What is New in the EU ETS?

The European Union Emission Trading System (EU ETS) is the most prominent part of the European Climate Change Program (ECCP) to meet the reduction targets under the Kyoto-Protocol. The EU ETS is now seven years old and finds itself in a period of transition as it will enter the third trading period next year.

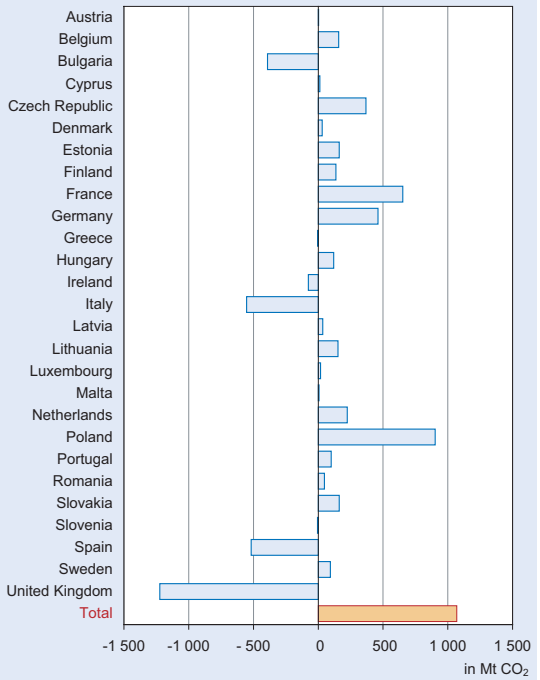
What happened so far?

By the end of the Kyoto commitment period in 2012, the EU aims to reduce its greenhouse gas emissions by 8%. Each of the participating states (EU 27 plus Iceland, Liechtenstein and Norway) has to fulfill individual emission reduction goals pursuant to the burden sharing principle. Germany, for example, agreed to reduce its emissions by 21% during the first two trading periods, whereas France was allowed to maintain its emissions at the level of 1990 [1].The EU ETS plays an important role in helping countries to achieve these targets. The ETS covers installations from 10 industries[2] which are responsible for 40% of European greenhouse gas emissions. All installations covered by the EU ETS receive European Union Allowances (EUA) according to National Allocation Plans (NAP). These EUAs are distributed at the beginning of each trading period and are destined for the respective period only. In the pilot phase, Phase I (2005-2007) of the EU ETS, at least 95% of the emission permits had to be allocated for free by the national governments. In Phase II (2008-2012) the fraction that could be auctioned rose from 5% in Phase I to 10%. Within the trading periods operators of ETS installations can buy and sell EUAs via stock exchanges (e.g. EEX in Leipzig), on OTC markets and via brokers. Beside the possibilities to buy emission allowances or invest in carbon reducing technologies, operators who fall short of permits have another opportunity to obtain additional emission allowances as of the beginning of Phase II. They can obtain certified emission reductions (CERs) or emission reduction units (ERUs) respectively by conducting emission reduction projects under the Clean Development Mechanism (CDM) or under the Joined Implementation Instrument (JI) in non-EU ETS countries that ratified the Kyoto-Protocol. In the EU ETS these additional certificates are recognized as equivalent emission reductions up to a certain amount. Germany, for example is allowed to offset 20% of its yearly emission reductions with CERs or ERUs.

A glance at the EUA and emission data from Phase I reveals that the first trading period was affected by an excess allocation of permits. Overall, operators needed more permits than their NAP had scheduled for them in only 7 out of 27 countries. Taking all participating countries into consideration, the amount of allocated allowances was larger than the verified emissions (see Figure 1). This excess allocation in combination with the expiration of certificates after Phase I was also reflected in the price of the emission certificates, which was close to zero from April 2007 onwards until the end of the first trading period (see Figure 2). An equivalent drop in prices is, however, not to be expected after Phase II as banking of permits is allowed at the end of the second trading period.

Figure 1

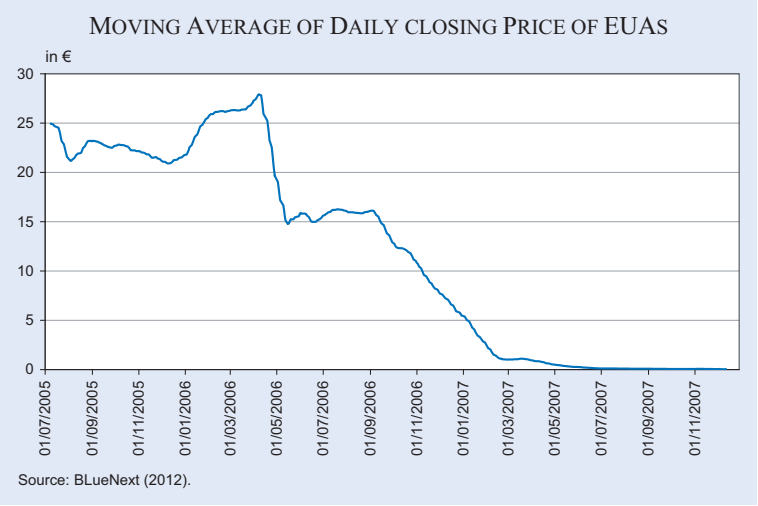
Difference Between Allocated Allowances and Verified Emissions in Phase I



Source: EEA (2012).

[1] European Commission, EU action against climate change: The EU Emissions Trading Scheme, Brussels 2009.
[2] Industries covered: 1. Combustion installations, 2. Mineral oil refineries, 3. Coke ovens, 4. Metal ore roasting or sintering, 5. Pig iron or steel, 6. Cement clinker or lime, 7. Glass including glass fibre, 8. Ceramic products by firing, 9. Pulp, paper and board, 10. Aviation (since 30 January , 2012).

Figure 2



Throughout Phase II, the price for EUAs has fluctuated between EUR 27 and EUR 6. Ten months before the expiry of Phase II, it is still at a level (EUR 9) that is widely considered to be too low and too volatile to set the necessary incentives for the industry to invest in emission reduction technologies, as highlighted by the CEO of E.ON, Johannes Teyssen[3]. To balance over-allocation of permits, the EU Commission considers to set aside 1.4 billion in allowances[4].

What next?

On 1 January 2013 the third and longest trading period to date commences. It will last from 2013 to 2020. The two main innovations of Phase III are a unified emission cap for the entire EU ETS region (versus differentiated caps for each of the 30 participating countries previously) and a rising fraction of the allowances that have to be auctioned. The share to be auctioned initially varies from 30 to 50% depending on the industry in question. For some industries this share increases to 100% in 2020. The European-wide emission cap should decrease by 1.74% every year, which should make it possible to achieve the EU reduction target of 20% compared to the base year 1990 by 2020.

After the expansion of the EU ETS to aviation on 30 January 2012 the scope of the trading scheme will be further enlarged with the beginning of the new trading period. From 2013 CO2-emissions from installations undertaking CCS, the petrochemicals ammonia and aluminum sectors are covered by the EU ETS. The ETS then also extends to some greenhouse gases not covered previously. That leads to a coverage of 43% of total EU greenhouse gas emissions.

Although the EU ETS already incorporates special regulation and exemptions for energy-intensive industries that are prone to relocation, carbon leakage remains a problem. An ongoing global increase in the emission of greenhouse gases will only be avoided by efforts on a global scale and the introduction of a global emission trading system. In this context the development of emission trading systems in several non-EU countries seems promising. China, for example, is currently testing out a domestic ETS and a regional trading scheme is already in place in the US[5]

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[3] http://www.europeanvoice.com/article/imported/meps-to-call-for-ets-set-aside/73653.aspx (downloaded March 1st, 2012).
[4] http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/272 (downloaded March 1st, 2012).

[5] Hood, Christina, International Energy Agency, Reviewing Existing and Proposed Emissions Trading Systems, Paris 2010, pp. 73-75.