

Have German Electricity Prices Stabilized?

The Federal Ministry for Economic Affairs and Energy (BMWi) in Germany promised on 20 October 2015 cheaper electricity¹.

The chart (fig. 1) shows four consecutive years with decreasing electricity cost - though two of the years (2015 and 2016) must be estimates.

The chart also shows a combination of decreasing market prices and increasing subsidies (Umlage = redistribution).

The transition (die Energiewende) is not yet complete, so it is still an interesting question if the price stability will last.

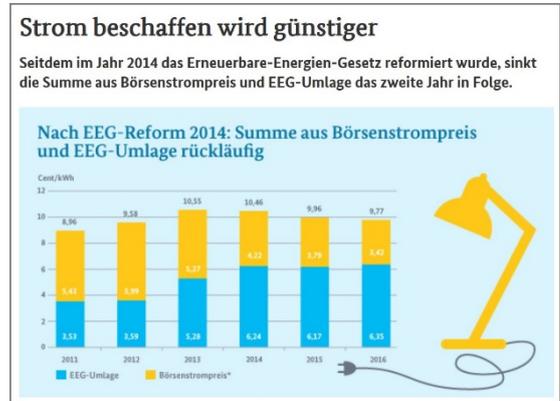


Fig. 1 - The top of the BMWi announcement

4% annual growth of electricity prices 1998 to 2015

Fig. 2 shows the price development for German household prices since 1998.

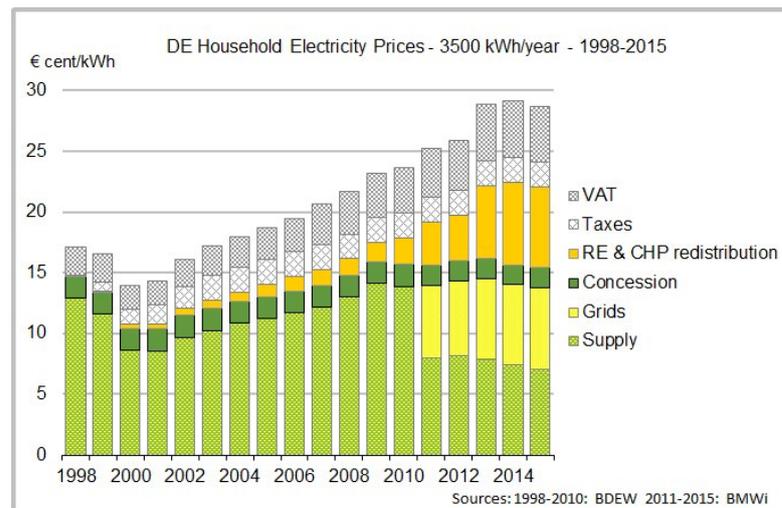


Fig. 2 - German Price Development 1998-2015

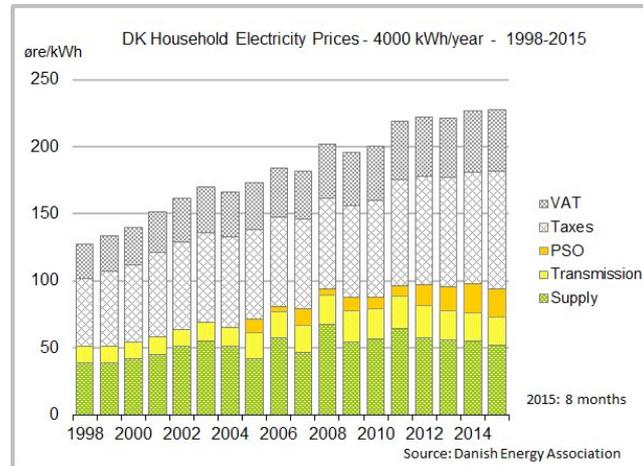
Fig. 2 confirms that the cost of production and distribution of electricity has been stable since 2009, while the subsidies (called redistribution) have increased considerably during the same years.

The German households have experienced a steady growth of the electricity prices for many years. The average growth from 1998 to 2015 was 4.3% per year. The average German inflation was 1.4% for the same years.

¹ <http://www.bmwi-energiewende.de/EWD/Redaktion/Newsletter/2015/18/Meldung/infografik-strom-beschaffen-wird-guenstiger.html>

A similar pattern in Denmark

Some interesting conclusions can be drawn by comparing the German and the Danish price charts.



Figur 3 - Danish Price Development 1998-2015

The average price increase from 1998 to 2015 was 3.3% per year.

The total consumer prices in 2015 are approximately the same in Germany and Denmark, but while production and distribution make 48% of the total price in Germany, the corresponding Danish fraction is only 32%.

The figures suggest that production and distribution of electricity are significantly cheaper in Denmark than in Germany.

PSO (Public Service Obligation) is the Danish support for renewable energy. The current increase of PSO causes debate in Denmark. Danish industrial consumers claim that PSO is a main reason for poor international competitiveness. In 2015, the Danish PSO was 21.39 øre/kWh or approximately 2.9 € cent/kWh. It can be compared with the German redistribution, which was 6.61 € cent/kWh in 2016. This note does not examine industrial electricity prices, so the comparison may be unfair.

The PSO debate in Denmark seems to shade that taxes and VAT make 59% of the consumer price against 23% in Germany. This observation suggests that the efficiency of Danish electricity supply is favorable to the Danish state and certainly not to the benefit of Danish consumers.

A view on the future

All predictions are wrong. This one will probably also be. However, a qualitative discussion on the current trends and their possible consequences must be useful.

- I expect a further increase of the amount of subsidized electricity generation with low marginal costs.
- I expect that the current low spot market prices of electricity will be maintained or even reduced further.
- I expect a stable or increasing level of subsidies for renewable energy.

- I expect a further decrease in production from traditional thermal generation units and consequently continued close-downs of those units
- I expect an increasing need for purchasing dispatchable reserve capacity as replacement for the closed units.
- Together with the development of the cost of subsidies, the future cost of reserve capacity will be decisive for the future electricity prices.

Stable electricity prices from now cannot be excluded, but I consider the possibility of a continuation of the trend in the last decade for more likely.

It should be acknowledged that the Energiewende has a cost. It is a privilege for politicians to make expensive decisions, but trying to sweep the cost under the carpet is to deceive voters and consumers.