

Editorial



Prof Dr Claudia Kemfert,
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"A rigorous climate policy is necessary in order to give incentives for energy suppliers to develop innovative and environmentally friendly technologies"

The European energy and climate policy is dominated by three main policy directions: the liberalisation of the energy markets, the European emissions trading system and the law to promote renewable energy. All three policy directions have different and contrary economic consequences.

The liberalisation of European energy markets – the introduction of competition, the reduction of external, particularly political, interference and adjustments, and the opening of the market to new providers – is a worldwide phenomenon. Although the reasons for opening the markets vary from country to country, the main goal – apart from higher production efficiency – is to offer customers lower electricity prices.

Though only a few countries in the world have accomplished complete liberalisation, it can be observed that most countries are aiming for complete opening of the energy markets in the near future. The progress of liberalisation of energy markets in Europe varies between countries. There has been more progress in the electricity market than in the gas market. In the electricity market, it is especially those countries with an oligopolistic or monopolistic market structure, such as France or Italy, that are most reluctant to open their markets for external access. This unequal distribution of market opening in Europe involves some distortions of competition – some energy providers are already facing complete competition, whereas others can continue operating in a monopolistic position. In Germany, for example, utilities reacted very dynamically after the liberalisation of the electricity market in 1999, with firm mergers and strategic behaviour. A rise in the market shares of certain producers might lead to a rather uncompetitive market structure, which will not reduce, but rather increase, electricity tariffs.

A similar situation can be observed in the gas market: different degrees of market opening diminish competition. Inadequate tariff structures for transport fees and arbitrary net access fees between countries and regions distort competition. In particular, Germany and France have demonstrably high transport costs. Low transparency of the availability of infrastructure capacities also leads to higher costs. The main factor in distorted competition, however, is the concentration of gas conveyance in very few companies. New market entrants face high barriers. All this leads not to declining energy prices, as requested by the Commission, but to higher and increasing energy prices.

The European climate policy is dominated by two main challenges: the European emissions trading system and policies to increase renewable energy. Europe has reacted to the challenges of climate change by establishing a Europe-wide emissions trading system. During the first phase, from 2005 to 2007, all 25 European countries will be able to trade emission allowances. The European emissions trading system starts in 2005: the first phase lasts

from 2005 to 2007 and is restricted to emissions of CO₂. The idea behind emissions trading is very attractive: to reach the overall goal of reducing emissions at minimal economic costs.

The European Union has issued a white paper to support the increased use of renewable energy for electricity production. The share of renewable energy should reach 12% of all energy production by 2010. The individual European countries are committed to accomplishing concrete targets of renewable energy contribution by 2010 for electricity production. In order to reach that target, specific countries apply different policy tools. Belgium, Spain, France and Portugal support a feed-in tariff (similar to Germany) to compensate for the higher costs of electricity production from renewable energy. Other countries, such as Finland, the Netherlands and Sweden, support tax concessions to give incentives for electricity production from renewable resources. A quota system regulates the share of renewable energy for electricity production; licences can be traded in a similar way to the emissions permits. Such a system is favoured by Austria, Italy and England. Germany has implemented a renewable energy law (EEG), which specifies the share of renewable energy and supports electricity production by renewable energy through concrete feed-in tariffs. The share of renewable energy for electricity production should be increased by 20% by 2020 and by 50% by 2050.

In summary, the European energy market faces two main challenges: the liberalisation process and climate policy. The liberalisation process of the European energy market is intended to increase competition between utilities, but in some countries there are already augmented market concentrations. The emissions trading system is intended to reduce greenhouse gas emissions. Only a rigorous European climate policy can yield market incentives that will lead to a process of substituting renewable for conventional energy. As old power plants have to be replaced by new ones in Germany, the current market situation seems to be the best breeding ground for a technological innovation offensive.