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European utilities

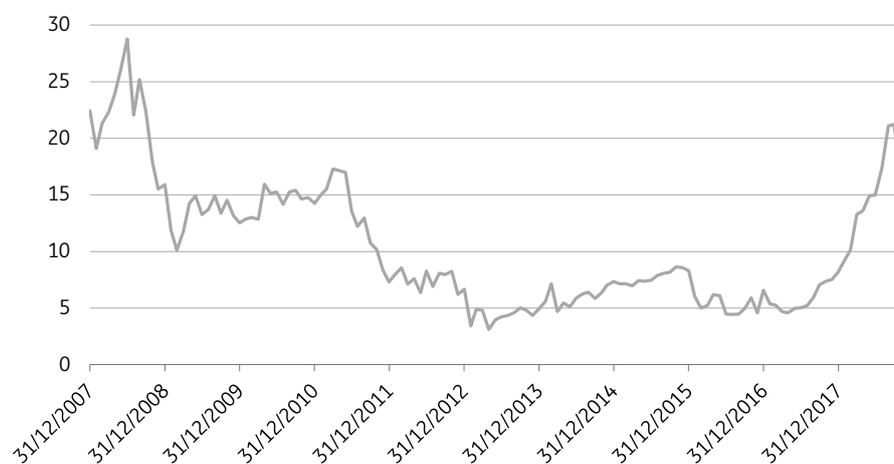
The carbon price comes into play

In the past few years, the questions around CO₂ emission reductions and renewable energies development have dominated the European Utilities sector. With Utilities' capital expenditure increasingly dedicated to the ongoing roll-out of renewable capacities, the theme will continue to be strongly present in 2019 and in the coming years. European energy companies will continue to be pressed to eliminate their most polluting energy generation technologies. The ongoing pressure comes from civil societies, environmental organisations, politicians and investors, among others. In 2005, the European Union designed the Emissions Trading System (ETS) that would charge European utilities (and other sectors such as pulp & paper, metals, cement, oil refineries, etc) for their carbon emissions. After an initial learning phase, the system has been adapted over time and seems to have reached a new era.

March 2018 saw the start of a significant EU carbon price hike not experienced since 2008, precisely ten years ago. The recent price pick-up can be explained by the reforms that will hit the EU ETS market in 2019. The past two weeks have seen price volatility nevertheless, putting a freeze on the price increase. The EU ETS price volatility can be explained by the current mild weather across Continental European as well as a higher number of allowances put on the market in the past few days. We think that the ETS reforms will keep supporting the carbon price in the short and medium term, the risk of a price collapse exists, notably with a hard Brexit.

In the past six months, the ETS carbon price rally has put some strain on European utilities heavily exposed to high CO₂ power generation mix. On the contrary, we see a number of utilities benefiting from a high carbon price thanks to their low CO₂ emissions power mix and the size of their power generation activities within their business mix.

Fig 1 EU carbon permit price (€/t)



Source: Bloomberg, ING

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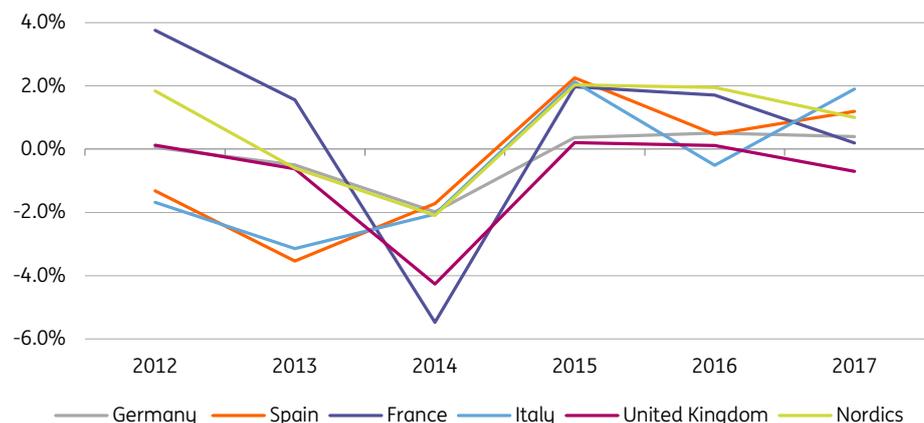
What can drive the EU carbon price up?

The carbon price was at its highest in June 2008 at €28.7/t while the lowest price was recorded in April 2013 at €3.1/t when the sovereign and economic crisis reached alarming levels. In those days, the decline of energy consumption within the EU contributed to a surplus of CO₂ permits, which led to a sharp price decline and an inefficient ETS market.

The limited recovery in the price from 2014 onwards and the strong rally experienced since March 2018 can be explained by several elements that contribute to the volatility of the ETS market:

- 1) **Power consumption.** The power demand rally seen across the European Union is certainly an important element. Power consumption returned to a positive growth momentum in 2014/15 with notably strong rebounds in France and in the UK. In 2017, consumption grew an average 0.6% for the group of selected countries shown in Figure 2: Germany, Spain, France, Italy, the UK and Nordics (Denmark, Sweden and Norway). In the near future, European utilities expect to see a relatively flat or modestly growing electricity demand (at around +0.5%). GDP growth supports energy consumption but environmental initiatives and efficiency measures push demand down. In the long term, demand for power could peak again but only if certain sectors turn to electricity as a major use of energy, such as the transport sector (with the roll-out of electric vehicles). As far as short-term power demand is concerned, weather conditions also play a big role. Milder weather leads to lower demand for carbon certificates, colder weather to higher demand.

Fig 2 Power demand trends in selected European countries (2012-17)



Source: Eurostat, RTE, Statista, UK Government Statistics

- 2) **The reduction of carbon certificates.** At the end of 2017, reforms of the EU Emissions Trading Systems were agreed. From 2021 onwards, the number of certificates will decrease by 2.2% per annum (instead of 1.7%). On top of this, a percentage of the existing surplus of certificates will be allocated to the market stability reserve (24% starting in January 2019). The reserve will address the current surplus of allowances by back-loading existing allowances to be auctioned. Each year in May, the reserve will also communicate on the amount of allowances it will definitely take away from the ETS trading market.
- 3) **The recent carbon price rally explained by the reforms.** March 2018 saw the beginning of a strong hike of the EU carbon permit price. The impressive increase can be explained by corporates buying certificates in anticipation of the expected 2019 slashed availability due to permit allocations put into the market stability reserve.

The end of 2018 and 2019 may see a squeeze between demand and offer and push the price of certificates up further.

- 4) **Political pressure.** A number of governments, including France, have pressured the ETS market to set a floor price at a minimum of €20/t. This is a price that is seen as rock bottom to incentivise the most polluting sectors to shift to greener technologies. With the price going up in the past few months, the pressure has faded, but we think that it could return if the rate were to be judged too mild.

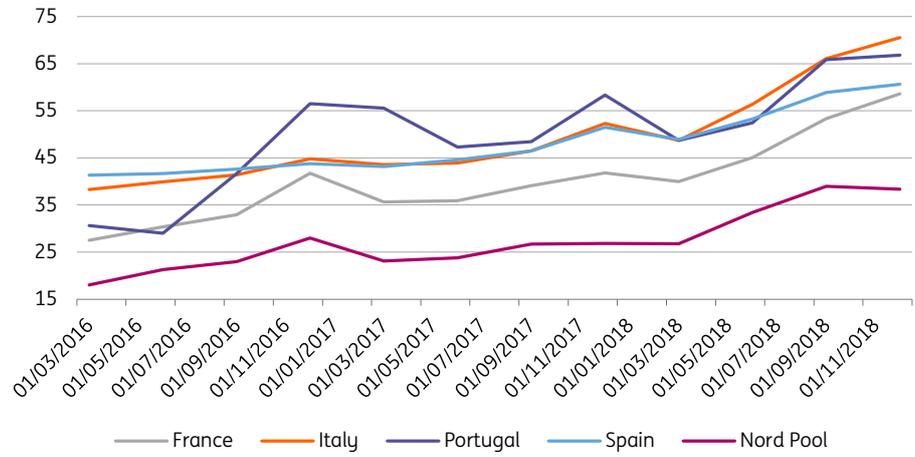
What can drive the EU carbon price down?

- 1) Unless the roll-out of electric vehicles takes a strong turn, most studies on energy demand **show a flat electricity demand in the European Union** between 2020 and 2030. A decrease between 2030 and 2040 is envisaged for the region while global demand growth will still be driven by China, India and the African Continent.
- 2) **Brexit.** The exact date of Brexit and a no deal/deal scenario are still uncertain. The same goes for UK utilities' participation to the European ETS market. The UK's long-term strategy regarding carbon pricing post-Brexit comprises four options. Although staying in the EU emissions trading system is one element, the UK is also considering a standalone ETS market, or a UK ETS market linked to the EU market or a new carbon tax. The EU Emissions Trading Scheme has been looking into the impact of the UK leaving the EU system. The risk resides in UK utilities (and other sectors) rushing to sell their allowances and putting considerable pressure on the carbon permit price. In response to this possibility, the EU ETS may decide to invalidate a certain amount of UK allowances.
- 3) **Political pressure from high polluting utilities.** A €20/t rate is already hitting a number of utilities across Europe, notably those whose generation mix is still skewed towards fossil energies. This is the case of German companies, whose power generation mix is based at 90% on coal and gas technologies. Other voices are being heard from Eastern Europe, notably Poland. On 17 October 2018, Polish Energy Minister Krzysztof Tchorzewski asked the European Commission to call a meeting of the Climate Change Committee to discuss an intervention on the carbon price. Polish utilities have seen their share prices fall sharply since the beginning of 2018 on high CO₂ permit costs. **The Polish Energy Minister would like the Committee to take action based on a rule that stipulates a potential intervention on the carbon allowance price if this price is three times the average price of the two preceding years. This rule can limit the price increase and the probability of CO₂ prices reaching sky-high levels is technically very limited.**
- 4) **Coal phase out.** Over the course of the past two years, a number of countries have announced plans to phase out of coal. Italy and the UK expect no coal power plants to run beyond 2025, the Netherlands, Portugal and Finland by 2030, while France has set a deadline for 2022. As far as Germany is concerned, a commission has been put in place to discuss carbon emissions reduction as well as the structural impact on the economy and employment of a coal phase-out. No specific deadline has been decided yet on closing down German coal power plants. The German utility RWE is pushing for a deadline of 2035.
- 5) While the ETS market will reduce the allowance of permits over time, the utilities sector is geared to clamp down on its most polluting energy technologies. In 2017, 30% of the electricity produced in the European Union was generated by renewables.

Winners of a high carbon price

Companies that benefit the most from a high EU ETS price are utilities with a low CO₂ emission power generation mix coupled with power production activities accounting for a substantial share of cash flows. The high carbon price has contributed to higher power prices across Europe, alongside high commodity prices and power demand. These utilities benefit from higher power prices with a limited need for carbon certificates purchasing.

Fig 3 Wholesale baseload power prices (€/Mwh)



Source: Bloomberg, ING

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