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Questions & Answers on Emission Trading and National Allocation Plans

What is the aim of emissions trading?

The aim of the Emission Trading Scheme (ETS)[1] is to contribute to compliance with commitments by existing and future Member States under the Kyoto Protocol. The scheme covers about a third of total greenhouse gas emissions (and close to half of the most important greenhouse gas – carbon dioxide). Emissions trading imply no new environmental targets, but have been decided in order to allow for *cheaper* compliance with existing targets. The possibility of participating companies to buy or sell emission allowances will guarantee an achievement of the overall target (the total cap) at least cost. If the Emission Trading Scheme would not have been decided, other – more costly – measures would have to be implemented.

How is the emission trading going to work?

Let's say that companies A and B both emit 100.000 tonnes of CO_2 per year. The government gives each of them 95.000 emission allowances. One allowance represents the right to emit 1 tonne of CO_2. So, neither company is fully covered for its emissions. At the end of each year, the companies have to surrender a number of allowances corresponding to their emissions during the year, whatever the emissions of the individual company are. Companies A and B both have to cover up for 5.000 tonnes of CO_2, and they have two ways of doing this. They can either reduce their emissions by 5.000 tonnes, or purchase 5.000 allowances in the market. In order to decide which option to pursue, they will look at their costs for reducing their emissions by 5.000 tonnes and compare this cost to the market price for allowances.

For the sake of the example, let's say that the allowance market price is € 10 per tonne of CO_2. Company A's reduction costs are € 5 (i.e. lower than the market price). Company A will reduce its emissions, because it is cheaper than buying allowances. Company A may even reduce its emissions by more than 5.000 tonnes, say 10.000 tonnes. For Company B, the situation is perhaps the opposite, and its reduction costs are € 15 (i.e. higher than the market price). It will prefer to buy allowances instead of reducing emissions.

[1] Directive 2003/87/EC.

Company A spends € 50.000 for reducing 10.000 tonnes at a cost of € 5 per tonne and receives € 50.000 from selling 5.000 tonnes at a price of € 10. So Company A fully offsets its costs to reduce emissions by selling allowances, while in the absence of the Emissions Trading Scheme it would have had a net cost of € 25.000 to bear. Company B spends € 50.000 for buying 5.000 tonnes at a price of € 10. In the absence of the flexibility provided by the Emissions Trading Scheme, company B would have had to spend € 75.000.

Since only a company that has low reduction costs and therefore has chosen to reduce its emissions, like Company A, is able to sell, the allowances that Company B buys represent a reduction of emissions, even if Company B did not itself reduce emissions. This is important to remember. In this way, it is ensured that the cheapest reductions are made first. Since the scheme is EU-wide, it will seek out the cheapest reductions in the whole of the EU and ensure that they are made first. It is this flexibility in the system which makes emissions trading the most cost-effective manner to achieve a given environmental target. The overall cost to industry would have been higher, if Company B had been forced to reduce emissions at its own plant at a higher cost.

How will the trade of allowances work?

The legal framework of the trading scheme does not regulate how and where the market in allowances will take place. Companies with commitments may trade allowances directly with each other, they may buy or sell via a broker, bank or other allowance market intermediary. It could also be the case that a company purchasing a fossil fuel (coal or gas) will be offered allowances in combination with the fuel. Finally, organised markets (allowance exchanges) may develop.

Why do the Member States have to prepare allocation plans?

By 31 March 2004 (1 May 2004 in the case of the 10 acceding countries) each Member State will have to prepare and publish a national allocation plan (NAP). In the plans a Member State will decide how many allowances to allocate in total for the period 2005 to 2007 and how many each plant covered by the Emission Trading Scheme will receive. The Allocation Plans will be assessed by the Commission for compatibility with the legal framework (in particular criteria contained in an Annex to Directive 2003/87/EC). In case a plan is not in line with the Directive or the Treaty the Commission may reject it in part or in total. If the Commission has not rejected any aspect of the plan, a Member State can proceed to take a final allocation decision. The Commission assessment will guarantee the environmental quality of the trading scheme (i.e. compatibility of the plan with a Member State's Kyoto commitment) and make sure that competition in the internal market is not unduly distorted.

How many installations are covered?

The Emission Trading Scheme will cover in total more than 12.000 installations (combustion installations, mineral oil refining, coke ovens, iron and steel plants, cement, glass, lime, brick, ceramics, pulp and paper) in the EU-25. In larger Member States some 1.000 to 2.500 plants are covered, while in most other Member States the number of plants covered lies typically in the range of 50 to 400. The number of companies affected by the Directive is obviously smaller, as large companies have multiple plants covered by the trading scheme.

How much does it cost to reach the Kyoto targets? Will the Emission Trading Scheme jeopardise Europe's competitiveness?

How much it will cost to comply with the Kyoto targets depends on the set of measures chosen. One of the underlying principles of the European Climate Change Programme has consistently been to identify the most cost-effective measures to achieve Kyoto compliance at lowest necessary cost. Recent Commission studies conclude that Kyoto can be achieved at an annual cost of €2.9 to € 3.7 billion, which is a small fraction of total economic output of the EU economy (less than 0, 1 % of GDP). One of these studies did furthermore conclude that in the absence of the Emission Trading Scheme costs of € 6.8 billion may arise.

How these costs will be distributed is dependent on the decision taken in the allocation plans and further measures adopted to control emissions in sectors not covered by the Emission Trading Scheme. The scheme will not jeopardise, but rather protect the competitiveness of the EU economy, as any alternative measures would mean imposing higher than necessary costs on EU business. Implementing Kyoto will, however, mean not only new economic opportunities but also cost for EU business. This is unavoidable – we cannot have something (i.e. Kyoto compliance) for nothing. We get the best value for money with the Emission Trading Scheme. If governments do not use the trading scheme to assist compliance, more costly measures will have to be imposed on other sectors.

The proposed so-called "Linking Directive"[2], which is currently in first reading in the European Parliament, will further lower the costs and protect the competitiveness of EU business. As appears from the name, the Linking Directive will create a link between the Flexible Mechanisms of the Kyoto Protocol - Joint Implementation (JI) and the Clean Development Mechanism (CDM) - and the EU emissions trading scheme. In principle, companies which carry out emission reduction projects outside the EU through JI or CDM will be able to convert the credits they earn from those projects into allowances that can be used for compliance under the EU Emissions Trading Scheme. The Linking Directive will therefore lower the cost to EU industry by offering further options for complying with the requirements of the Emissions Trading Scheme.

[2] COM 2003/403

Will emissions trading lead to higher power prices?

It is important to distinguish between the target and the instrument in this debate. Any changes in power prices will not be a consequence of emissions trading, but of the implementation of the Kyoto Protocol. The Kyoto Protocol sets a cap on allowable greenhouse gas emissions, which means that the EU economy will be a carbon-constrained economy in the future. This carbon constraint gives value to the allowances and leads to changes in relative prices in the EU economy. Goods that contain more carbon will be relatively more expensive than goods that contain less carbon. As the trading scheme is the cheapest way to implement Kyoto, it means that any price changes will be the least necessary. Many studies have been put forward about the likely development of power prices and a wide range of estimates is available. Pricing decisions in the liberalised power market are increasingly complex and difficult to predict. The Commission will carefully monitor the development of power prices and all other aspects related to the Emission Trading Scheme.

How much progress have Member States made towards their Kyoto targets?[3]

Member State	Kyoto target	Emissions in 2001
Austria	- 13.0 %	+ 4.8 %
Belgium	-7.5 %	+ 0.2 %
Denmark	- 21.0 %	+ 1.8 %
Finland	0.0 %	+ 4.7 %
France	0.0 %	+ 0.4 %
Germany	- 21.0 %	- 18.3 %
Greece	+25.0 %	+ 23.5 %
Ireland	+ 13.0 %	+ 31.1 %
Italy	- 6.5 %	+ 7.1 %
Luxembourg	- 28.0 %	- 44.2 %
The Netherlands	- 6.0 %	+ 4.1 %
Portugal	+ 27.0 %	+ 36.4 %
Spain	+ 15.0 %	+ 32.1 %
Sweden	+ 4.0 %	- 3.3 %
The United Kingdom	- 12.5 %	- 12.0 %
Total EU-15	**- 8.0 %**	**- 2.3 %**

[3] The Kyoto targets needs to be achieved in the period 2008 to 2012 compared to the emissions level in 1990.

Links to websites:

More information on the EU ETS is available at

http://europa.eu.int/comm/environment/climat/emission.htm

More information about national allocation plans is available at

http://europa.eu.int/comm/environment/climat/emission_plans.htm