## Are renewables guilty for expensive electricity?

## Impact of incentives for renewables on residential electricity prices in Visegrad countries

Electricity together with water and heat are among the most rapidly growing expenses for households and companies in four Visegrad countries. Poland, Czech Republic, Slovakia and Hungary have a similar modern history which has influenced electricity prices for the final users in the last three decades. Controlled deregulation combined with the establishment of the electricity market was the most important factor responsible for electricity price increase in the beginning of the nineties. The development of the nominal price of electricity since 1995 was slightly different between Visegrad countries – between 1995 and 2014 household electricity prices grew by 237 % in Poland, by 280 % in the Czech Republic, by 378 % in Slovakia and by 414 % in Hungary. On the other hand, the actual electricity price is significantly lower in Hungary and Slovakia in comparison with Poland and Czech Republic.<sup>1</sup>

Table 1: Comparison of electricity retail price development in Visegrad countries 1995 – 2014 (price level from August 31st for 2014)

Country	Electricity retail price increase between 1995 and 2014 [%]	Actual retail price in 2014 [euro cent]	Share of RES incentives on retail price [%]
Poland	237	15.65	3
Czech Republic	280	18.30	13
Slovakia	378	12.70	7.5
Hungary	414	12.64	3

If we take into account the real price of 1995, the price level stayed the same in 1995 and 2014 in Poland and Hungary. In the Czech Republic the electricity price rose 20 % higher than inflation.

Renewables are often blamed in V4 national media as being the key reason for more expensive electricity. Thus, as a part of our research, the influence of RES incentives (support schemes) on electricity prices was examined. Studies in all four Visegrad countries show that support of renewable electricity production increased retail electricity price significantly but much less than other price components like stock market electricity price, distribution fee or VAT rate.

In particular, in the Czech Republic, where costs of feed-in tariffs for renewables are transposed into the consumer's price, the overall costs of the renewables support scheme represent only 13 % of the electricity retail price. In Slovakia, incentives for renewables is included into a "system operation tariff"- standard electricity price component – and represents only 7.5 % of electricity retail price. In Poland renewables are supported through "property rights RES" which represent only 3 % of electricity retail price. In Hungary renewables are supported by a pricing component, which was removed from the residential electricity price structure in 2013 but in fact would represent less than 3 % of retail electricity price in 2014.

The end of artificial centralized control of energy prices lead to the gradual establishment of market based electricity pricing from the beginning of nineties (the processes of deregulation and privatization and their effects were different in the four countries as described in the country reports, see details below). The market deregulation enabled the inclusion of profits from energy production and distribution companies into the electricity price. On the other hand, market competition pushes electricity prices down. Market deregulation also contributed to the fact that the

<sup>&</sup>lt;sup>1</sup> National studies used different methodologies for evaluation of price development. Czech national study works with mostly used tariff rate for households, other countries with average value.

electricity supply is much more reliable than it was in the eighties.

Last but not least, renewable energy sources contribute significantly to a massive reduction of the stock market electricity price on the European market. This effect balanced the negative impact of renewable energy support (as a part of the electricity price) and for example in Poland, the final impact on consumers is positive.

## Contacts, notes

Full studies about price development are available on following websites: <u>Czech Republic</u>, <u>Hungary, Poland</u> (link to download the study is at the end of the page) and <u>Slovakia</u>. All studies are in respective national languages, but with English summary.

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