

Carbon sequestration in a dynamically cost-effective EU climate policy

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Abstract

The aim of our project is to investigate the potential cost savings from carbon sequestration measures in agriculture and forestry with respect climate targets in the EU. We address the challenges to design cost-effective policies and policy instruments, given nonpermanence of sequestration measures, and transaction costs that accrue over time when policy instruments are applied. The relative role of sequestration in climate policy is determined by the trade-off between carbon sequestration and the use of bioenergy/biomaterials. The cost-effective timing of measures is determined by the development of carbon pools in growing crops, soils, and products, and the overall targets set for carbon mitigation pathways. There are transaction costs related to the use of policy instruments, which can be expected to vary across countries and time. Tailoring policy instrument choice to the national context could reduce the potential for policy coordination across the EU. We aim to empirically model these issues using dynamic cost-effectiveness models for the EU countries, while evaluating the benefits and costs from policy coordination.