

Brussels, 29 November 2006

Questions and Answers on Emissions Trading and National Allocation Plans for 2008 to 2012

1) What is the aim of emissions trading?

The EU Emission Trading Scheme¹ (EU ETS) is the cornerstone of the EU's strategy for fighting climate change. It is the first international trading system for CO₂ emissions in the world. It covers over 10,000 installations in the energy and industrial sectors which are collectively responsible for close to half of Europe's emissions of CO₂.

The aim of the EU ETS is to help EU Member States achieve compliance with their commitments under the Kyoto Protocol in a cost-effective way. Letting participating companies buy or sell emission allowances means that emissions cuts can be achieved at least cost. If the Emissions Trading Scheme had not been adopted, other – more costly – measures would have had to be implemented.

2) How does emissions trading work?

At the heart of the ETS is the common trading 'currency' of emission allowances. One allowance gives the holder the right to emit one tonne of CO₂. For each trading period under the scheme, Member States draw up national allocation plans which determine how many emission allowances each installation receives. The 'cap,' or limit, on the total number of allowances granted is what creates scarcity in the market. Companies that keep their emissions below the level of their allowances can sell their excess allowances. Those facing difficulty in keeping their emissions in line with their allowances have a choice between taking measures to reduce their own emissions, such as investing in more efficient technology or using less carbon-intensive energy sources, or buying the extra allowances they need on the market, or a combination of the two. Such choices are likely to be determined by relative costs. In this way, emissions are reduced wherever it is most cost-effective to do so.

3) What should the price of allowances be?

The price is a function of supply and demand as in any other free market. The Commission has no view on what the price of allowances should be and does not intervene in the allowance market. Should distortions occur, competition law would apply as with any other market.

¹ Established by Directive 2003/87/EC, as amended by Directive 2004/101/EC.

4) What is the purpose of national allocation plans?

The National Allocation Plans (NAP) determine the total quantity of CO₂ emission allowances that Member States grant to their companies, which can then be sold or bought by the companies themselves. This means that for each trading period each Member State must decide in advance how many allowances to allocate in total and how many allowances each plant covered by the scheme will receive individually.

Under the terms of the Emissions Trading Directive, each Member State was required to prepare and publish a NAP for the 2008-2012 trading period by 30 June 2006.

5) How does the Commission assess the allocation plans, and how much time does it have for this?

The assessment of the allocation plans is based on 12 criteria laid down in Annex III to the Emission Trading Directive.

The first criterion provides that the proposed total quantity of allowances must be in line with a Member State's Kyoto target. This means that a Member State should make sure that the overall allocations put it on track to comply with this criterion.

Of course, the Member State can and should also take other measures in other sectors. For instance, transport is responsible for 21% of EU greenhouse gas emissions, households and small businesses for 17% and agriculture for 10%.

In addition, Member States can plan to purchase emission credits through international emissions trading under the Kyoto Protocol or from emission-saving projects carried out in third countries under Kyoto's flexible project-based mechanisms.² (see question 11).

All these measures and their projected results must be mentioned in the allocation plans.

A number of criteria also ask Member States to assess emissions developments and potentials for reductions in all sectors. In addition, there are criteria that seek to ensure non-discrimination between companies and between the different sectors as well as compliance with the EU's competition and state aid rules. Other criteria relate to provisions in the plan for new entrants, the accommodation of early reduction efforts and clean technology.

The Commission published guidance on the implementation of these allocation criteria in early January 2004 and in December 2005. If the Commission finds that a plan is not in line with the criteria and the EU Treaty it can reject it, in part or in full. If the Commission has not rejected any aspect of its plan, the Member State can proceed to take a final allocation decision. The Commission's decision has to be taken within three months of a complete national allocation plan being submitted by a Member State to the Commission. This means that the national allocation plan assessment process can include asking a Member State to submit additional information to the Commission, if found to be missing from the initial version of the plan.

² These are known as the Clean Development Mechanism (CDM) and Joint Implementation (JI). Both mechanisms allow governments to implement emission-reduction projects abroad and count the achieved reductions against their own Kyoto targets. Companies can also invest in CDM or JI credits, which are treated as equivalent to emission allowances under the EU ETS. The CDM applies to projects undertaken in developing countries while JI covers projects undertaken in other industrialised countries with emission targets under the Kyoto Protocol.

6) Does this mean that a Member State cannot issue as many allowances as it wants?

Yes. The quantity of allowances a Member State may issue is governed by the 12 criteria. The Emissions Trading Directive does not explicitly prescribe a given number of allowances, but each Member State must respect the criteria.

This means that in practice their leeway is limited. If a Member State were over-generous in issuing allowances, not only would the plan probably fail to comply with some of the allocation criteria, but the Member State would also miss out on the opportunity to use the ETS as a tool to help it comply with its Kyoto commitment. And if too many allowances were issued, there would be no scarcity so no market would develop.

7) How many plans has the Commission assessed so far?

On 29 November 2006, the Commission concluded its assessment of the first set of 10 plans for the 2008-2012 trading period. It conditionally approved all of these plans, and indicated the steps that need to be taken by each Member State to make its plan fully acceptable.

8) Why has the Commission required changes to plans?

The Commission is requiring changes to the 10 plans assessed where:

- the proposed total of allowances ('cap') for the 2008-2012 trading period is not consistent with meeting the Member State's Kyoto target;
- the proposed total of allowances is not consistent with expected emissions and the technological potential to reduce emissions, taking into account independently verified emissions in 2005, anticipated changes in economic growth and carbon intensity;
- the proposed limit on the use by companies of credits from emission-reduction projects carried out under the Kyoto Protocol's flexible mechanisms is not consistent with the rule that the use of these mechanisms should be supplemental to action to address domestic emissions.
- "ex-post adjustments" have been proposed i.e. any plan to adjust allocations after a final allocation decision is taken (see question 16).
- other issues specific to individual plans with a view to avoiding undue distortions of competition and of the internal market.

9) Why does the Commission disallow allocation guarantees?

An allocation guarantee means that a Member State has given political or legal assurances that a certain quantity of free allowances will be allocated into the future to a set of installations beyond the period for which the allocation plan is valid.

The Commission considers that such guarantees are not in line with the allocation criteria under the Emissions Trading Directive and discriminate between companies in a way that unduly favours certain undertakings or activities contrary to the requirements of the EC Treaty. In other words, the installations benefiting from this rule gain an unfair advantage over others.

Therefore, the Commission has disallowed the provision of such guarantees beyond 2012, and the application of such guarantees given at an earlier stage during the 2008 to 2012 period. Installations intended to benefit from such preferential guarantees have to be allocated allowances in the same manner as other existing installations. In addition, allocation guarantees beyond 2012 have to be examined under EU state aid rules.

Only Germany proposed to provide allocation guarantees.

10) What is the current situation for investments in the power industry in Germany?

There have been statements to the effect that the German power industry cannot make investments without benefiting from an allocation guarantee of 100% of the allowances needed for free and over a long period.

First of all the allocation guarantee does not differentiate between the technologies used for the allocation. Any technology gets allocated 100% of the needed allowances in accordance with technical benchmarks regardless of the level of CO₂ emissions generated by that technology. This encourages investment in new power plants but not automatically in low CO₂ emitting ones.

According to the information available concerning investments in new power plants in Europe, there is no reason to believe that more capacity has been planned in Germany solely on the basis of the planned allocation guarantees. Some new capacity is planned in all Member States over the next six years.

Due to its competitive situation the European power industry is able to pass onto consumers a substantial share of the value of allowances allocated for free. Without the free allocation of all needed allowances the profit calculations for investments will be affected, but not to the extent that investments in new capacity will not be made.

11) How does the Commission assess the limits on JI/CDM use by companies under the EU ETS?

In addition to domestic action by Member States to reduce their greenhouse gas emissions, the Kyoto Protocol allows Member States to invest in Joint Implementation (JI) and Clean Development Mechanism (CDM) projects in other countries and use credits from these for compliance purposes towards part of their emission reduction commitments. Member States are required to ensure that the use of Kyoto project credits is supplemental to domestic action.

Since the EU ETS is the EU's central instrument for achieving the Kyoto Protocol targets, the Emissions Trading Directive allows operators of installations to use JI and CDM credits towards fulfilling a proportion of their emission reduction commitments under the scheme. This proportion must be consistent with Member State commitments to "supplementarity" and has to be fixed in the national allocation plan.

The Commission considers that, as a general rule, installations should be allowed to use JI and CDM credits to supplement their allowance allocation by up to 10%. In assessing proposed limits that are greater than 10%, the Commission has taken into account the effort a Member State has to undertake to respect its Kyoto target.

12) How do approved caps compare to verified emissions recorded for the year 2005?

Member State	2005 verified emissions ³	Allowed cap ⁴	Additional emissions ⁵
Germany	474	453	11
Greece	71.3	69.1	
Ireland	22.4	21.15	
Latvia	2.9	3.28	
Lithuania	6.6	8.85	0.05
Luxembourg	2.6	2.69	
Malta	1.98	2.14	
Slovakia	25.2	30.9	1.7
Sweden	19.3	22.8	2.0
UK	242.4 ⁶	246.2	9.5

13) How does the Commission assess banking of allowances between 2005-07 and 2008-12?

Banking (i.e. the carry-over) of allowances from the first to the second trading period is allowed only if it does not lead to an allocation beyond the total allocation approved by the Commission for the second trading period. Therefore, for each allowance allowed to be banked, an allowance must be deducted from the total quantity issued for the second trading period. In addition, banking has to be examined under EU state aid rules. Where banking is not a result of real emission reductions having been made, it is likely to be found incompatible with these rules.

14) Can a Member State decide to auction more allowances after the Commission has decided on the national allocation plan?

Yes, but only within a specific time period. This flexibility is specifically noted in each Commission decision on a national allocation plan. However, there are two caveats. Firstly, the share of allowances allocated free of charge can only be reduced before a Member State takes its final allocation decision, which must in turn be before the start of the 2008-2012 trading period. The primary objective of a Member State's final allocation decision is to update the proposed national allocation plan submitted to the Commission in response to the Commission's decision on that plan. Secondly, the share of allowances allocated free of charge cannot be reduced beyond the limit set under the Emissions Trading Directive, which states that at least 90% of allowances are to be allocated for free during the 2008-2012 trading period.

³ Additional installations have not reported verified emissions for 2005.

⁴ Allowances for additional installations are included in the figures.

⁵ Several Member States have extended the scope of the EU ETS and covered installations or emissions that were not included in the first trading period.

⁶ Verified emissions for 2005 do not include installations opted out in 2005 which will be covered in 2008 and 2012 and are estimated to amount to some 30 Mt.

15) What happens if the Commission rejects a national allocation plan?

A rejection of a national allocation plan means that the Member State may not proceed to implement the plan as it stands, i.e. may not allocate the number of allowances proposed. The Commission must give reasons in any rejection decision. These reasons will give guidance to the Member State on how to make its final plan compatible with the allocation criteria.

If the Member States whose plans were partially rejected implement the changes required by the Commission they will not have to submit their plans to the Commission a second time, but will automatically qualify for emissions trading.

16) Can a Member State change the plan after Commission approval?

After receiving the Commission's approval a Member State has to proceed to take a final allocation decision at national level. Before doing so, it can make changes to the number of allowances for individual plants as a result of improved data, e.g. if historic emissions data are used for a plant-level allocation formula, or to increase the percentage of allowances that it will auction (see question 14 above). A Member State may, however, under no circumstances increase the total number of allowances it intends to put into circulation.

Any other changes than those listed above would need to be proposed by 31 December 2006 at the latest, as this is the date set by the Directive for the final allocation decisions to be taken.

Once the final allocation decision has been taken at national level and the final plan is published, no more changes (known as "ex-post adjustments") to the number of allowances in total or per plant can be made in the national allocation plan. The final allocation decision concludes the allocation process and formally opens the market for allowances in the Member State.

17) Do Member States have a say in each other's plans?

While the Commission has the sole responsibility for assessing the plans, the Directive provides that the Climate Change Committee, consisting of Member State representatives, considers each plan. The Commission, as the Committee's chair, participates in the debate and takes the conclusions into account in its assessments.

As a general point, the Climate Change Committee has stressed the importance of national allocation plans to ensure the functioning and effectiveness of the EU Emissions Trading Scheme, and to maintain and strengthen the EU's international leadership and credibility on climate change.

18) What about the remaining plans?

The assessment of the other allocation plans received is underway and will be concluded as soon as possible. The decisions taken so far have created a stable and predictable environment, as the Commission will apply the same approach and principles to the assessment of further plans.

It is in the interests of all Member States to have a cleared plan. Not having a national allocation plan accepted by the Commission means that the industry of that Member State would be delayed in being able to access the EU-wide allowance market.

19) When and on what basis will allocations for the third trading period be decided?

The legal base for allocations for the 2013-2017 trading period will be the same as for the 2008-2012 trading period, unless amended through the review process (see question 25). Therefore, the Commission would expect to apply the same approach and principles to the assessment of national allocation plans submitted for the 2013-2017 trading period as used to assess the 2008-2012 plans.

20) What installations are covered?

The more than 10,000 installations that are covered by the scheme across the EU-25 are combustion plants, oil refineries, coke ovens, iron and steel plants, and factories making cement, glass, lime, brick, ceramics and pulp and paper.

In larger Member States some 1,000 to 2,500 plants are covered, while in most other Member States the number of plants covered tends to range from 50 to 400.

The number of companies affected by the Directive is obviously smaller, as large companies have many plants covered by the trading scheme.

21) How much will it cost to reach the Kyoto targets? Does the Emissions Trading Scheme jeopardise Europe's competitiveness?

It 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 the Kyoto targets. Commission studies have concluded that the targets can be achieved at an annual cost of €2.9 to €3.7 billion, which is less than 0.1 % of GDP in the EU. One of these studies concluded that without the Emissions Trading Scheme costs could reach € 6.8 billion. Emission trading thus allows the costs of Kyoto to be reduced.

How these costs are distributed will depend on the decisions taken in the allocation plans and on further measures adopted to control emissions in sectors not covered by the Emissions Trading Scheme. The scheme will not jeopardise, but will rather protect, the competitiveness of the EU economy, as any alternative measures would impose higher than necessary costs on EU businesses. Europe thus gets the best value for money with the Emissions Trading Scheme. If governments do not use the trading scheme to assist compliance, more costly measures would need to be imposed on other sectors. Costs have to be seen in relation to the opportunities arising for suppliers of clean, low-carbon technologies in Europe and beyond, and the medium-term advantage for European industry in starting to move now towards a low-carbon global economy.

In addition, companies are allowed to invest in Joint Implementation (JI) and Clean Development Mechanism (CDM) projects in third countries under the Kyoto Protocol through the "Linking Directive".⁷ This further lowers the costs and protects the competitiveness of EU businesses by offering more options for complying with the requirements of the Emissions Trading Scheme.

⁷ Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC

22) Does emissions trading lead to higher electricity prices?

It is important to distinguish between the target and the instrument in this debate. Changes in electricity prices will not be a consequence of emissions trading, but of 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 lowest necessary. Many studies have been put forward about the likely development of power prices and a wide range of estimates are available.

Pricing decisions in the liberalised power market are increasingly complex and difficult to predict. There are many events that directly affect the electricity price, and emission trading is just one of them. Structural aspects such as the liberalisation of the energy market and variations in the internal energy market have very far-reaching effects. The Commission is conducting an inquiry into the power and gas markets and is carefully monitoring the development of power prices and all other aspects related to those markets, including the ETS.

23) How do companies benefit from emissions trading?

Let's say that companies A and B both emit 100,000 tonnes of CO₂ per year. The government gives each of them 95,000 emission allowances. One allowance represents the right to emit 1 tonne of CO₂. 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 actual emissions during the year. Companies A and B both have to cover 5,000 tonnes of CO₂, 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 compare the costs of reducing their emissions by 5,000 tonnes with the market price for allowances.

For the sake of the example, let's say that the allowance market price is € 10 per tonne of CO₂. 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 may be the opposite: its reduction costs are € 15 (i.e. higher than the market price) so it will prefer to buy allowances instead of reducing emissions.

Company A spends € 50,000 on 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 emission reduction costs by selling allowances, whereas without the Emissions Trading Scheme it would have had a net cost of € 25,000 to bear. Company B spends € 50,000 on 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 reduce emissions itself.

This is important to remember. This ensures that the cheapest reductions are made first. Since the scheme is EU-wide, companies will seek out the cheapest reductions in the whole of the EU. It is this flexibility in the system which makes emissions trading the most cost-effective manner of achieving 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.

24) How does allowance trading work in practice?

The legal framework of the trading scheme does not regulate how and where the market in allowances takes place. Companies with commitments may trade allowances directly with each other, or they may buy or sell via a broker, bank or other 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.

There is an electronic registry system underlying the scheme. This registry system is separate from trading activity - not all trades result in changes in ownership of allowances, but where a trade culminates in a change in ownership a transfer of allowances between accounts in the registry system is made.

In this way, the registry system is similar to a banking system which keeps track of the ownership of money in accounts but does not track the deals made in the goods and services markets which were the cause of the money changing hands.

The system is purely electronic, so allowances are not printed on paper but exist only in an online registry account. Each company with a commitment and any person interested in buying or selling allowances needs an account. The system consists of a national component in each Member State where the allowances are held, and a hub at European level which conducts automated checks on each transfer of allowances to ensure that the rules of the Directive are respected.

25) Will there be changes to the legal framework of the EU ETS?

As required by the Emissions Trading Directive, the Commission is reviewing the Directive in the light of experience gained in the first trading period 2005-2007. The Commission set out its agenda for the review in a Communication published on 13 November (see [IP/06/1548](#)). The review is being conducted in the framework of the European Climate Change Programme (ECCP) and involves all relevant stakeholders through a working group. This working group has been asked to submit a report by 30 June 2007 outlining the main findings of the review process. Taking account of this report and other contributions, the Commission will submit a legislative proposal in the 2nd half of 2007 for making improvements to the scheme. If approved by the European Parliament and Council of Ministers, these would take effect from the start of the third trading period in 2013.

See also:

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

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

http://ec.europa.eu/environment/climat/2nd_phase_ep.htm

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