ETS will have a significant impact on European food production

The European Union has been the leading player in the global context in its efforts to reduce greenhouse gas (GHG) emissions. In 1997, it signed the Kyoto Protocol which committed it to reduce CO_2 emissions by 8% compared to those in 1990. To help it achieve this target, at the beginning of 2005 the European Commission created a trading mechanism for emissions allowances.

Current EU environmental targets are for a 20% reduction in GHGs, a 20% improvement in energy efficiency and a 20% share for renewable energy by 2020. To help meet these, the Commission's review of its Emission Trading Scheme (ETS III) for the period starting in 2013 calls for a wider auctioning of GHG emission allowances. More companies will face the direct cost of their emissions, which will considerably affect their market competitiveness, especially in highly energy intensive industries, such as the European fertilizer industry.

The cost pressure on the industry is greatest among nitrogen fertilizer manufacturers, who are some of the most efficient in the world. They will face increasing costs from several directions. Direct costs will come from the effects of the ETS on ammonia and nitric acid production, both of which are essential intermediates in the manufacturing process. Production costs are also highly affected by natural gas prices, and the cost of electricity will also increase as a result of emissions trading.

FREE ALLOCATION OF RIGHTS BASED ON BENCHMARKS

EFMA accepts the target of a 20% reduction in CO_2 by 2020. But in the absence of a level International playing field with regards to carbon reduction legislation, it advocates a 100% free allocation of emission rights for the European fertilizer industry, based on agreed industry benchmarks. More details of these benchmarks can be found in the following section of this report.

In the face of a world food shortage, Europe needs to remain sufficiently self-reliant in food production and its main farm inputs. It should not endanger the existence of its own fertilizer industry and depend on external fertilizer sources from Russia, North Africa or the Middle East. In the absence of a binding international agreement on global GHG reduction, emissions trading should not become such a burden for the European fertilizer industry that it loses its competitiveness.

CO_2 is an unavoidable by-product in the production of nitrogen fertilizers, and so the full auctioning of emission allowances will impose significant pressures on the industry. According to the Pellervo Economic Research Institute, nitrogen fertilizer industry producer prices will need to increase by between 20 to 30% to compensate for the increased manufacturing costs.

In addition, Europe is an integral part of the world fertilizer market, so companies cannot increase their prices without taking into account global competition from elsewhere, typically the USA, Africa, the Black Sea and Asia. The supply and demand balance in the world market dictates prices, so fertilizer manufacturers in the EU are unlikely to be able to pass on additional environmental costs.

The biggest impact will be on ammonia and nitric acid production. Urea fertilizers are manufactured directly from ammonia, whereas typical European nitrogen compound fertilizers are manufactured from ammonia via nitric acid. Although nitric acid's share of the total nitrogen fertilizer manufacturing costs is relatively small, the combined cost effects of ETS are still significantly higher for nitrate-based nitrogen fertilizer than for urea.

As a result of full auctioning of emission allowances in Europe, many European ammonia and nitric acid plants, which are some of the most efficient in the world, would loose their competitiveness and have to close. This lost production capacity would result in the expansion of capacity in other regions of the world with less efficient plants and more polluting energy industries. Although such closures would be effective in reducing CO_2 emissions in Europe, they would lead to an overall increase in global GHG emissions.

DECLINING INDUSTRY WITHIN THE EU

European fertilizer production has been declining within the EU, mainly because of decreasing demand from agriculture, the lack of natural gas within the EU and its high price from abroad. Although the most recent EFMA forecast shows a slight increase in demand, the extra cost of ETS III would cause this long term decline to continue.

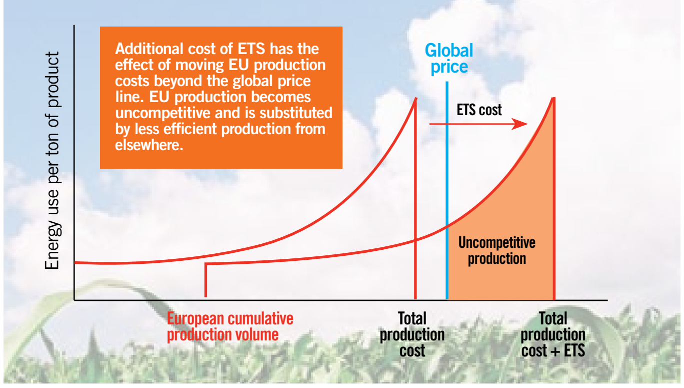
Increasing demand for urea N-fertilizer combined with declining production of nitrogen fertilizers within the EU, as a result of extra cost of ETS, would result in increased imports from low-cost natural gas regions and increased carbon leakage. Europe would become highly dependent on the production of Eastern European and Central Asian countries and their policy and pricing.

The global agricultural situation is critical. Farmers are expected to produce more food and bio-energy crops to satisfy global demand, yet their energy and other input costs have increased significantly due to a tight supply/demand balance. Increasing the price of fertilizers through additional emission costs would therefore have a very harmful effect on European agricultural productivity. Europe's capacity to respond to increased agricultural demand, and even its own food security, could be endangered.

The fertilizer industry is very capital intensive and its capital earnings would also be endangered by an increased carbon cost. Investment would be redirected away from Europe and eventually the industry could leave completely. As a consequence, carbon leakage would certainly increase, employment in Europe would suffer and there could be a serious threat of fertilizer shortages due to overdependence on imports.

In the absence of an international binding agreement that levels the playing field for carbon reduction, only a 100% free allocation of emission rights based on agreed industry benchmarks, can safeguard the competitiveness of the European fertilizer industry and prevent sizeable carbon leakage. EFMA is closely working with the relevant authorities to reach a sensible and fair solution.

EFFECT OF THE FULL COST OF ETS ON THE EUROPEAN INDUSTRY



COMPARATIVE GHG EMISSIONS FROM FERTILISER PRODUCTION