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Industrial consumers in Ticino and the electricity market

LIBERALIZATION, SUSTAINABILITY AND EFFICIENCY: OUTCOMES AND OPPORTUNITIES

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Executive summary

- The Swiss electricity market has undergone important changes in the last few years, with the spreading of new technologies for generating electricity and monitoring consumptions, the progress of the liberalization process, and the subsequent development of an unforeseen variety of supply offers. These changes translate into several new opportunities for the industrial consumers, who can now improve their own ecological footprint, achieve cost savings by sensibly choosing their supply offer or implementing efficiency measures, and ultimately gain competitiveness and attractiveness on their reference market.
- Aim of this report is mapping the behaviour, preferences and perceptions of industrial electricity consumers in Canton Ticino under two dimensions:
    - The liberalization of the retail market, with a focus on its impacts in terms of customer satisfaction for costs, quality and variety of supply services, and on the drivers that influence the display of the above-mentioned effects;
    - The adoption of energy efficiency measures or (renewable) generation for self-consumption, with a focus on the factors that may favour a broader spreading of these investments and on the perceived link between environmental sustainability and performance of the firm.
- The analysis is based on an on-line survey that was distributed in October and November 2017 among 3’327 firms located in Canton Ticino. The survey was validly completed by 222 respondents.
- The sample is representative of the industrial base of the Canton in terms of firm’s size and activity sector. The 222 respondents are mainly micro and small firms. 55% of them report consumptions below the 100 MWh/year threshold needed for accessing the free market, and almost 80% report a low incidence – below 5% - of electricity costs on the firms’ turnover.
- It is however surprising that, despite the relatively broad classes included in the questions, more than 35% of respondents declared they did not know their yearly consumption, and 18% stated they did not know the incidence of electricity costs on turnover.
- Looking at the retail market liberalization, the analysis shows what follows:
    - The cost of electricity is considered important or very important by 57% of the sample;
    - Looking at the actual costs of electricity supplies, 30% or the respondents declared they were not satisfied with the cost they paid, 26% expressed a neutral opinion, and only 19% claimed they were satisfied or extremely satisfied, while the remaining 25% had no specific opinion on this issue. The respondents were on average more positive when assessing the quality of the electricity supply service: only 21% stated that service quality did not match the costs, whereas 22% expressed a neutral opinion, and 35% expressed a positive or very positive evaluation; 22% said they had no specific opinion;
    - The variety of supply offers adopted by the respondents is good in terms of energy mix, price formation options, and price variation across time slots, days of the week, and seasons;
    - The respondents show a marked aversion toward the possibility of switching supplier in the upcoming 12 months: 72% rate this event as unlikely or very unlikely. Assuming they had to face this choice, the respondents state they are more likely to choose a supplier located in Ticino than a Swiss or international one. Geographical and linguistic proximity are of particular importance when choosing the supplier;
    - The main factors hindering supplier switching are the perceived difficulties in comparing alternative offers and hassle from engaging in a new bureaucratic process, the lack of time, and finally the expectation of very limited cost savings. Only one respondent actually changed supplier since January 2016, and only two declared they had used a price comparison tool in the last 12 months;

    - When looking at the features of electricity supply offers, more than 60% of respondents find "important" or "very important" the availability of a 100% renewable-based supply and the frequent metering of consumptions in order to lower bill adjustments. The percentage drops to slightly more than 50% when looking at the availability of ICT for real-time consumption monitoring, and an electricity supply from generation plants located within the Canton;
    - The survey reveals however a widespread ignorance concerning simple features of the own electricity supply contract. Moreover, the respondents express troubles in finding and interpreting reliable and accurate information concerning alternative offers, as well as in comparing the own electricity costs to those paid by the firm's competitors in the neighbouring markets (Switzerland, Italy, and the European Union);
    - Around 50% of the respondents state they do not have any precise opinion as regards the positive effects of the partial retail market liberalization started in 2009, and the benefits expected from the completion of the liberalization process.
- Looking instead at the spreading of energy efficiency measures and (renewable) generation devices for self-consumption, the analysis shows what follows:
    - More than half of the respondents see energy efficiency and the use of renewable energy as factors leading to an improvement in both corporate image, and competitiveness;
    - Around 10% of the respondents have actually joined an official energy efficiency programme, whereas 22% have spontaneously adopted energy efficiency measures. Only 5% of the respondents who have not joined any official programme have requested an energy audit in the last 12 months; by the time the survey was completed, however, none of them had decided to start any programme in the upcoming year;
    - Generation devices for self-consumption are less popular: 7% of the sample declared they had a renewable-based generation plant, and 5% declared they had a generation device based on non-renewable sources;
    - The perceived difficulty in accessing dedicated funding is one of the factors hindering the diffusion of energy efficiency measures and renewable-based generation plants. However, a good share of the respondents seems unaware of or uninterested in existing funding opportunities.
- The analysis highlights that most industrial consumers in Ticino, despite showing a good interest the topics of electricity consumption and its ecological impacts, have not (yet) become active players on the market. Their reluctance or inertia probably stem from the difficulties in finding and interpreting reliable and detailed information. This "information gap" is most likely one of the causes of the low participation in the free market of entitled consumers, as well as of the relatively low engagement in energy efficiency and self-generation investments.
- The circulation of information from reliable and independent experts may help overcoming this gap, and allow industrial consumers to reap all the benefits stemming from the liberalization process and the availability of new technologies. More specifically, the development of a price comparison tool facilitating the choice among alternative offers might support consumers, particularly during the transition to a completely liberalized market envisaged for the next few years. The tool could be developed to include not only the firm's consumption profile, but also its preferences with respect to environmental impacts, geographic and linguistic proximity of the supplier, and the billing process.