



# Emissions trading: a changing climate

*Bert D'Hooghe* assesses how the industry is tackling climate change and looks at the revision of the EU emission trading scheme (ETS), with reference to dolomite, gypsum, lime, magnesia, and soda ash

IN THE BATTLE against climate change, the European Union wants to pass itself off as a global champion. Hence, climate issues play a major role in today's EU policy-making.

Some even see the fight against climate change as a new common European project, comparable to the introduction of the "euro". The EU's intentions clearly go further than mere environmental concerns. A new policy framework on the promotion of renewable energy, for instance, should make the EU less dependent on oil and gas, the prices of which have reached record heights.

The way towards the EU's leadership in the "battle against climate change" was paved at the European Council meeting in March 2007. There, the heads of the EU Member States set out ambitious objectives in the field of climate change. The two main targets are:

1. A reduction of at least 20% in greenhouse gases (GHG) by 2020 (compared to 1990-levels). The reduction factor will be increased from 20% to 30% in case an international agreement can be reached that would impose "comparable emission reductions" on other developed countries;
2. The share of energy from renewable sources in the total EU energy consumption should increase to 20% by 2020.

These objectives play a prominent role in the currently ongoing climate policy debate in Europe and are often referred to as the "20-20 by 2020" targets. They also include a decision to incorporate by 2020 a minimum of 10% biofuels in total transport fuel use and a reference to an action plan to increase energy efficiency by 20%.

On 23 January 2008 the European Commission (EC) proposed the first practical policy measures to attain the targets that the Council had determined. These were published in a comprehensive package on "Climate Action and Renewable Energy" and include legally-binding targets for each EU Member State in the field of emissions reduction and the use of renewable energy.

## Proposals for the reduction of greenhouse gas emissions

The "Climate Action and Renewable Energy" package contains two proposals for the reduction of greenhouse gasses. The first one

applies to those installations that have to buy carbon allowances in the framework of the EU Emissions Trading Scheme (ETS) (as is the case for some installations in the industrial minerals industry).

The second one focuses on the other sectors (such as transport, housing, agriculture and waste).

Both groups together have to achieve the Council's target for a 20% reduction of greenhouse gasses by 2020 (compared to 1990). This percentage is recalculated on a 2005 basis, which is the most recent year for which figures are available, and divided into separate targets for the ETS and non-ETS sectors.

In practice, non-ETS sectors should reduce their greenhouse gas emissions by around 10% by 2020 compared to 2005. This is a EU-wide average, meaning that some countries would have to reduce their emissions by 2020, while others, especially the newest EU Members in Central Europe, are still allowed to further increase their emissions within certain limits. Belgium for example has to reduce its greenhouse gas emissions with 15% while Poland's emissions are still allowed to increase with 14%.

The ETS sectors, in their turn, should reduce their greenhouse gas emissions by 21% compared to 2005. This reduction is one of the keystones of the EC's proposal for revising the ETS in preparation of the third emission trading period running from 2013 to 2020.

## The 3rd phase of the EU ETS

The EU greenhouse gas Emissions Trading Scheme (ETS) has been operating since 1 January 2005. Each industrial plant covered by the trading scheme received a number of carbon allowances according to a National Allocation Plan approved by the European Commission.

Companies with emission reduction targets have to use these accounts to cancel allowances equal to their yearly emissions. Companies can also use credits from emission-saving projects to meet their annual emissions targets.

At the moment the European lime industry already participates in the European ETS. For lime kilns with a capacity above 50 tpd carbon allowances are needed. The same applies to combustion installations with a rated thermal input exceeding 20 MW. The proposal for a revised ETS now also contains in the legal text a clarification stating that the "calcination of dolomite and magnesite in rotary kilns or in other furnaces with a production capacity exceeding 50 tonnes per day" is included.

The EC would also like to extend the scope of the ETS to a number of new installations, such as those for the production of soda ash ( $\text{Na}_2\text{CO}_3$ ). If the proposal is accepted as it is currently written, installations for the drying or calcination of gypsum, where the combustion installations have a rated thermal input exceeding 20 MW would also fall within the scope of the new ETS.

Furthermore, the revised European ETS would recognise the geological storage of greenhouse gas emissions.

Apart from broadening the scope, the EC proposes some other important changes for the 3<sup>rd</sup> phase of the ETS that would run from 2013 to 2020.

A single EU-wide emission cap will be determined. This makes national allocation plans redundant, and renders the distribution of the allowances more harmonised. The EU-cap would each year decrease by 1.74% so that total reductions over the third phase would amount to 21%.

In addition, auctioning of allowances should become the basic principle for allocation. Until now the large majority of allowances have been allocated free of charge. The EC believes though that *“auctioning best ensures the efficiency, transparency and simplicity of the system and creates the greatest incentive for investments in a low-carbon economy.”*

Increased auctioning definitely implies an additional cost for those sectors falling within the scope of the ETS. In most cases they will have to buy allowances to ensure the continuation of their production activities.

European industry is afraid that these increased costs would damage their global competitiveness and prevent growth.

In order to smooth the transition from allocation to auctioning, the EC would still allow ETS sectors to get 80% of their allowances free of charge in 2013. This share would be reduced linearly each year to reach zero free allocation by 2020.

The electricity sector would not receive this transitional measure and would face full auctioning straight away in 2013. Electricity prices may thus increase. Specific measures will also be worked out for *“energy-intensive industries”*.

## Energy intensive industries & emission trading

Although auctioning would become the guiding principle for the allocation of allowances, the EC plans to make an exception for installations in sectors judged to be at significant risk of *“carbon leakage”*.

This term refers to the international competitive pressure that could encourage imports from countries outside the EU that do not impose comparable constraints on emissions.

A transfer of production to non-EU countries would not necessarily decrease global emissions, but would simply imply a shift of production without any environmental benefits, notably there will be environmental disadvantages if we take into account the impact of greenhouse gas emissions from transport

Therefore, by 2010, the EC intends to determine which sectors may suffer from *“carbon leakage”*. This evaluation takes several parameters into account, such as a sector's capability to pass on the cost of the required allowances in product prices, and the overall competition industry faces from products from outside the EU.

Studies by the Climate Strategies Group (CSG), the Carbon Trust and the French Ministry of Finance and Industry recognise the European lime industry as an energy intensive industry that is highly exposed to the cost of  $\text{CO}_2$ . Cost increases can also be expected in other sectors such as gypsum or soda ash.

Those installations that are identified as being susceptible to *“carbon leakage”* could, according to the proposal, apparently receive up to 100% of their allowances for free. This way they can maintain their competitiveness.

Apart from giving free allowances to energy intensive industries, other measures are also being considered to ensure the competitiveness of the European industry.

France, which currently holds the EU presidency, has suggested an effective European carbon equalisation system to neutralise any distorting effects from imports. The idea of *“border adjustment measures (BAM)”* certainly needs to be further explored. It is not sure for example to what extent the WTO would accept such a  $\text{CO}_2$  tax.

## Free allocation on the basis of benchmarking

The EU lime sector believes that the best way to achieve  $\text{CO}_2$  emission reductions in energy intensive industries at risk of carbon leakage is by providing them with free allowances; the amount of which should be determined by applying benchmarks which encourage carbon reduction.

These indicate what target level of emissions is feasible for industry. Such a system provides a better insight in industry best practices and provides incentives to keep on reducing  $\text{CO}_2$  emissions while ensuring that lime produced in Europe will remain very competitive for customers.

The EU lime industry has proactively worked out a model of how such a system of benchmarking could work in practice. Also other energy intensive industry sectors are now in favour of this option.

## A new post-Kyoto international agreement

The exact emissions reduction rates and the extent to which European industry needs protection will depend much on whether an international agreement can be reached.

In this context, the UN Climate Change Conference (COP15) in Copenhagen in 2009 may bring more clarity. There, a new post-2012 (ie. post-Kyoto) climate agreement is expected to be negotiated. In case other developed countries follow suit, the EU would be willing to even further decrease its emissions from 20% to 30% by 2020.

In any case, the EU wants to move forward quickly with the new proposal for a revised post-2012 European ETS. At the moment the proposal has been submitted to the European Parliament and the Council for a first reading.

The EC would like to adopt it after this first reading, but the complexity of the dossier and the interests at stake will probably make it rather difficult to reach a final agreement so soon. A second reading is not impossible.

The new directive should enter into force before the end of the current second phase of the ETS in 2012. IMA-Europe, in particular through the European Lime Association (EuLA), which recently joined IMA, keeps actively following-up all developments to safeguard the economic viability of the European minerals industry. 

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