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The electricity market of Canton Ticino between Switzerland and Lombardy

THE PRICE OF ELECTRICITY FOR HOUSEHOLDS AND FIRMS

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Executive summary

This report provides an assessment of the price of electricity for three consumption classes, representative of the resident population and small and medium-sized firms of Canton Ticino. As a term of comparison, the report collects information of electricity prices for the same consumption classes in the rest of Switzerland, the neighbouring Italian region Lombardy, and the European Union, with a short focus on Germany, France and Austria.

The price of electricity for end consumers is often regarded as a secondary issue in Switzerland. The share of electricity costs in the monthly budget of Swiss residents and firms is indeed rather low, thanks to the very high per capita income and the strong weight of the tertiary sector in the economy. Ticino and Switzerland operate however in an increasingly competitive setting, and face the challenges of the decarbonisation of their economy on the one hand, the appreciation of the Swiss franc on the other hand. A constant monitoring of the positioning of the electricity market of Ticino with respect to the neighbouring regions is thus increasingly important, in order to ensure attractive framework conditions for households and small and medium enterprises.

The key data emerging from the report are the following:

- The price paid for electricity by households and firms located in Ticino in the years 2010-2017 is shown in the table below. The average values reflect a slow growth until 2016 and a slight decrease in 2017. Average prices were higher in Ticino than in the rest of Switzerland, particularly for the industrial segment of demand;

Electricity price for end consumers in Rp./kWh - Average 2010-2017		
	Ticino	**Rest of Switzerland**
Households	20.9	20.5
Small firms	20.0	18.0
Medium-sized firms	17.1	14.8

- Households and firms located in Ticino benefitted instead from cheaper prices than their counterparts in Lombardy in the years 2010-2014. The price differential started to narrow down in 2015, also as a consequence of the strengthening of the national currency, and average prices gradually became cheaper in Lombardy at least for residential consumers and small firms. When compared to the EU-28 average prices, Ticino and Switzerland register lower values only for the household segment;
- The price of electricity in Ticino can be broken down in the following components: cost of the commodity, worth 31% of the final price in 2017 (37% on average in the years 2010-2017), cost of transmission and distribution grids, contributing to 42% of the final price in 2017 (43% on average between 2010 and 2017), incentives provided to renewable-based generation plants, weighing around 7% of the final price in 2017 (4% on average in the years 2010-2017), and finally the remaining taxes and levies, accounting for 19% of the final price in 2017 (16% between 2010 and 2017);
- The cost of the commodity has witnessed a steady decrease for all consumption classes in Ticino and the rest of Switzerland, in parallel with the downward trend in the wholesale price of electricity in most

European markets. The commodity component of the final prices, historically cheaper in Ticino than in Lombardy, is now similar in the two areas and even lower in Lombardy for small industrial consumers;

- The price component covering grid costs is higher in Ticino than in the rest of Switzerland for small and medium enterprises, that also pay a premium of more than 4 Rp./kWh with respect to their competitors in Lombardy. Household consumers, on the contrary, pay slightly less in Ticino than in the rest of Switzerland. A recent reform of the regulated components of electricity prices in Italy has brought about important advantages for the residential market in Lombardy: since 2017 Italian households profit from a cost advantage close to 6 Rp./kWh, much higher than the historical average of 1-2 Rp./kWh;
- Electricity consumers in Ticino and in the rest of Switzerland pay on the other hand much lower costs for incentives to renewables, and taxes and levies in general. The KEV component covering incentives to renewables in Switzerland has reached in 2017 its maximum allowed level of 1.5 Rp./kWh, still well below the 4-8 Rp./kWh paid by industrial and residential consumers in Lombardy. Taxes and levies are also more expensive for households and firms located in Lombardy, while consumers from Ticino are in turn at a slight disadvantage with respect to their counterparts in Switzerland.

In light of the recent trends in markets, regulation and energy policies, the expectations for the next months in 2017 are the following:

- The European wholesale markets for electricity and natural gas have regained stability after the price spikes observed at the end of 2016, as a consequence of the temporary halt of several nuclear generation plants in France and the uncertainties concerning the US energy policy. The cost of electricity is thus expected to be reasonably in line with the relatively low levels observed in the past few months;
- End consumers in Canton Ticino could take advantage of a stronger convergence between the cost of the commodity and the wholesale price of electricity on the national market. This differential is indeed slightly higher in Ticino than in the other Cantons. Price comparison tools could foster competition among suppliers in the liberalized segments of demand, to the benefit of those consumers who are less skilled in comparing alternative supply contracts. A close monitoring from the energy regulator would instead help preventing cross-subsidies across different consumption segments;
- As for the price component covering incentives to renewable-based generation, uncertainties are linked to the full implementation of the Swiss Energy Strategy 2050. A positive outcome of the referendum on May 21st 2017 would probably lead to a gradual increase of this component from the current 1.5 Rp./kWh to the new threshold of 2.3 Rp./kWh. This value would still be lower than that paid by electricity consumers in Italy and the biggest economies of the European Union, with the exception of France;
- Transmission and distribution costs are also likely to grow in the medium term, due to the adaptations and upgrading needed for integrating a growing share of new renewable plants while decommissioning the old nuclear plants. A similar trend is however expected for most European countries, that have agreed common sustainability goals and are already witnessing a rise in the contributions of new intermittent renewables;
- The structure of the price component covering transmission and distribution costs will probably need a revision in the medium term, with a shift of part of the cost from electricity consumption (Rp./kWh) to installed capacity (Rp./kW). Indeed, if electricity consumers should cover an increasing share of their needs through their own small-scale renewable plant, the final amount of electricity withdrawn from the grid would drop. In the absence of a rebalancing reform, the splitting of grid costs - still needed to cover peak consumptions – on an always lower amount of electricity withdrawals would lead to undesirable distortions and distributional effects.