# Lehrstuhl für Wirtschaftliche Staatswissenschaften, insbesondere Energiewirtschaftslehre



### **Bachelor Thesis**

# Lessons learnt of emission pricing in residential heating and 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.

The EU is not the first to introduce an emission pricing scheme for the road traffic or residential heating. There are already other countries that have built their environmental policies in the transport and heating sector on CO<sub>2</sub>-pricing (Resources for the future, 2024; Stalvins, 2020). These examples may provide lessons learnt regarding the conditions under which emission pricing is successful in these sectors.

The goal of this thesis is to evaluate already existing CO<sub>2</sub>-price schemes in road traffic and residential heating. This analysis includes the selection of suitable examples and the characterization of their CO<sub>2</sub>-price scheme, the review of the literature and studies about these studies, and the identification of key figures to describe their effect.

# Key tasks and objectives of the thesis

- Review of carbon pricing schemes in road traffic and residential heating
- Analysis of literature and reports on the effects and lessons learnt from these pricing schemes
- Processing of data to support the description of the pricing schemes and their short-run and long-run effects

## Your profile

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

## Literature

- German Environment Agency (2024). Supply and demand in the ETS 2. Climate Change 09/2024.
- Stavins, Robert N. "The future of US carbon-pricing policy." Environmental and energy policy and the economy 1.1 (2020): 8-64.
- Resources for the future (2024): World Carbon Pricing Database. https://www.rff.org/publications/data-tools/world-carbon-pricing-database/

### **Contact**



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### **Topics**



- EU ETS II
- Carbon pricing
- Road traffic and heating

#### **Methods**



- Literature work
- Meta-analysis