TRACE

UNIVERSITY OF MANNHEIM
Department of Economics

IAB INSTITUTE FOR EMPLOYMENT RESEARCH
The Research Institute of the Federal Employment Agency

ZEW

EVALUATING POLICY INSTRUMENTS FOR THE TRANSFORMATION TO A LOW CARBON ECONOMY

// CAUSAL EVIDENCE FROM ADMINISTRATIVE MICRODATA (TRACE)

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Objective

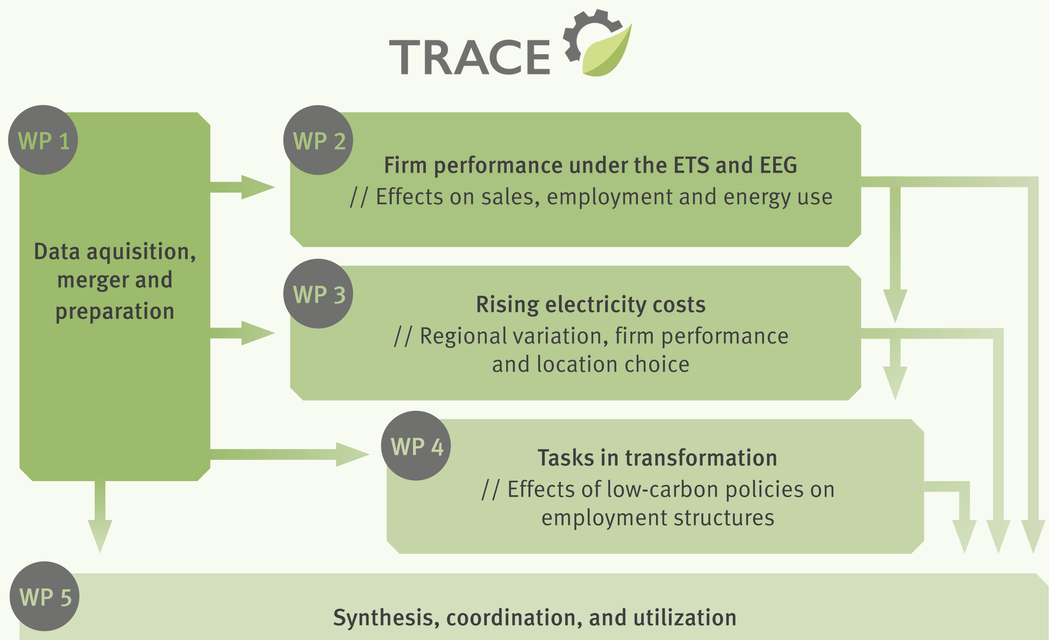
The main objective of TRACE is to subject existing climate policy measures to scientific ex-post evaluation of the highest standard for the case of Germany focusing on the manufacturing sector.

The evaluation focuses on

- Effectiveness towards achieving policy goals
- Costs and unintended consequences
- Regional and sectoral disparities in impacts on the labor market

Throughout the project, special emphasis will be put on identifying the channels through which these effects occur in order to better understand how the regulated firms respond to the policy measures. The project brings together labor and environmental economists and sociologists and utilizes the most advanced administrative micro data sets available.

Scientific approach (Work packages 1-4)



WP 2

Firm performance under the ETS and the EEG

Objective
Quantify the causal effect of the European Union Emissions Trading Scheme (EU ETS) and of exemptions from the Renewable Energy Surcharge on sales, energy use, employment, wages and plant exit.

Method
Quasi-experimental approaches and panel econometrics

Relevance
Understanding how changes in input prices for primary fuels and electricity affect the performance of manufacturing is crucial to gauge the cost of ambitious climate policies in terms of job losses, output reductions, and firm relocations.

WP 3

Rising electricity costs

Objective
To quantify the impact of rising electricity prices on plant performance and emissions, on plant location choice or exit from the market, and on workers' wages.

Method
Quasi-experimental approaches and panel econometrics

Relevance
Understanding the effects of rising electricity costs allows for an assessment of the distribution of the burden regionally as well as the incidence of electricity costs. This information facilitates the (improved) design of future and current policy instruments.

WP 4

Tasks in transformation

Objective
To create an index of the carbon-relevance of occupations and to quantify the impact of climate policy on occupation structures.

Method
Text-mining, machine learning for creation of the index, Quasi-experimental approaches for econometric analysis

Relevance
The analysis of tasks addresses the intensive margin of job content and the climate-policy relevance of existing occupations. It sheds light on whether employment growth is stronger/weaker in occupations identified as having a low/high climate policy relevance.

Knowledge transfer and utilization (WP5)

TO THE SCIENTIFIC COMMUNITY
- Seminars and conferences
- Working papers (ex: ZEW discussion papers)
- Publications in peer-review journals

TO THE POLICY COMMUNITY
- ZEW lunch debates in Brussels
- Side events at UNFCCC Conferences of the Parties

TO THE GENERAL PUBLIC
- Advisory boards
- Workshops
- Website

PROJECT WEBSITE
https://kooperationen.zew.de/trace/home.html

Dialog zur Klimaökonomie

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