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The wholesale market for electricity

THE EVOLUTION OF PRICES AND POLICIES IN TICINO, SWITZERLAND, AND THE EUROPEAN UNION

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Executive summary

2020 has not yet come to an end, but is already proving a record-breaking year. The economic crisis and the travel restrictions induced by the Covid-19 pandemic have caused an unprecedented -5% slump in world energy demand. The impact of the pandemic has not been uniform across economies and energy markets: so far, the richest countries have been suffering the most, and oil and coal have absorbed the largest slice of the decline in energy consumption. The IEA forecasts released in June 2020 for world energy demand in 2020 suggest -8% for oil, -7% for coal, -3% for natural gas, -2% for electricity, and a slight increase for renewables.

Electricity demand and prices in Europe

The European electricity sector was already stagnating across 2018 and 2019, and experienced a sizeable decline during 2020. Between January and August 2020 electricity demand dropped by -4.2% in Switzerland, -6.2% in Germany, -6.9% in France, -5.3% in Austria, -7.7% in Italy, and -6.0% in the EU-27. Spot prices on the wholesale markets followed a similar, but more pronounced trend. Considering Switzerland and its direct neighbours, day-ahead prices went from the 49.4-67.6 EUR/MWh observed in January 2019 to the 35.0-47.5 EUR/MWh of January 2020 and the 13.5-24.8 EUR/MWh of April 2020, an historical low for the region. The rest of Spring and Summer 2020 saw a rebound up to the 43.7-48.8 EUR/MWh of Sempteber and a small retracing in October.

Energy market trends and energy policies are driving a deep restructuring of the supply side

The fall of electricity prices and demand was accompanied by a deep restructuring of the supply side, which was also driven by the trends observed in the wholesale markets for coal, gas, and emission allowances (EUA). Natural gas prices have indeed collapsed in Europe and Asia along 2019 and 2020, due to an excess supply in the LNG segment. More in detail, TTF day-ahead prices have hit historical lows during Spring 2020, declining from the already low yearly average of 13.6 EUR/MWh of 2019 (-40% with respect to 2018) to the 8.3 EUR/MWh of the first ten months of 2020 (-39.3% with respect to 2019). Along the same period coal prices have experienced a slower decline, from the 61.8 USD/MT observed in 2019 (-32.8% with respect to 2018) to the 48.5 USD/MT of the first ten months of 2020 (-21.4% with respect to 2019). The EUA, on the contrary, have been fluctuating around an unprecedented high of 25 EUR/tCO2 eq. across the two years, boosted by the introduction of the Market Stability Reserve in 2019 and by the expectation of further cuts in the emission caps in the upcoming years.

Towards an earlier phase-out of coal and lignite generation?

These market trends, together with the expansion in renewables observed in the last ten years, have been pushing coal and lignite generation towars negative margins throughout 2019 and 2020 in most European countries. As a consequence, the contribution of these plants within the European generation mix has shrunk to historical lows, dropping by -24.8% between 2018 and 2019 and by a further -29.5% in the first eight months of 2020 in the EU-27. The fall of coal and lignite was even more pronounced in Germany, where generation figures reached a -25.4% in 2019 and a -34.2% between January and August 2020. Gas plants experienced instead a small decline over the same period, while renewable generation recorded a slight increase in most European countries.

The decarbonisation of the European generation mix has been determined by the combination of energy policies and energy market trends; the latter might reverse in the next months, depending on the trends in world economies and energy policies. Nonetheless, the size and speed of the transition suggest that even in this case, the phasing-out of coal and lignite plants might happen sooner than expected in most Central- and Eastern-European countries.

New energy policies: ambitious decarbonization goals in Switzerland and the European Union

Next to the remarkable trends observed on the Swiss and European electricity markets, year 2020 also saw renewed efforts toward a deeper decarbonization both in Switzerland, and in the European Union.

In Switzerland the Federal Council has been working on a throughout and organic revision of the Energy Act and the Federal Law on Energy Supply. The proposal under discussion envisages an increase in the renewable generation targets in the medium and long term, a redefinition of the incentives for renewable-based plants up to 2035, and finally the introduction of flexibility reserves for seasonal and short-term swings, with important benefits in terms of security of supply.

In the EU-27 the new Eurpean Commission has instead launched an ambitious package of legislative proposals, the European Green Deal, which aims at ensuring a reduction in greenhouse gas emissions of 55% with respect to 2005 levels by 2030. The legislative proposals target the functioning of the entire energy system in order to ensure a deeper and more efficient decarbonisation of the European economy. The “hydrogen strategy” and the “system integration strategy” published within this package are already eliciting a lively debate in the energy industry.

Unsolved issues

Both in Switzerland, and in the EU-27 some political issues remain however unsolved.

In Switzerland the main open issue concerning the electricity market is the intergovernmental agreement for the integration of the Swiss market within the Internal Energy Market of the EU-27. The intergovernmental agreement for the electricity market would allow a more efficient use of the existing transmission lines, and safeguard the formal and informal influence that Swiss actors may exert in the European panels where new investments and legislative provisions are discussed. The agreement is however conditioned by the debate concerning the broader institutional agreement between Switzerland and the EU-27, for which the political consensus is still uncertain.

The European institutions are instead still working on the post-Brexit agreements: the outcome of the seemingly never ending negotiation will determine, among other things, the possibility of ensuring the integration within the Internal Energy Market of the energy market of the UK and, indirectly, the Republic of Ireland. In the last few weeks, the European institutions are moreover facing some difficulties in the approval of the 2021-2027 budget and Recovery Fund. The proposal approved in July 2020 introduced a conditionality on the rule of law, which has recently elicited a veto from Hungary and Poland.

The expectations for 2021: tough times are hopefully over

After the price and demand lows hit during Spring 2020, the upcoming months should see a gradual recovery of electricity prices and demand. The speed of the recovery is however subject to the uncertainty concerning the duration of the pandemic and lockdown measures in Europe and the rest of the world. The Azienda Elettrica Ticinese (AET) will most likely end 2020 with a negative impact from its share of the coal-fired gas plant in Lünen, Germany, but with some very important results from its assets and activities in Switzerland, namely the signing of a supply contract to Repower and the commissioning of a large wind farm at the Gotthard pass. Next to the stability coming from operating in a somewhoat countercyclical business and from the long-standing trust relationship with the local community and stakeholders, the expectation of a clear framework for the medium- and long-term promotion of renewable-based generation in Switzerland in the next few months justifies further optimism for the AET and the other distributors and suppliers operating in Ticino.