



Universität
Basel

Research Project

Cost-effectiveness of Emissions Trading Schemes

Project funded by own resources

Project title Cost-effectiveness of Emissions Trading Schemes

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Organisation / Research unit

Departement Wirtschaftswissenschaften / Public Economics / Public Finance (Hintermann)

Project start 01.10.2019

Probable end 31.12.2023

Status Completed

The use of price instruments is often advocated by economists, based on their ability to bring about marginal abatement cost equalisation, and hence to achieve targets at least cost. We use the EU ETS as a case study and test this theoretical prediction. We parametrically estimate separate enhanced hyperbolic distance functions for various industries of the German manufacturing sector and are therefore able to compute the shadow value of CO₂ emissions.

We are the first to provide firm-level estimates of the marginal cost of CO₂ emissions using confidential administrative data for German manufacturing firms between 2005 and 2014. This allows for an unprecedented insight into the cost of the EU flagship climate policy for manufacturing firms. We are able to describe the evolution of the abatement costs over time and across industries, tracking the impact of changes in the policy design and its stringency on the behaviour of the firms in our panel. Our findings provide valuable information for policy makers in the European Union and beyond on the actual level of the costs imposed by climate change policy, and its distributional impacts across firms and industries.

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Follow-up Project of... [3242117 Measuring the effectiveness and efficiency of the European Union Emissions Trading Scheme](#)

Add publication

Published results

4607187, Di Maria, Corrado; Zarkovic, Maja; Hintermann, Beat, Are Emissions Trading Schemes Cost-effective?, Publication: Discussion paper / Internet publication

Add documents

Specify cooperation partners

ID	Kreditinhaber	Kooperationspartner	Institution	Laufzeit - von	Laufzeit - bis
4493248	Hintermann, Beat	Di Maria, Corrado, Associate Professor	University of East Anglia	01.11.2015	31.12.2023