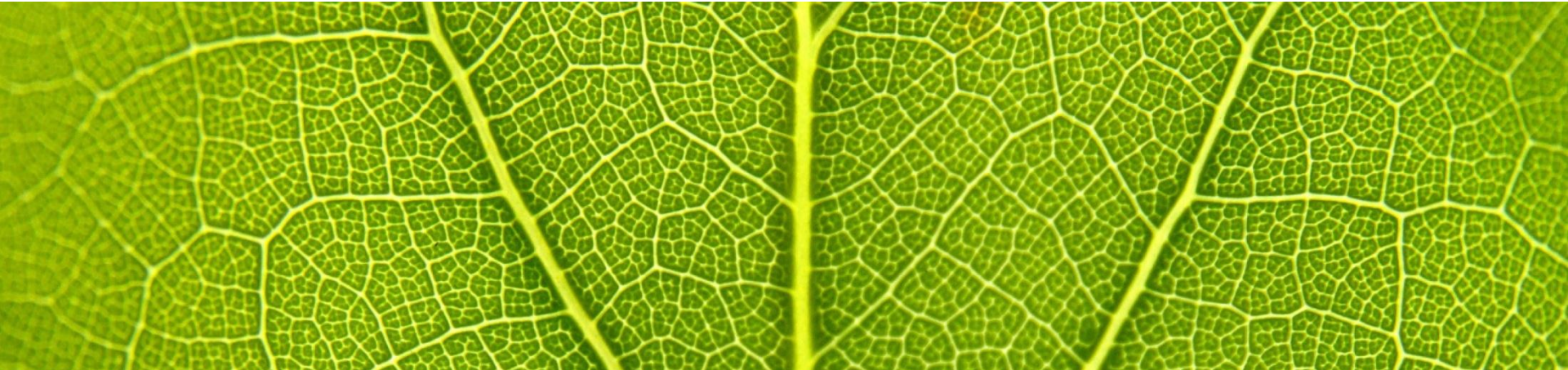


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Assessment of industrial energy prices

Strommarkttreffen

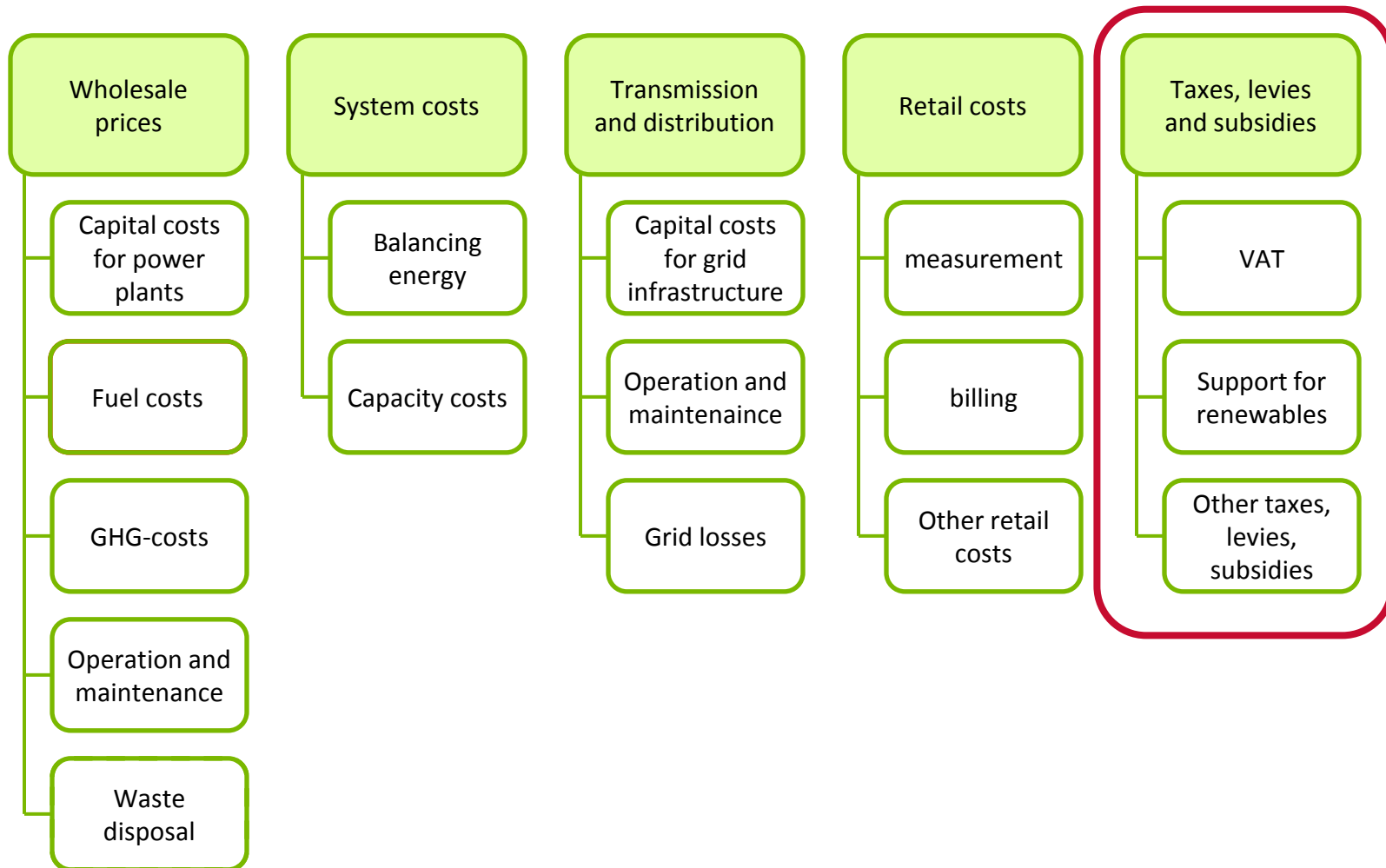
07/05/2014

Katharina Grave

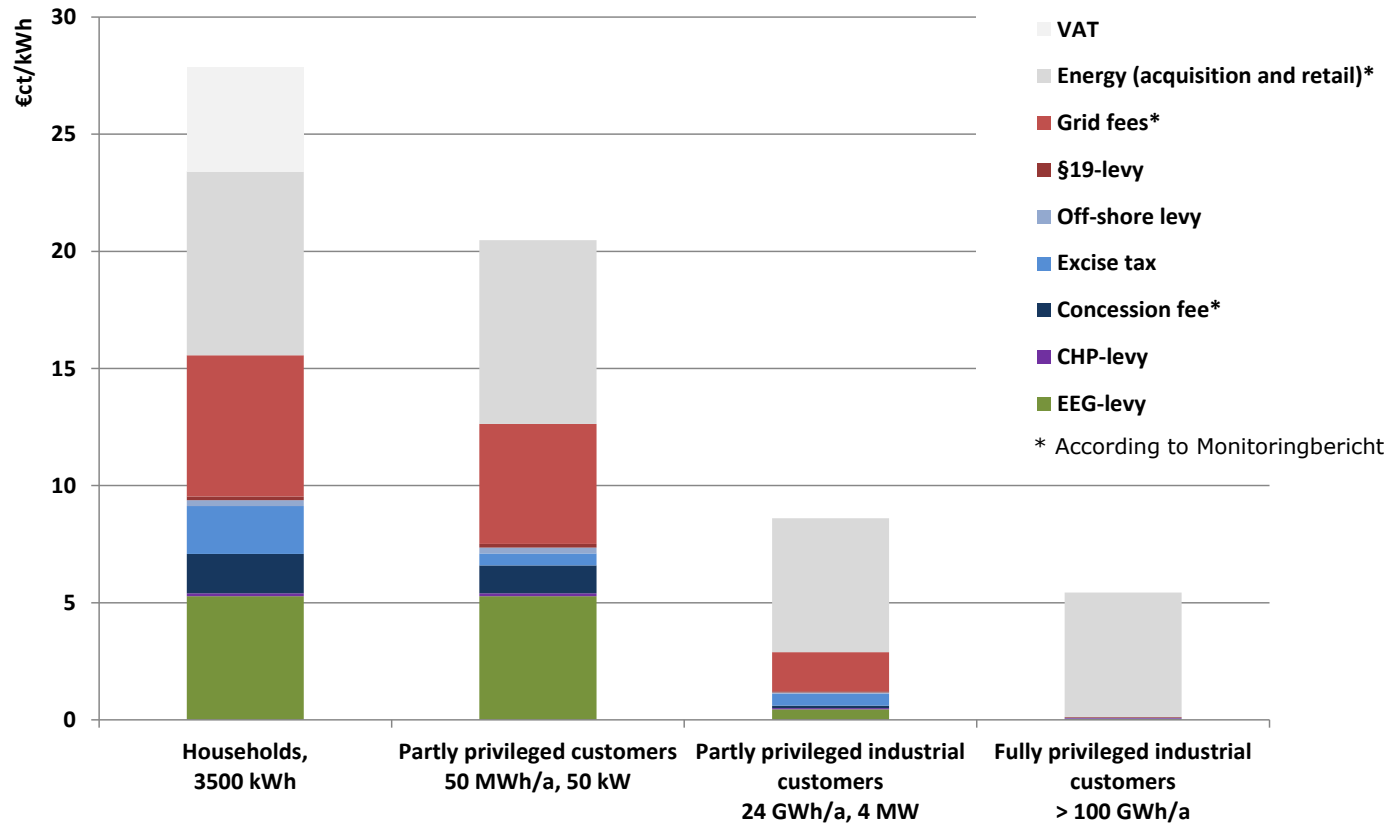
Agenda

- Introduction: Electricity price components
- Taxes and privileges
- Methodology for estimations
- Results
- Conclusions

Electricity price components

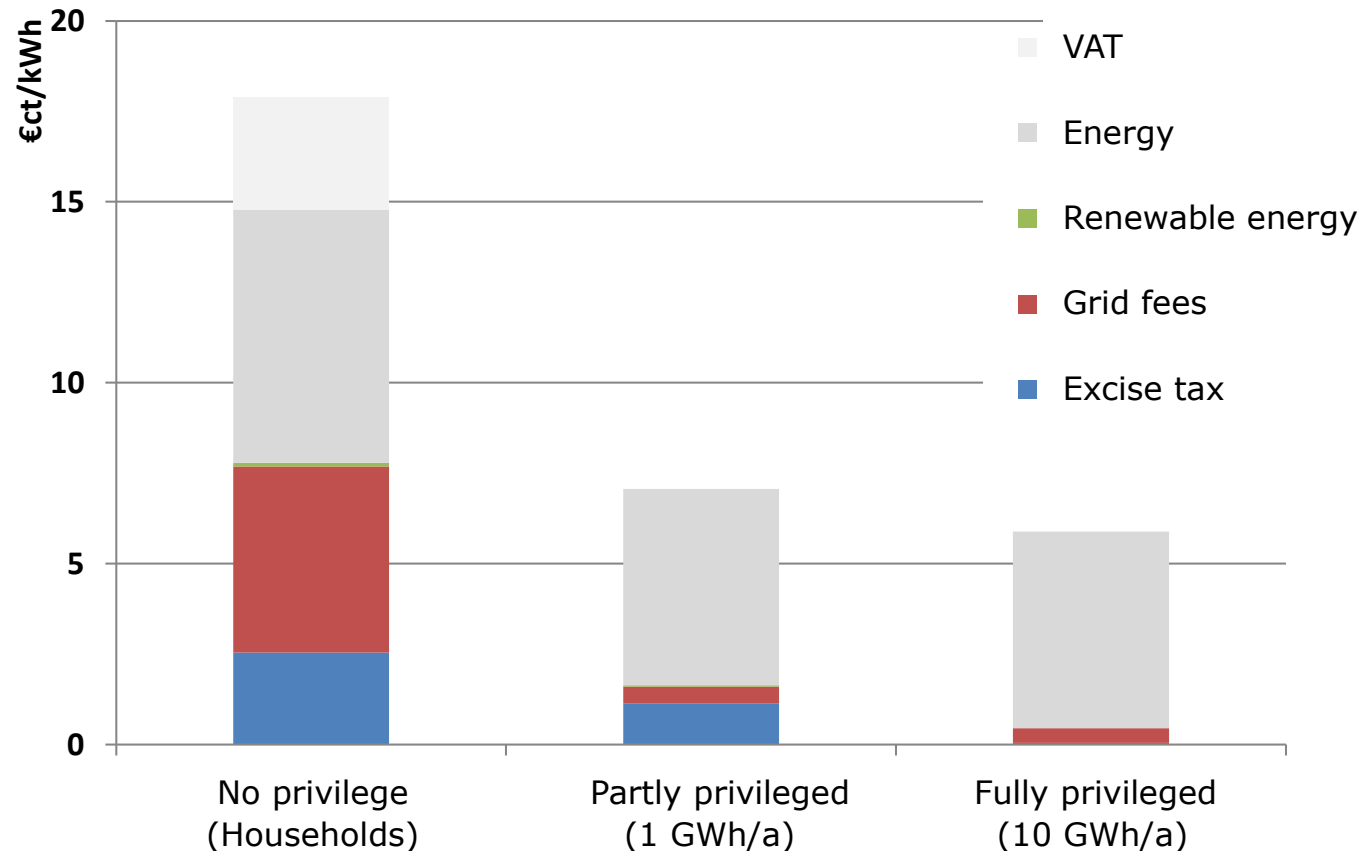


Motivation: Studying Electricity price components in Germany 2013



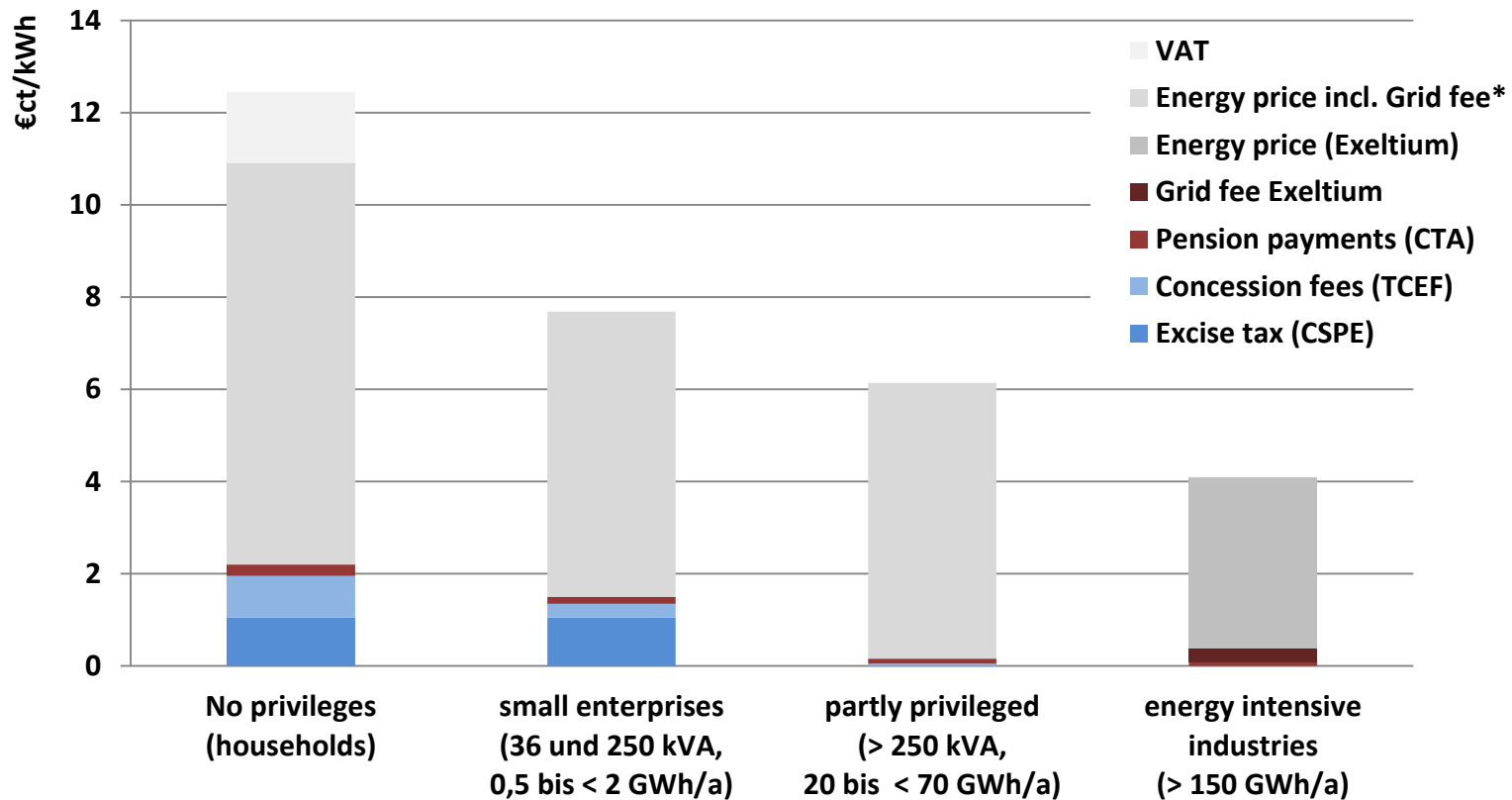
In contrast to household prices, the energy component is the main driver of electricity prices for industrial customers.

Motivation: Studying electricity price components in the Netherlands 2013



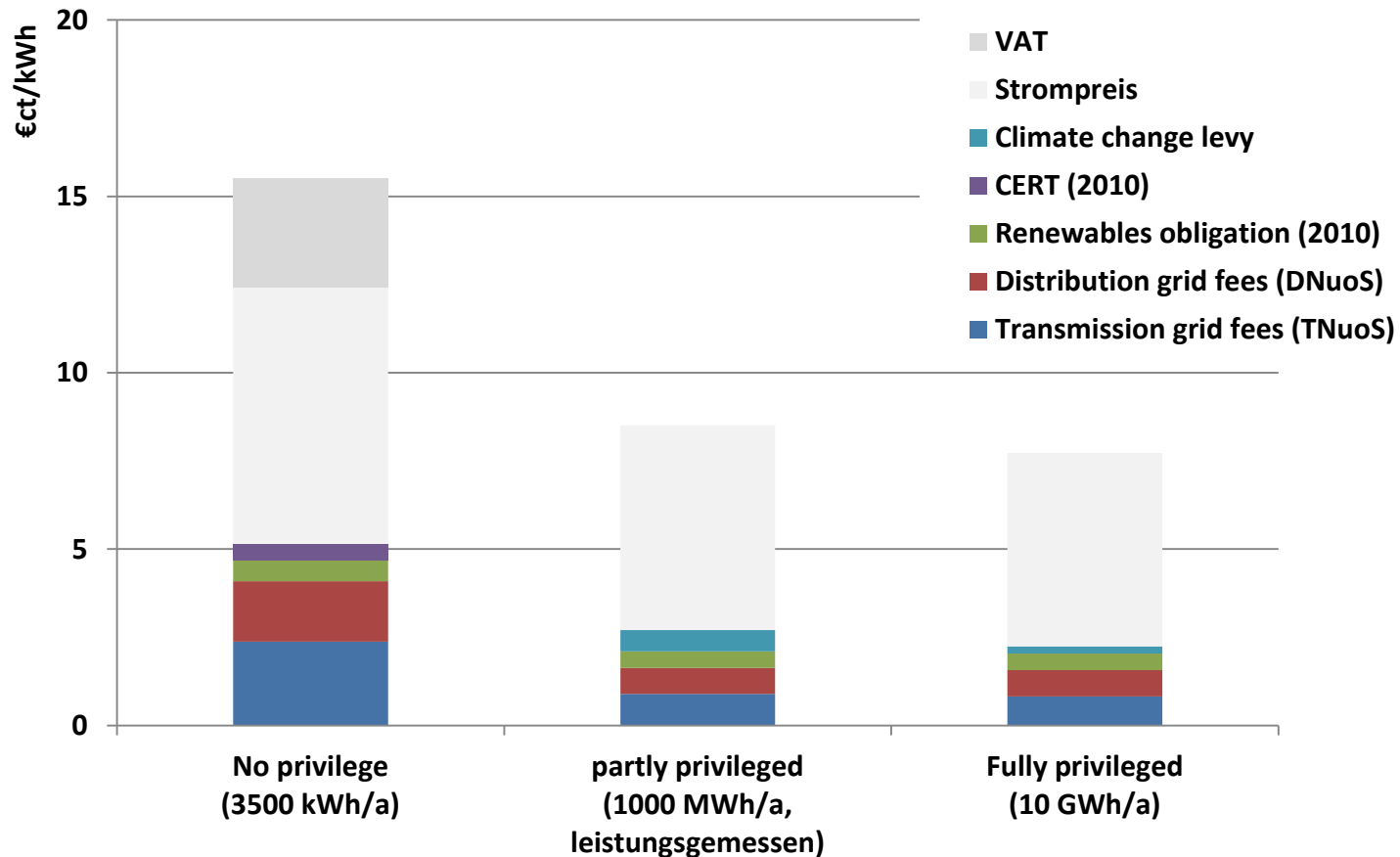
In neighbouring countries, industrial customers are also widely excepted from tax and levy payments.

Motivation: Studying electricity price components in France 2013



In France, energy intensive industries the energy component is lower than the wholesale market prices.

Motivation: Studying electricity price components in UK



In UK, prices for industrial customers are high compared to the neighbouring countries.

Methodology: combining future and spot prices according to acquisition strategies

Mixed strategies: Most power intensive industries combine different acquisition strategies to hedge the risks of price variations

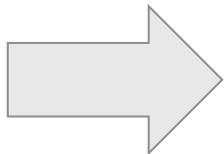
Most companies indicate a planning horizon of about two years.

Assumptions:

Companies trade continuously

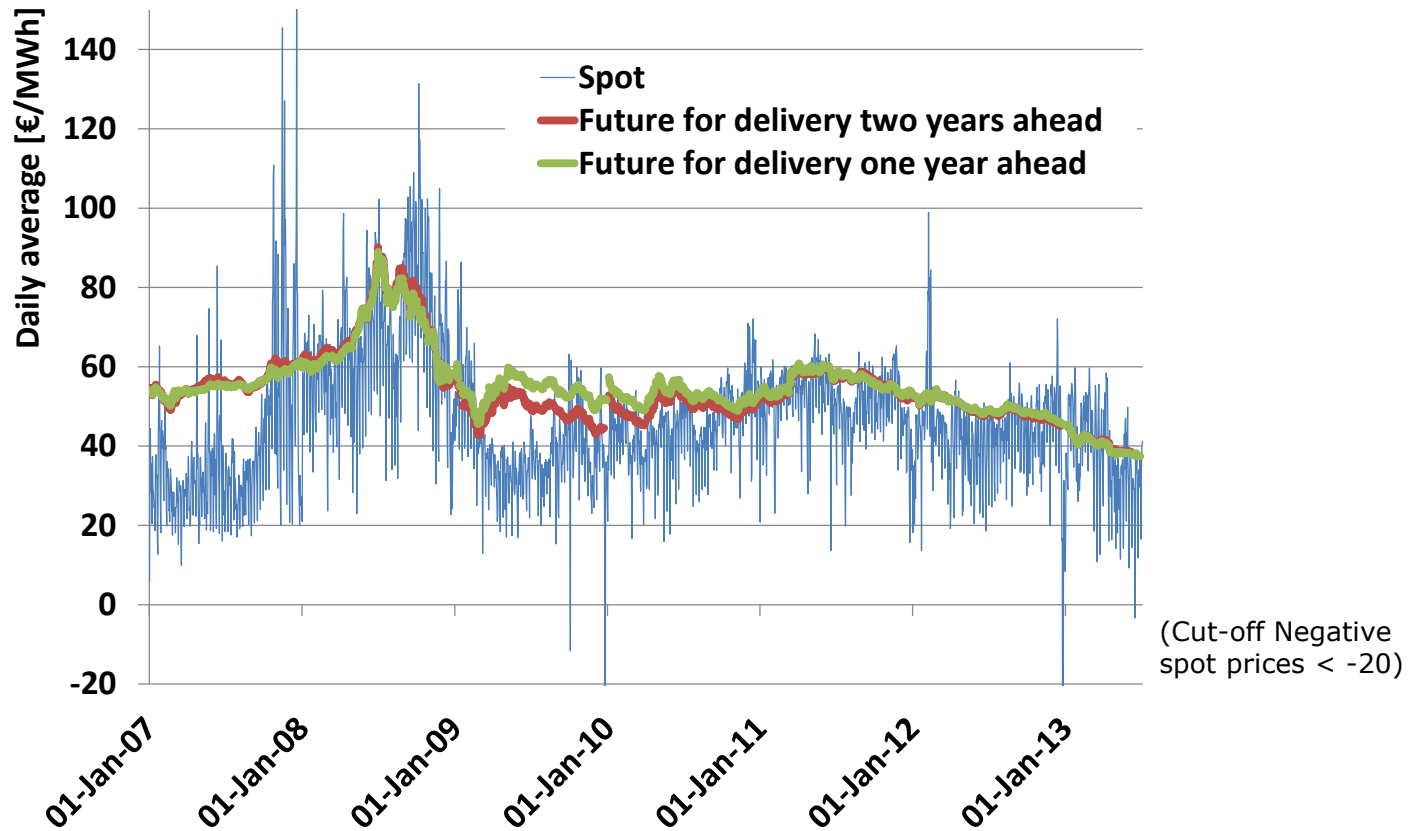
Equal volumes for future products

Demand for base load – flat demand curve

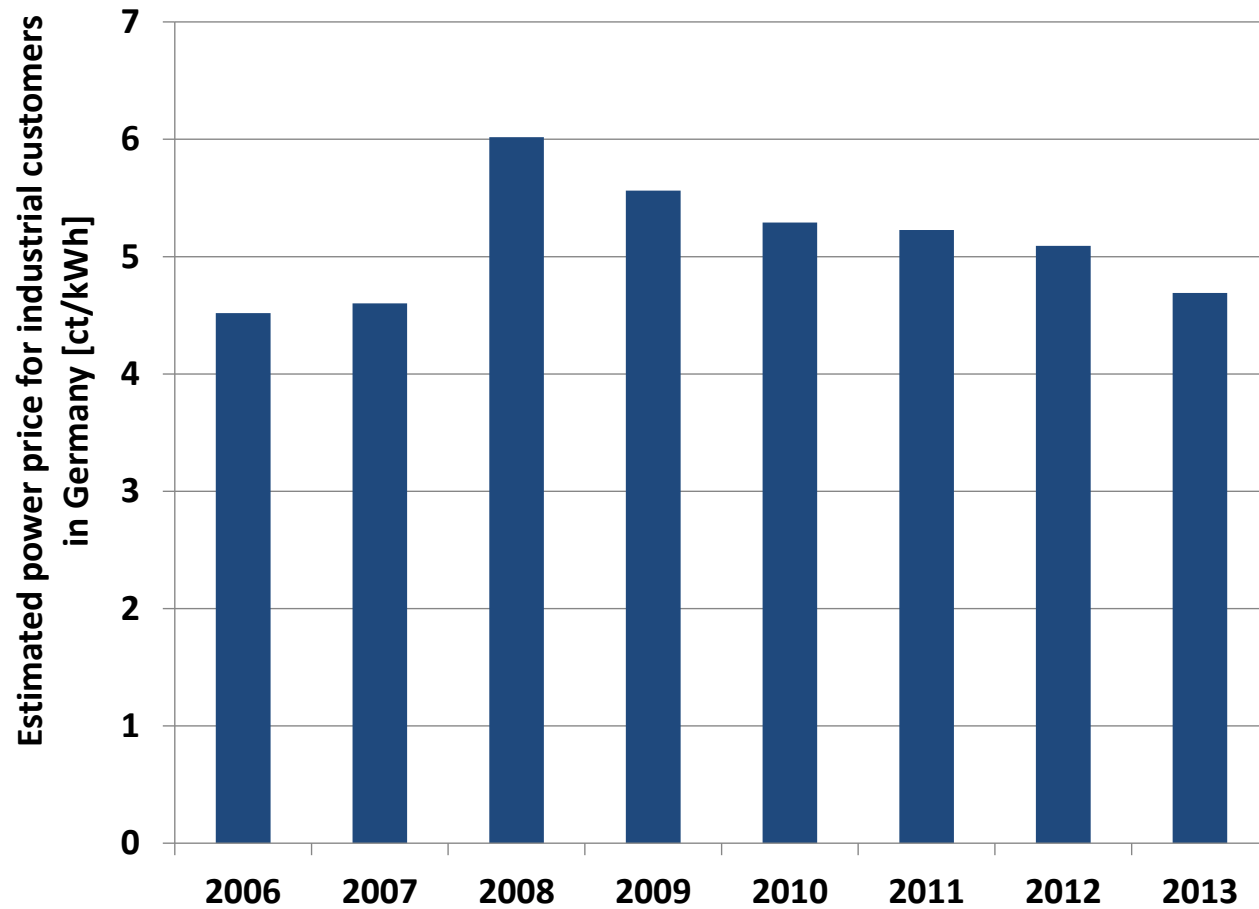


We combine the future prices from two previous years with spot market prices

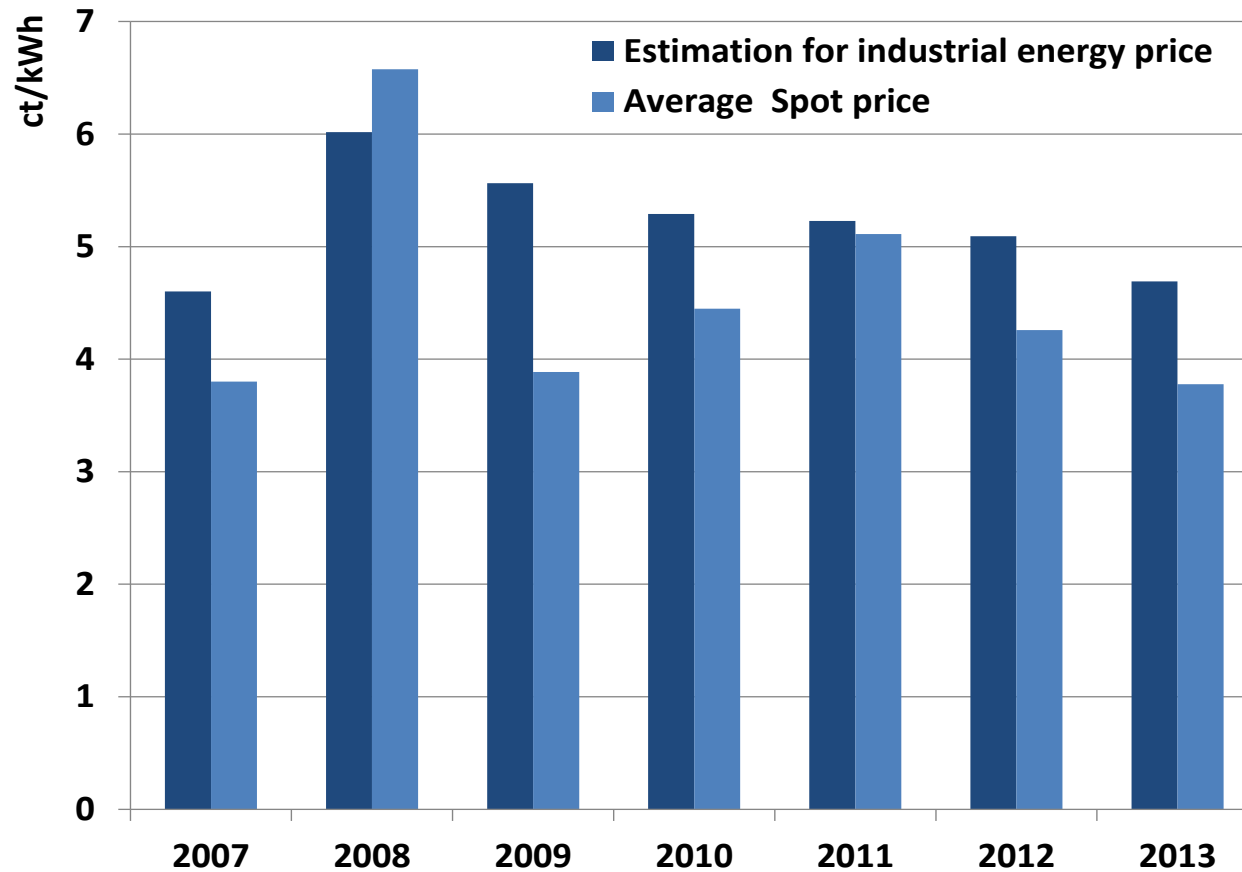
Data: Future prices in Germany



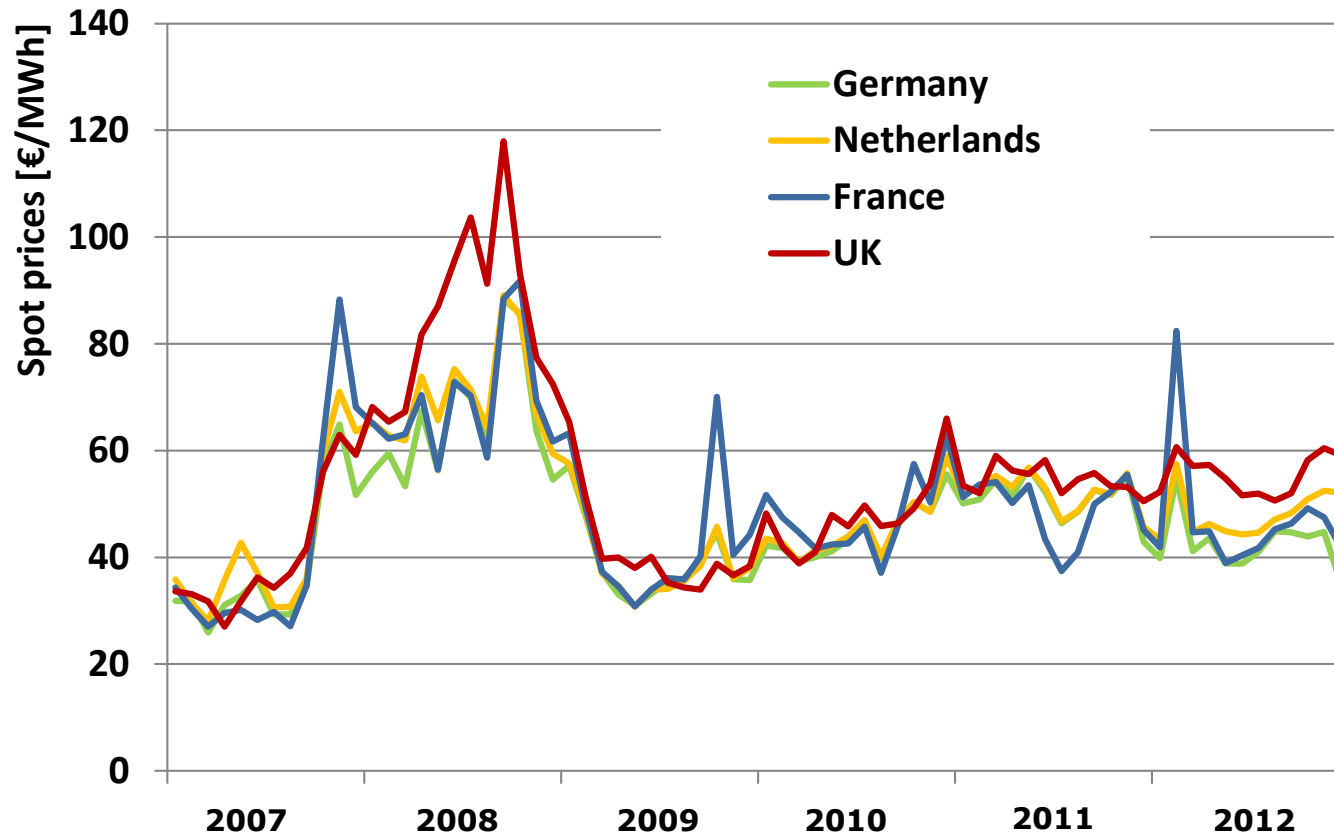
Results: Average industrial electricity prices from 2006 - 2013



Results: Comparison to average spot prices

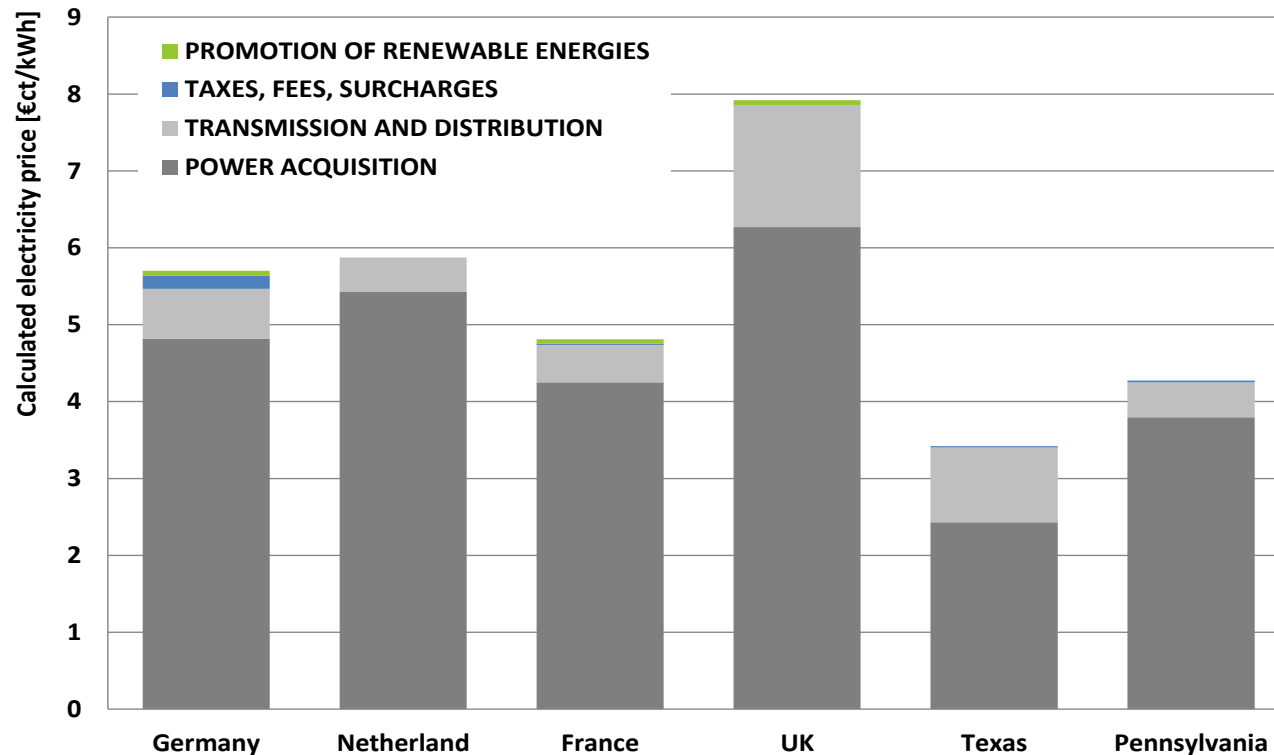


Wholesale prices in neighbouring countries



Comparison for an energy intensive customer

Power price for electric steel producers



Conclusions

General results

- There are various taxes and levies in European countries
- All countries privilege energy intensive industries
- The energy component is the most important factor for industrial electricity prices

Main weaknesses and future improvements:

- Long term contracts cannot be evaluated
- Autogeneration is a big factor in energy intensive industries
- Regulation and prices are constantly changing, one point in time does not show development of price competition

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