

Go Green or Go Home: Climate Policy, Industry Concentration and Technology Adoption

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Abstract :

Carbon pricing is a central element of climate policy strategies in many countries. Its objective is to reduce carbon emissions by taxing emissions-intensive production processes and providing incentives to upgrade technologies to be less emissions-intensive. Many regulated industries are strongly concentrated, potentially impacting the firms' upgrade decisions. Reduced-form evidence shows that firms' technology response to environmental regulation is affected by the ability to pass through marginal cost, suggesting that this is a relevant margin of firm reaction interacting with competition structure. In this project, I will propose a dynamic model of imperfect competition and technology choice. I plan to estimate it using French data to evaluate carbon pricing policies in the European Union. Using indirect inference to estimate parameters relating to static production cost and the cost of investments into technology upgrading, I intend to employ an estimated model to quantify varying carbon taxation schemes' price and welfare implications.