Environmental policy in the presence of bias and uncertainty

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Abstract

We develop a theoretical model of the European Union emissions trading scheme (EU ETS) in which participants design collectively optimal policy, understanding that they will face heterogeneous political pressure to conduct more or less ambitious policy *ex post*. Member states can commit to an *ex ante* minimum requirement on complementary emission reduction technologies. If policy on these complementary technologies is designed at the Union level, this minimum requirement will also take into account the redistributive effect through permit allocation and the global externality. However, asymmetric information still distorts the emission cap away from the constrained-efficient outcome.

Keywords: climate change; bias; uncertainty; commitment; flexibility

JEL Classification: Q54; D70; D50