Press Release

Study on EU Climate Policy Shows that Pricing Carbon Dioxide Is An Effective Tool for Reducing French Producers' Emissions

A study conducted by the EPoS Economic Research Center at the Universities of Mannheim and Bonn shows that EU emissions trading works.

In France, pricing CO2 has proved to be an effective tool for reducing emissions in the manufacturing industry. According to a new study of Mannheim economist Ulrich Wagner together with his colleagues Ralf Martin and Mirabelle Muûls from Imperial College London and Jonathan Colmer from the University of Virginia, French producers have reduced emissions of this harmful greenhouse gas by an estimated 15 percent - around 43 million tons of CO2 - in the first eight years after the EU Emissions Trading System (EU ETS) has been introduced. The costs of complying with the new climate protection regulations did not have a negative impact on production.

"The introduction of the Emissions Trading System has produced some notable results in French manufacturing industries," says Wagner. "Importantly, the reductions in CO2 emissions did not come at the expense of either weaker performance or outsourcing to bypass European climate regulation." Wagner holds the Chair of Quantitative Economics at the University of Mannheim

EHS as a driver of technological change

For manufacturers, the CO2 price increases production costs, which could lead to reduced economic activity. The fact that this was not the case is surprising for the researchers involved in the study. One finding of the study is that French companies invested in energy-saving technologies and were thus able to lower their energy bills. This helped them to offset the costs incurred by the investments or the purchase of emission allowances. "Despite widespread concerns about the economic costs of climate protection measures, the ETS did not come at the price of output reductions across the board," says Wagner. "Instead, many companies invested in new technology which lowered energy consumption and the carbon intensity of production. Therefore, pricing emissions is apparently a good way to make companies aware of potential cost savings and efficiency gains through green technologies."

Unfounded criticism of the EU emissions trading system

The EU ETS is the world's first and biggest carbon market and operates as a "cap and trade" system. An emissions cap is set for certain greenhouse gases. The companies receive or buy emission allowances, which they can trade with one another. The ETS is the EU's key tool for reducing greenhouse gas emissions of energy companies, energy-intensive industrial plants, and airlines. It covers around 10,000 plants - around 40 percent of EU emissions. Critics have described this market-based regulation as both environmentally ineffective and economically devastating. "We have analyzed company data in an unprecedented level of detail and shown that such claims are unfounded," says Wagner. "The reduction of harmful emissions in the first eight years of the ETS had no negative impact on employment or value added."

You can find the complete study here: http://www.restud.com/does-pricing-carbon-mitigate-climate-change-firm-level-evidence-from-the-european-union-emissions-trading-system/

The Collaborative Research Center Transregio 224 EPoS
Established in 2018, the Transregio 224 EPoS collaborative research center, a collaboration between the University of Bonn and the University of Mannheim, is a long-term research institution funded by the German Research Foundation (DFG). EPoS addresses three central social challenges: how to promote equality of opportunity; how to regulate markets in light of the internationalization and digitalization of economic activity; and how to safeguard the stability of the financial system?

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