Policy instruments to reduce electricity consumption in private households: Is efficiency enough?

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Title of the Paper

Policy instruments to reduce electricity consumption in private households: Is efficiency enough?

Form of Presantation

- ○ Poster
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Short Description (maximum 2500 characters)

This paper compares the implementation of energy policy instruments in five different countries. The instruments were aimed at reducing the electricity consumption in private households, and the analysis poses some overall questions: What can we learn for a transfer to Germany, in terms of how the policy instruments were applied and how they addressed consumers and the consumer environment? Were they able to induce overall electricity savings or “only” more efficient energy usage? A comparative ex-post analysis of the implementation and outcomes of the policy instruments follows, comparing the programs in Austria, Denmark, and the Netherlands, which targeted the enhancement of investments in energy-efficient refrigerators and freezers, and progressive electricity tariffs in Italy and California for private households.
Analysis shows that the successful outcomes in Austria, Denmark and the Netherlands, such as market transparency and transformation towards highly energy-efficient cooling appliances, can be attributed to the close relationship between administrators, manufacturers, and retailers—characterized as a collaborative, consensus-oriented policy style—but also to the existence of relatively independent organization who controlled implementation finances. Although the aims of Austria’s subsidy programme were more economically motivated as compared to the strong environmental commitments of Denmark and the Netherlands, the impact was similar. The Austrian case was, in terms of ecological impact, even more successful due to the obligation to hand-in an old cooling appliance to receive the subsidy.
In Italy and California progressive tariffs were introduced to reduce electricity consumption, load, and dependency; but also as a social instrument, to redistribute the rising cost of electricity from low-consumption to high-consumption households.
Although social reasons—such as keeping the price of electricity low for the majority of customers—prevent any major changes in the tariff scheme in Italy, tariff adjustments today are used to stimulate energy efficiency, especially in high-consumption costumers. In California, the freezing of social rates after the energy crisis in 2000 made it possible to introduce higher progressive rates.

Although the analyzed policy instruments have limitations regarding electricity efficiency and electricity-saving impacts, some fruitful lessons for a transfer of these instruments to Germany are discussed at the end.

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