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EU ETS at a crossroads: recalibrating an oversupplied market to spur investments and innovation

The European Parliament will soon vote on the European Commission's proposal to amend the EU's Emissions Trading Scheme (EU ETS) Directive. In order to correct the massive imbalance between supply and demand in the carbon market, the European Commission has proposed to delay the auctioning of 900 million (mln) allowances, a process called "back-loading". The Parliament and EU governments have been asked to clarify the mandate of the Commission with regards to delaying the timing of emission allowance auctions.

This briefing presents the views of CAN Europe, Greenpeace, Sandbag and WWF on the reform of EU ETS in the short and medium term.

The carbon market urgently needs recalibration

The ETS is currently not functioning as originally envisaged. Due to the economic recession and decreased industrial production, as well as an unprecedented inflow of international offset credits (coming from often questionable emission reduction projects outside of the EU), a massive surplus of emission allowances has flooded the carbon market.

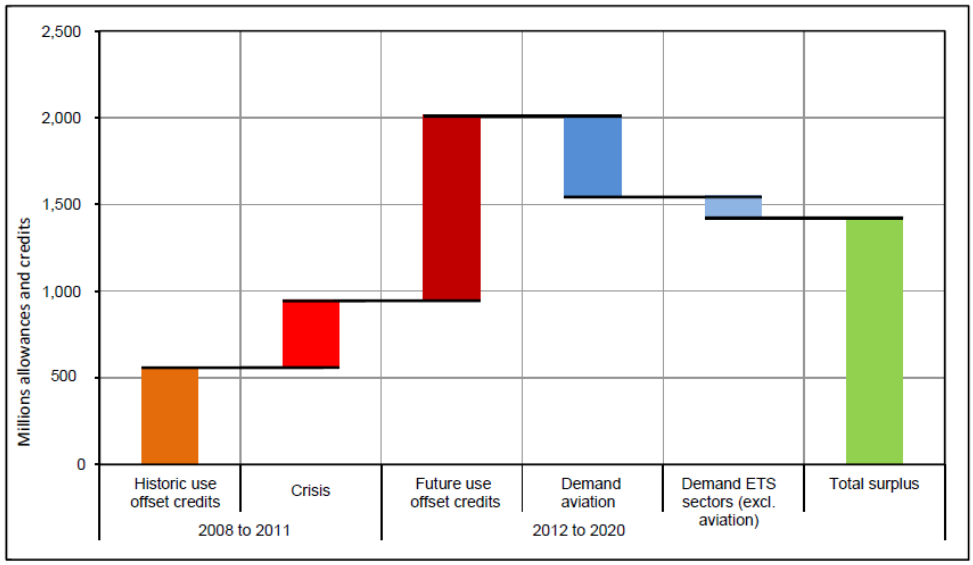
The Commission estimates that the surplus of allowances accumulated in the EU ETS has nearly doubled within the last year, increasing from 955 mln at the end of 2011 to 1.7 bln by December 2012. The surplus is expected to reach over 2 bln by the end of this decade – more than double Germany's annual CO_2 emissions[1].

Because supply of allowances is currently outstripping demand so significantly the carbon price signal has become extremely weakened. Installations under the ETS therefore need to pay very little for their CO_2 emissions and have no incentive to switch from high-emitting fossil fuels to cleaner production. Much-needed investments in low-carbon innovation and more efficient technologies are being delayed. In combination with record low coal prices, a weak carbon price signal is putting the EU at risk of dangerous high carbon lock-in. In 2011 coal consumption grew in more than one third of EU Member States, with a record 52% increase in Spain[2]. The amount of electricity generated from coal in France and in the UK has increased by almost as much as 50% in the first quarter of 2012, compared to 2011[3]. In many Member States, including Germany, Poland and the Netherlands, new coal-fired power plants are either planned or under construction.

For these reasons a fix for the ETS is critical. In any market, a reduction in supply is an appropriate response to a decrease in demand. The same principle should apply to the EU's carbon market. With a large surplus of emission allowances flooding the system, temporarily curbing the supply of allowances is a justified response.

[1] Each allowances represents 1 tone of CO_2.
[2] Compared to 2010, BP June 2012, Statistical Review of World Energy.
[3] The unwelcome renaissance, The Economist, 2013.

Demand and supply balance in the ETS: 2008 to 2020[4]



Back-loading must be followed by structural measures

Back-loading will temporarily delay, but not permanently cancel, auctioning of 900 mln ETS allowances between 2013 and 2015. It will reduce future supply, without affecting the volume of future free allocation nor decreasing the surplus of allowances held by companies. The Commission has proposed that back-loaded allowances will re-enter the market between in 2019 and 2020.

CAN Europe, Greenpeace, Sandbag and WWF welcome the back-loading proposal as a step toward a broader EU's carbon market reform. Nevertheless back-loading alone will not restore ETS credibility in the long-term. Delay in allowances auction must be complemented with structural reform of the ETS: permanent cancellation of allowances and an increase in the emission reductions trajectory. Both these actions are in line with a cost-efficient pathway to achieving 30% domestic emission reductions by 2020 and 80-95% cuts by 2050. Only such fundamental reform of the EU's carbon market would boost green investments and guarantee that the EU does not lock itself into high-carbon infrastructure for decades.

Without immediate and effective repair of the ETS, it is likely that EU governments will take the matter into their own hands at national level. Already some Member States, including the United Kingdom and the Netherlands, have decided to complement the EU carbon market with their own regulations. This risks distorting the internal EU market and fragmenting climate and energy policies. In the absence of consistent, EU-wide rules, costs and risks for investors would increase, jeopardising much-needed investments in modernisation of the EU energy sector.

Back-loading will not decrease the EU's competitiveness and will not result in industry relocation

One of the most commonly repeated – and greatly exaggerated - arguments against back-loading is that an increased carbon price signal will hurt industry's competitiveness and cause it to leave Europe risking jobs and resulting in higher emissions outside of the EU. Yet, for manufacturing sectors, climate policy is a far less relevant factor in investment decisions than other aspects, like differences in tax structure, labour costs or local market conditions[5]. Only a very limited number of energy-intensive sectors may be potentially exposed to competitiveness impacts as a result of climate policies. The EU ETS already addresses and even over-compensates them for possible adverse effects of carbon pricing [6].

[4] Hermann H., Matthes, F. Chr. (2012), Strengthening the European Union Emissions Trading Scheme and raising climate ambition, Öko-Insitut, commissioned by WWF and Greenpeace.
[5] Stern Review on the Economics of Climate Change, 2006, Part III: The economics of stabilisation, Chapter 11 Structural change and competitiveness.
[6] Climate Strategies, November 2009. Ten (plus one) insights from the EU Emissions Trading Scheme.

Most of the EU energy-intensive sectors were defined as exposed to international competition and in consequence included in the "carbon leakage list". Under the rules of the EU ETS Directive, they are entitled to receive 100% free allocation of allowances on the basis of product-specific benchmarks[7]. In case their emissions increase the total volume of free allowances, they can purchase cheap international offset credits, which are currently traded at record-low prices of around €0.40 per tonne of CO_2. Moreover EU Member States are allowed to provide them state aid compensating for a potentially increased electricity prices resulting from CO_2 costs passed on by power producer.

The "carbon leakage list" was developed in 2009 under the assumption that the EU carbon price would reach €30 per tonne by 2020. Since then the forecasts for CO_2 prices have been significantly lowered: even with ambitious intervention in the ETS, a price of €30 is not expected to be reached any time soon. In January 2013, the EU carbon price dipped below €5 to its lowest point ever. Furthermore, since 2009 many countries, including China, Australia and South Korea, have started to design their own carbon markets, a fact often disregarded by industries threatening to relocate.

In addition to the future 100% free allocation of allowances many energy-intensive sectors received an enormously generous free allocation in the last years. Industry's surplus of allowances was estimated at more than 700 mln allowances at the end of 2011, almost twice as much as annual Poland's emissions. Nearly 70% of the surplus was owned by only two sectors: cement and steel production[8]. Companies with the surplus can decide to make profits by selling it on the market or to keep it on their accounts and use it for covering their future emissions.

In other words many industry sectors would not have to buy any allowances in the upcoming years: they will continue to receive free allocation and will be allowed to use the surplus they've accumulated in the last years.

A stronger carbon price will boost innovation

A stronger EU carbon price and accelerated rate of green investments will play an important role in stimulating innovation and boosting demand for products from industrial sectors. For instance, increased demand for renewable energy technologies could significantly increase demand for steel, as one windmill needs the same amount of steel as about 320 - 440 cars[9].

Moreover, contrary to some industries' claims, a wide range of technological options is still available to reduce emissions in energy-intensive sectors, both in the short and long term. In the steel sector, recycling as well as different retrofit measures can significantly improve energy efficiency of production and in consequence cut GHG emissions[10]. Most of the available options to decrease energy intensity are cost-negative, meaning that the investments pay themselves back within the lifetime of the improvements that were made. In the longer-term, new technologies such as the "Hisarna" coke-free steelmaking process or use of magnesium-based clinker in the cement sector are likely to reach market maturity before 2030. These options can contribute to delivering 80 to 95% emission reductions by 2050[11].

Back-loading will raise ETS auctioning revenues and boost energy modernisation in new Member States

Reduction in number of allowances available on the market will in consequence raise their value. According to analysis by the Öko-Insitut, back-loading of 1.4 billion allowances would cumulatively increase Member States' profits from sale of ETS allowances by €6.5 bln between 2013 and 2020, compared to a scenario without intervention[12]. Back-loading complemented by structural measures would result in even greater increase of

[7] An indicator of emissions per unit of product.
[8] ETS; Sandbag, 2012. Losing the lead? Europe's flagging carbon market.
[9] The average car contains 800 kg steel; a single wind turbine contains 250 to 350 tonnes of steel.
[10] Potential retrofits include scrap preheating, continuous casting, pulverized coal injection and top gas pressure recovery, which can improve energy efficiency of production by up to 16% compared to energy use levels in 2005. International Energy Agency, Paris, 2007. Tracking industrial energy efficiency and CO_2 emissions. Energetics Inc., 2005, Steel industry marginal opportunity study, prepared for the US Department of Energy.
[11] CAN-Europe, 2010. Horizon 2050: steel cement and paper, based on research by CE Delft.
[12] Öko-Insitut, 2012. The costs of inaction, auctioning revenues under different climate ambition scenarios for the EU ETS.

auctioning revenues. All Member States – without any exemptions – would see their governments' ETS revenues rising due to back-loading combined with a broader EU's carbon market reform. With the right policy choices, these funds can mobilise investments in resource efficient technologies and support innovation in the power sector and industry. They can also be used to reduce other taxes and to compensate for a potential increase in electricity prices for consumers.

Furthermore, if back-loading is implemented, the new EU Member States that applied for continued free allocation of allowances for their power producers after 2012[13], will benefit from an increased value of these free allowances. Central and Eastern European countries are obliged to invest the value of free allowances into the upgrade of their power systems, therefore a restored carbon price signal will increase the value of necessary investments, accelerating modernisation of their power sectors.

Summary of our recommendations

Low-carbon and resource-efficient technologies are crucial for shaping Europe's economy of tomorrow: more resource efficient and resilient to fossil fuel price shocks and thus more competitive on the global market.

CAN Europe, Greenpeace, Sandbag and WWF welcome the proposed delay of emission allowance auctions as an important first step towards fixing the ETS, although the number of allowances to be held back should be higher. Furthermore back-loading must be immediately followed by ETS structural reform.

- ✓ EU Member States and the European Parliament should swiftly clarify the mandate of the European Commission, so it can change the Auctioning Regulation and restore the effectiveness of the ETS in the short term.
- ✓ The Climate Change Committee should strengthen the Commission's back-loading proposal and ensure that at least 1.4 billion allowances will be back-loaded. Delay of 900 mln auction allowances is not enough neither to address the surplus of allowances expected to accumulate in the ETS by 2020 neither to put the EU on track to cost-efficiently reaching a 30% emission reduction target by 2020.
- ✓ Back-loading of allowances should be followed by ETS structural reform including permanent cancellation of at least 2.2 billion allowances and an increase in the emission reduction trajectory to at least 2.6%. That change would allow the EU to reach 30% domestic emission reductions by 2020 and cost-efficiently meet its 80-95% climate objective by 2050.
- ✓ No additional entitlements for the use of international offset credits should be created, and options to establish further qualitative limitations must be agreed (for example, regarding coal-based CDM projects).
- ✓ Considering that neither back-loading nor permanent retirement would reduce the volume of free allowances available to industrial sectors, the European Commission should urgently re-assess and shorten the list of sectors at risk of carbon leakage, taking into account the current carbon price projections as well as carbon markets under development worldwide.

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[13] Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Lithuania, Poland and Romania.