



Bachelor Thesis

Cross-country comparison of implicit CO₂-prices in road traffic

By 2027, the European Union will introduce the EU-Emission Trading Scheme II (EU-ETS II). While the original EU-ETS I encompass emissions in industry, electricity generation, and aviation, EU-ETS II shall include emissions in road traffic, buildings, and smaller scale industries. The EU-ETS sets a binding cap for the cumulated emissions in these sectors and permits the trading of emission allowances among the emitters.

Road traffic, which falls now under the EU-ETS II, has been already subject to ambitious emission reduction goals and, hence, to policy interventions. In consequence, there is a heterogenous landscape of taxes and levies between fuels and European countries. Against this background, the EU ETS II may harmonize the different levels of explicit and implicit CO₂-pricing in the EU.

The goal of this thesis is to determine the differences between the fuel taxation of the European countries, particularly with differences regarding the CO₂-intensity of available fuels for individual road traffic. This analysis includes familiarization with relevant data sources on energy price data, e.g. from the IEA Prices and Taxes database, preparing the data for comparison, and conducting the analysis and comparison itself.

Key tasks and objectives of the thesis

- Familiarization with energy price and taxes in road traffic, particularly with respect to emission pricing
- Gathering and cleaning data and making them comparable
- Interpreting the data with respect to emission pricing and its consequences for the introduction of the EU ETS II

Your profile

- Economics major, best with a focus on energy
- Interest in quantitative work and emission pricing

Literature

- German Environment Agency (2024). Supply and demand in the ETS 2. *Climate Change* 09/2024.
- Kettner-Marx, Claudia; Kletzan-Slamanig, Daniela (2018): Energy and Carbon Taxes in the EU. Empirical Evidence with Focus on the Transport Sector. *WIFO Working Paper*, 555.
- International Energy Agency (2024): Energy Prices and Taxes Statistics. *OECDiLibrary*.
- European Commission (2023): Excise Duty Tables (Tax receipts – Energy products and Electricity). Indirect Taxation and Tax administration

Contact



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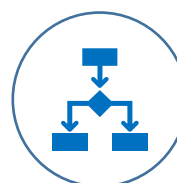
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Topics



- Energy prices and taxes
- EU ETS II
- Road traffic

Methods



- Literature work
- Data processing