

# Economics in Brief



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## Backloading has no material impact on CO<sub>2</sub> prices or reduction initiatives

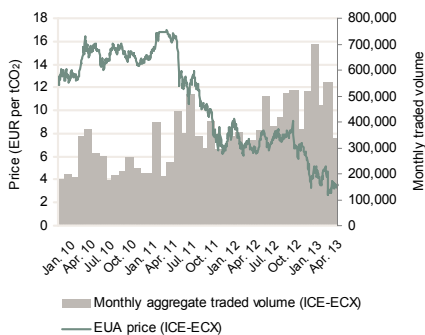
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Reduced demand for energy due to the economic climate and the high allocation of permits have led to a surplus of CO<sub>2</sub> permits and historically low CO<sub>2</sub> prices in the EU emissions trading system.

### Trading volumes rise as permit prices fall

The sharp and consistent decline in permit prices from more than EUR 14/tCO<sub>2</sub> in 2010 to a low of less than EUR 3/tCO<sub>2</sub> by April 2013 (currently: approx. EUR 5/tCO<sub>2</sub>) has come hand in hand with rising trading volumes (figure 1). The increasing proportion of permits being auctioned has led to brisk trading, since not all market participants received the permits they needed in the first stage. However, the number of permits allocated free or auctioned off is so high overall that prices have declined continuously. At the end of the second trading period, 78 % of the companies surveyed for the KfW/ZEW CO<sub>2</sub> Barometer had a surplus of permits. This amounted to an average of 123 % of their allowable emissions in 2012.

Figure 1: Trading prices and volumes



Source: Thomson Reuters Datastream

### Backloading cannot stem the price decline

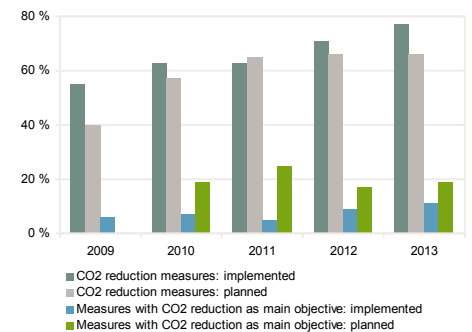
Following the price slump in December

2012 to less than EUR 6/tCO<sub>2</sub>, the European Commission deferred issuing permits to the end of the third trading period (backloading). The individual stages of the backloading approval process by the industry committee, environment committee and the plenary sitting of the European Parliament at the end of January and in February, April and July of this year prompted increasingly small price reactions. More significant price rises in expectation of a stricter CO<sub>2</sub> policy failed to materialise. Prices continued to decline, not least because the finally agreed backloading of 900 million permits for one tonne of CO<sub>2</sub> represents a small proportion of the estimated total surplus permits of around two billion (European Commission, 2013).

### Backloading with no additional investment incentive

A survey conducted as part of the CO<sub>2</sub> Barometer found that the proportion of companies that have implemented reduction measures since the emissions trading system was introduced has increased (figure 2). However, the percentage of companies that are planning future CO<sub>2</sub> reduction measures is stagnating, recently at 65 to 66 %. In addition, the primary objective of both the implemented and planned measures is process optimisation or energy cost reductions rather than reducing CO<sub>2</sub> emissions. The proportion of companies that are planning specific CO<sub>2</sub> reduction measures has actually declined compared with 2011. Backloading does not therefore seem to have provided any incentive for further CO<sub>2</sub> reduction measures.

Figure 2: Existing and planned CO<sub>2</sub> reduction measures: percentage of companies



Source: KfW/ZEW CO<sub>2</sub> Barometer 2010–2013

### Low permit prices favour coal-fired power generation

The low CO<sub>2</sub> prices and the favourable coal prices caused by the fracking boom in the USA led to more coal-fired power generation and rising CO<sub>2</sub> emissions in Germany in 2012 (coal as a proportion of the gross power generated: 2010: 42 %, 2012: 45 %).

### EU emissions trading volume targets should be tougher

From a climate policy perspective, the EU's medium to long-term greenhouse gas targets should increase permit prices. A correspondingly tougher emissions trading volume target would have several additional effects:

- Investors' price expectations would rise;
- Coal-fired power generation (high CO<sub>2</sub> emissions) would become less attractive;
- Declining relative prices of renewable energy would allow the heavily criticised subsidies under the German Renewable Energy Act (EEG) to be reduced. ■