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The electricity market of Canton Ticino

THE PRICE OF ELECTRICITY FOR HOUSEHOLDS AND FIRMS

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Executive summary

Contents and structure of the Report

This Report provides an analysis of the price of electricity for three consumption classes in Canton Ticino: households (class H4 according to the Swiss energy regulator Elcom), small firms (class C3) and medium-sized firms (class C5). The analysis covers the years 2018 and 2019 and, where data is available, the first semester of 2020. The electricity prices in Canton Ticino are compared to those observed in the rest of Switzerland, Italy, Germany, Austria, France, and finally to the European Union averages. As a further term of comparison for the residential segment, the Report also provides a detailed insight into the offers available for household consumers in Lombardy, the Italian region bordering Ticino.

The Report is organized as follows:

- Chaper 1 provides an overview of the average electricity prices for the three consumption classes in Ticino and in the other regions, and evaluates the components that build up the final price paid by consumers,
- Chapter 2 investigates the heterogeneity in the electricity prices for household consumers in Canton Ticino and the rest of Switzerland. Moreover, an insight into the electricity prices for residential consumers in Lombardy provides useful hints on the effects of market liberalization for small consumers.

The Report is based on Elcom and Eurostat data. The analysis of the residential market in Lombardy is instead based on an original dataset developed within the Institute for Economic Research (IRE) using the “Portale Offerte”, an on-line price comparison tool set up by the Italian energy regulator ARERA.

Retail price trends in Canton Ticino and in the other regions

The years 2018-2020 witnessed a slight increase in the average electricity prices for all consumption classes in Canton Ticino: from 21.45 to 22.51 CHF cent/kWh for households, from 20.84 to 21.56 CHF cent/kWh for small firms, from 17.70 to 17.96 CHF cent/kWh for medium firms. Similar trends were observed in most of the regions considered in the analysis, with the exception of Germany, where final prices decreased for all consumption segments.

The electricity prices paid by residential consumers in Ticino and in Switzerland were among the cheapest in the countries under scrutiny. Looking instead at industrial consumers, the electricity prices observed in Ticino were slightly higher than the EU averages, and ranked the third most expensive within the sample, after Germany and Italy. The average prices for industrial consumers in the rest of Switzerland were instead lower than the EU averages, and ranked the third cheapest in the sample, after Austria and France.

Retail price components

Looking at the composition of the final price of electricity, Ticino and the rest of Switzerland have benefitted from the lowest costs for incentives to renewable generation, as well as from the lowest taxes on each unit of energy. Energy taxes are however higher in Ticino than in the rest of Switzerland. On the other hand, both regions have faced the highest network costs; this price component is only slightly lower in Ticino than in the rest of Switzerland. The commodity cost is slightly lower than the EU average for the residential segment, and in line with the EU average for the industrial segment. The cost of incentives to renewables and the energy taxes are particularly high in Germany and in Italy. Italy records on the other hand the lowest network costs, Germany the lowest cost of the commodity, particularly for small and medium firms. The spread between cost of the commodity on the one hand, and wholesale electricity price on the other hand is relatively low in Ticino and the rest of Switzerland as compared to the other regions: despite the decline in wholesale electricity prices, the differential lays between 0.15 CHF cent/kWh and 2.5 CHF cent/kWh throughout 2018, 2019 and the first half of 2020.

Households in the spotlight: median prices are lower in Ticino than in the rest of Switzerland

As the residential market has not been liberalized in Switzerland, a closer look at the electricity prices applied by each supplier in Canton Ticino and the rest of Switzerland provides interesting insights as regards the heterogeneity of electricity prices actually paid by consumers. By accounting for the dimension of the local suppliers, approximated using the number of inhabitants of the municipalities they serve, we are able to compute the median electricity price in Ticino and in the rest of Switzerland. Throughout 2018, 2019 and 2020 the medians of electricity prices, network costs and commodity costs have been steadily lower in Ticino than in the rest of Switzerland, whereas the median of energy taxes has been higher. The fact that several Ticinese suppliers have lower commodity costs as compared to their counterparts in the rest of Switzerland suggests that in the hypothesis of a full market opening they might be ready to defend their market share and possibly even expand outside the Cantonal borders.

The case of Lombardy: outcomes, limits, and challenges of the retail market liberalization

Thanks to a new database collecting the supply offers for households living in Milan, Lombardy, we are able to provide a detailed insight into the heterogeneity of electricity prices available to end consumers living in this Italian region in the first half of 2020. The analysis is particularly interesting from a Swiss perspective, as the Italian retail market has been liberalized since the second half of 2007. A closer look at the main price and market trends is thus potentially informative of the risks and opportunities stemming from a full retail market opening.

The supply offers collected in the Portale Offerte, the official price comparison tool provided by the Italian energy regulator ARERA, show that in the first half of 2020 electricity prices on the free market were on average higher than the regulated tariff. This finding is coherent with the results described for 2019 in ARERA's yearly report.

The fact that the regulated tariff is lower than the average market price might suggest that the liberalization process has failed to yield the expected convergence of market prices toward the long run marginal cost, possibly due to market distortions. Alternatively, it might suggest that the energy regulator has set the tariff at a level which is not compatible with the full recovery of production costs. On the other hand, however, more than 1350 supply offers with a wide spectrum of different supply conditions were available in each quarter on the Portale Offerte. This suggests that the liberalization has also provided a strong incentive to product differenciation, which in the market for a homogeneous good can only be achieved through contractual and marketing innovation in the supply service. The availability of differenciated supply services meeting consumers' needs and expectations will be crucial for the energy transition. The ability to take advantage of the higher willingness-to-pay of selected consumers for renewable-based or locally sourced electricity might for example be very useful in the next few years in order to achieve the EU decarbonisation goals. The adoption of a consumer-centred approach from both suppliers, and regulators will be crucial to achieve the energy transition goals within a liberalized market setting.