and socio-economic outcomes of environmental policies, and integrate existing research directly or via replication games. Methodologically, *MEEP* primarily draws on empirical economic causal inference approaches with important interdisciplinary components that draw on approaches from meteorology and atmospheric chemistry to model environmental effects and their spatial distribution, including the use of temperature inversions for capturing exogenous shocks to pollution concentrations. We will study effects, among others, on carbon emissions and climate damages, air pollution and health as well as on workers, firms and low-carbon innovation. *MEEP* will yield a considerably more comprehensive mapping of the effects of environmental policies than previously available, and will also allow for a more nuanced assessment of the distributional effects of environmental policies that is of key importance for climate policy support. Crucially, our project will complement well-studied, and most likely regressive, distributional effects of direct consumption costs, such as due to higher fuel prices, with assessments of producer costs and of direct benefits of environmental policies, such as on human health and productivity. The goal of *MEEP* is to develop interactive maps that will enable the general public, students, researchers and policy-makers alike to explore the multifaceted effects of key environmental policies at different spatial scales (from 16 German states to ≈ 400 districts or ≈ 8000 zip-codes). *MEEP* thereby seeks to not only advance scientific knowledge but to also make an important transfer contribution—in collaboration with partners such as the Umweltbundesamt—to inform the sustainability transition, considering inter-dependencies among the Sustainable Development Goals (SDGs). While the primary focus is on Climate Action (SDG 13), *MEEP* also explores effects of environmental policies on Health and Well-being (SDG 3), Industry and Innovation (SDG 9), as well as Cities and Communities (SDG 11).