

“Green” fuel tax on private transportation services and subsidies to electric energy. A model-based assessment for the main European countries

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Abstract

This paper evaluates the environmental and macroeconomic implications for France, Germany, Italy and Spain of taxing motor vehicle fuels for private transportation, a sector not subject to the Emissions Trading System, so as to reduce taxes on electricity consumption and increase subsidies to renewable sources of electricity generation. The assessment is based on a dynamic general equilibrium model calibrated for each of the four countries. The results suggest that the measures posited will reduce carbon dioxide emissions in the transportation sector and favor the development of electricity generation from renewable sources, thus limiting the growth of emissions from electricity generation. The measures do not jeopardize economic activity. The results are robust whether implementation is unilateral in one country or simultaneous throughout the EU.