

Indexing European Carbon Taxes to the EU ETS Permit Price – A Good Idea?

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Abstract

We study an environmental policy that (i) tax some emitters while others are covered by a cap-and-trade system and (ii) index the tax level to the permit price. Such a policy could be attractive in a world where abatement costs are uncertain and the regulator has information about the correlation between the two groups' cost shocks. We show that the optimal (linear) index policy yields lower expected social cost than the optimal policy mix studied in Mandell (2008). It also outperforms an economy-wide emission tax or an economy wide cap-and-trade system if the correlation is positive and sufficient strong. For plausible parameter values a very strong correlation is required and expected net gains are rather small, however.

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