

## Questions & Answers on Emissions Trading and National Allocation Plans

(Updated version as of 20 June 2005)

### 1) What is the aim of emissions trading?

The Emission Trading Scheme<sup>1</sup> (ETS) is a cornerstone in the fight against climate change. It is the first international trading system for CO<sub>2</sub> emissions in the world. It covers over 11.500 energy-intensive installations across the EU, which represent close to half of Europe's emissions of CO<sub>2</sub>. These installations include combustion plants, oil refineries, coke ovens, iron and steel plants, and factories making cement, glass, lime, brick, ceramics, pulp and paper.

The aim of the EU ETS is to help EU Member States achieve compliance with their commitments under the Kyoto Protocol. Emissions trading does not imply new environmental targets, but allows for cheaper compliance with existing targets under the Kyoto Protocol. Letting participating companies buy or sell emission allowances means that the targets 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) What determines the price of allowances?

The Commission has no view on what the price of allowances should be. The price is a function of supply and demand as in any other free market. Market intermediaries quote prices for allowances offered or bid for. The Commission will not intervene in the allowance market. Should distortions occur, competition law would be applicable as with any other market.

### 3) What is the purpose of national allocation plans?

The National Allocation Plans (NAPs) determine the total quantity of CO<sub>2</sub> emissions that Member States grant to their companies, which can then be sold or bought by the companies themselves. This means each Member State must ex-ante decide how many allowances to allocate in total for a trading period and how many each plant covered by the Emissions Trading Scheme will receive. The first trading period runs from 2005-2007, the second one from 2008-2012, and the third one will start in 2013.

The idea is that Member States limit CO<sub>2</sub> emissions from the energy and industrial sectors through the allocation of allowances, thereby creating scarcity, so that a functioning market can develop later and overall emissions are then really reduced.

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<sup>1</sup> Directive 2003/87/EC of the European Parliament and the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community

NAPs have to be drawn up periodically. Each Member State had to prepare and publish a first NAP for the 2005-2007 trading period by 31 March 2004 (1 May 2004 for the 10 new Member States). The NAPs for the second 2008-2012 trading period have to be prepared and published by 30 June 2006.

**4) Based on which criteria did the Commission assess the allocation plans for the first period? Will there be any differences in the assessment of the plans for the second trading period?**

The assessment of the allocation plans is based on the 12 common criteria in Annex III to the Directive on Emission Trading. For the 2005-2007 trading period, 11 criteria were relevant.

Criterion 1 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 allocations that they grant their plants will allow it to meet its Kyoto target.

Of course, the Member State can and should also take other measures. Other sectors also generate greenhouse gas emissions: in the EU, transport is responsible for 21% of EU greenhouse gas emissions, households and small businesses for 17% and agriculture for 10%. So, Member States can and should also take measures to reduce emissions in these sectors. In addition, Member States can plan to purchase emission credits through Kyoto's flexible project-based instruments Clean Development Mechanism (CDM) and Joint Implementation (JI) and international emissions trading under the Kyoto Protocol. CDM and JI allow governments to implement emission-reduction projects abroad and count the achieved reductions against their own Kyoto targets. JI projects can be undertaken in other industrialised countries with Kyoto targets, while CDM projects can be hosted by developing countries, which under the Protocol have no targets.

All these measures and their projected results must be mentioned in the allocation plans. Under criterion 1 the Commission assesses whether the emission levels of the industries that participate in Emission Trading, alongside these other measures, will enable the Member State to meet its Kyoto targets. As only the combined effect of different policies and measures will allow Member States to achieve their targets, the Directive speaks of the "path" to Kyoto. A number of other 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 Directive foresees that the procedure for assessing plans for the second trading period (2008 to 2012) stays the same and is based on the same set of criteria, except for two issues. Under criterion 1 it will be necessary to assess not only whether the plan puts the Member State on its path to Kyoto, but rather whether the plan, together with other policies and measures, will guarantee the achievement of the Member State's Kyoto target. Furthermore, criterion 12, which was not relevant for the allocation process for the 2005-2007 trading period, will become relevant for the 2008-2012 trading period: the Linking Directive (see question 13) has added an additional criterion that requires each plan to state how many credits from JI and CDM projects the plants covered by the allocation plan are permitted to surrender for compliance in the second trading period.

Under the Linking Directive, Member States will set limits to guarantee that a significant reduction of greenhouse gas emissions still takes place within the European Union, and not abroad.

The Commission published guidance on the implementation of these allocation criteria in early January 2004. If the Commission finds that a plan is not in line with the criteria and the EU Treaty it can, in part or in full, reject it. 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 from the date a Member State notifies a national allocation plan to the Commission.

### **5) 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 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 be failing to comply with some of the allocation criteria, but the Member State would also miss out on the opportunity to use the Emissions Trading Scheme as a tool to help it comply with Kyoto. And if too many allowances were issued, there would be no scarcity so no market would develop.

### **6) When and with which results did the Commission assess the national allocation plans for the first trading period?**

On 7 July 2004, the Commission concluded the assessment of a first set of eight plans. It accepted five plans unconditionally (Denmark, Ireland, the Netherlands, Slovenia, Sweden), and partially rejected the other three - those of Austria, Germany and the UK.

On 20 October 2004, the Commission concluded the assessment of a second set of eight plans. It accepted six plans unconditionally (Belgium, Estonia, Latvia, Luxembourg the Slovak Republic and Portugal), and conditionally approved the other two - those of Finland and France.

In late December 2004, the Commission concluded the assessment of a third set of five plans. It accepted four plans unconditionally (Cyprus, Hungary, Lithuania and Malta), and conditionally approved the Spanish plan.

On 8 March 2005, the Commission conditionally approved the Polish plan, and on 12 April 2005, it accepted the plan of the Czech Republic without conditions. On 25 May 2005, the Italian plan was conditionally accepted, and on 20 June 2005, the Commission concluded the assessment of the last plan, from Greece, approving it without conditions.

In each case of conditional approvals, the Commission indicated the steps that need to be taken by the Member State to make the plan fully acceptable.

### **7) For what reasons did the Commission require changes to plans?**

The Commission identified problems in three areas of general importance:

- if the allocation chosen by a Member State for the 2005-2007 trading period jeopardises the achievement of its Kyoto target (excessive allocation)
- if the volume of allowances for the 2005-2007 trading period is inconsistent with assessment of progress towards the Kyoto target, i.e. the allocation exceeds projected emissions

- if a Member State intends to make so-called “ex-post adjustments” to allocations. This means that the Member States plans to intervene in the market after the allocation is done, and redistribute the issued allowances among the participating companies during the 2005-2007 trading period.

**Excessive allocation** can result from various cases:

Firstly, where a Member State does not reason how the Kyoto target in 2008-2012 would be respected, but left a gap to be closed with measures to be defined later.

Secondly, where a Member State states the intention to purchase Kyoto credits, but does not demonstrate credible and reliable steps to realise these purchases.

Thirdly, where a Member State bases its plan on projections (including economic and emission growth rates) that are inconsistent and exaggerated compared to official growth forecasts by the Member State itself or other impartial sources.

**Ex-post adjustments** are incompatible with the legal framework and represent interventions that disrupt the market and create uncertainty for companies. For example, if a company faces the possibility that the government may take away allowances after it has reduced its emissions, it will hesitate to do so.

And if companies think they can receive additional allowances for free from their governments, they will pursue this route rather than turn to the market and buy allowances.

In total, the Commission has approved the allocation of about 6.57 billion allowances to a bit somewhat more than 11.500 installations for the trading period in 2005 to 2007 (see table at the end). It has demanded cuts in the number of allowances to be allocated in 14 out of the 25 plans. These cuts total over 290 million allowances or about 4% of the notified number of allowances. In addition, the Commission has disallowed intended ex-post adjustments in 13 plans.

### **8) 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 the plan compatible with the allocation criteria.

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

### **9) What steps follow in the allocation process after the Commission's approval of a (revised) plan?**

After a positive Commission decision on a plan or after the necessary amendments foreseen by a Commission decision have been undertaken, the allocation process is completed with a final allocation decision at national level and the allocation of allowances in the national electronic registry (registries see questions 16 and 17).

### **10) Can a Member State change the plan after Commission approval?**

After the approval of the Commission 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. A Member State may, however, under no circumstance increase the total number of allowances it intends to put into circulation.

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

### **11) Do Member States have a say on each other's plans?**

While the Commission has the sole responsibility to assess the plans, the Directive provides that the Climate Change Committee, consisting of Member State representatives, considers each plan. This Committee is a forum to debate each plan. The Commission, as the Committee's chair, is following this 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 maintain and strengthen the EU's international leadership and credibility on climate change.

### **12) What is the role of participating companies, Member States and the Commission now that the EU ETS has kicked off?**

Since 1 January 2005, companies have been required to keep track of their emissions. At the end of each year, they have to produce a report on annual emissions, which will be verified by a third party (similar to an auditor verifying the financial accounts of a company). At the same time, they have to make sure that they are in possession of a sufficient number of allowances to surrender year by year (first surrender date is end of April 2006) so not to be subject to financial sanctions.

Member States have to issue allowances by the end of February each year in accordance with the final allocation decisions, operate the national registry (see questions 16 and 17), collect verified emissions data and make sure that a sufficient number of allowances is surrendered by each company. Each Member State will also have to produce a regular annual report to the Commission.

The Commission operates the European hub of the registry system, and will prepare an annual report on the basis of Member States reports. It closely follows the performance of, and reviews the experience with, the EU Emissions Trading Scheme. In accordance with the Directive, the Commission will present a report to Council and Parliament by 30 June 2006. In preparation of this report the Commission will seek input from stakeholders.

### **13) How much will it cost to reach the Kyoto targets? Will the Emissions Trading Scheme jeopardise Europe's competitiveness?**

This 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. Recent Commission studies conclude 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. So emission trading allows the costs of Kyoto to be reduced even further.

How these costs are distributed depends 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 rather protect, the competitiveness of the EU economy, as any alternative measures would mean imposing higher than necessary costs on EU businesses. Implementing Kyoto will, however, mean not only new economic opportunities but also costs for EU businesses.

This is unavoidable – we cannot have something (i.e. Kyoto compliance) for nothing. Europe 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 will have 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 the transition to a low-carbon global economy.

The "Linking Directive"<sup>2</sup> further lowers the costs and protects the competitiveness of EU businesses. As its name implies, the Linking Directive creates 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 (Kyoto Flexible Mechanisms see question 4).

In principle, companies which carry out emission reduction projects outside the EU through JI or CDM can 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 further lower the cost to EU industry by offering more options for complying with the requirements of the Emissions Trading Scheme. CDM is already operational, so that European companies running CDM projects can use the earned credits for compliance during the first trading period. JI projects will kick off in 2008 with the beginning of the first commitment period under the Kyoto Protocol, which also marks the beginning of the second trading period under the EU ETS (2008-2012). However, preparations for JI projects are already underway.

### **14) Will 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 is becoming a carbon-constrained economy.

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<sup>2</sup> Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC

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, emission trading is just one of them. There are structural aspects such as the liberalisation of the energy market and variations in the internal energy market that have very far-reaching effects. The Commission will carefully monitor the development of power prices and all other aspects related to the Emissions Trading Scheme.

### **15) How will companies benefit from emissions trading?**

Let's say that companies A and B both emit 100,000 tonnes of CO<sub>2</sub> per year. The government gives each of them 95,000 emission allowances. One allowance represents the right to emit 1 tonne of CO<sub>2</sub>. 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. If they fail to do so, they face a fine of € 40 per missing allowance during the 2005-2007 trading period, and € 100 during the second 2008-2012 trading period. Companies A and B do not want to pay the fine and both have to cover 5,000 tonnes of CO<sub>2</sub>. 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 CO<sub>2</sub>. 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 itself reduce emissions.

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 and ensure that they are made first. 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.

## **16) 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 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, several organised markets (e.g. energy exchanges) have begun to offer allowance trading services.

There is also an electronic registry system that keeps track of the ownership of emission allowances as they change hands in the market. 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, there is a transfer of allowances between accounts in the registry system.

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 are the cause of the money changing hands. So the registry system is not a marketplace; the way in which allowances are traded is a decision made by the participants in the market.

The system is purely electronic, and 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 need to open an account.

The system consists of a national component in each Member State where the allowances are held and of a hub at European level, which will conduct automated checks on each transfer of allowances to ensure that the rules of the Directive are respected. Some of the data held in the registry will be released periodically, in accordance with UN rules and the Electronic Registries Regulation<sup>3</sup>. A balance has been sought between environmental transparency and commercial confidentiality.

## **17) Are all the national registries operational?**

The Community transaction log has been up and running since 1 January 2005. As of 17 June 2005, nine national registries are operational (see table in the annex) and about half of allowances to be put in circulation per year have already been credited on company accounts. Other Member States are still working on finalising the launch of their registries.

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<sup>3</sup> Commission Regulation of 21 December 2004 for a standardised and secured system of registries pursuant to Directive 2003/87/EC and Decision 280/2004/EC

## **18) What are the next steps?**

The Commission is closely monitoring the functioning of the EU ETS. In mid-2006, it has to present a report to the Council and the European Parliament, considering the items listed in Article 30 of the Directive (e.g. inclusion of other sectors and gases, allocation method, level of the excess emissions penalty).

On 13 June, the Commission launched a survey among stakeholders that will feed into the report. This report may be accompanied by proposals for amendments to the scheme. The results of the survey will help the Commission establish whether it would be appropriate to propose amendments. However, it is important to note that any amendments to the Directive that the Commission proposes in 2006 would most likely only have an effect as from the third trading period beginning in 2013. This is because of the time needed for the legislative procedure and because the national allocation plans for the second trading period have to be submitted already in mid-2006, at the same time as the report is published. The survey will also inform the elaboration of allocation plans for the second trading period 2008-2012.

**Annex:**

<b>Member State</b>	<b>CO<sub>2</sub> allowances in mio. tonnes</b>	<b>Share in EU allowances</b>	<b>Installations covered</b>	<b>Registry functional</b>	<b>Kyoto target</b>
Austria	99.0	1.5 %	205	Yes	-13%*
Belgium	188.8	2.9 %	363	No	-7.5%*
Czech Republic	292.8	4.4 %	435	No	-8%
Cyprus	16.98	0.3 %	13	No	-
Denmark	100.5	1.5 %	378	Yes	-21%*
Estonia	56.85	0.9 %	43	No	-8%
Finland	136.5	2.1 %	535	Yes	0%*
France	469.5	7.1 %	1,172	Yes	0%*
Germany	1,497.0	22.8 %	1,849	Yes	-21%*
Greece	223.2	3.4 %	141	No	+25%
Hungary	93.8	1.4 %	261	No	-6%
Ireland	67.0	1.0 %	143	No	+13%*
Italy	697.5	10.6 %	1,240	No	-6.5%
Latvia	13.7	0.2 %	95	No	-8%
Lithuania	36.8	0.6 %	93	No	-8%
Luxembourg	10.07	0.2 %	19	No	-28%*
Malta	8.83	0.1 %	2	No	-
Netherlands	285.9	4.3 %	333	Yes	-6%*
Poland	717.3	10.9 %	1,166	No	-6%
Portugal	114.5	1.7 %	239	No	+27%*
Slovak Republic	91.5	1.4 %	209	No	-8%
Slovenia	26.3	0.4 %	98	No	-8%
Spain	523.3	8.0 %	819	Yes	+15%
Sweden	68.7	1.1 %	499	Yes	+4%*
United Kingdom	736.0	11.2 %	1,078	Yes	-12.5%*
<b>Total</b>	<b>6,572</b>	<b>100.0 %</b>	<b>11,428</b>		

Note: Figures do not take into account any opt-ins and opt-outs of installations in accordance with Article 24 and 27 of Directive 2003/87/EC.

\* Under the Kyoto Protocol, the EU15 has to reduce its collective greenhouse gas emissions by 8% below 1990 levels during 2008-2012. This target is shared among the 15 Member States under a legally binding burden-sharing agreement (Council Decision 2002/358/EC of 25 April 2002). The majority of the Member States that joined the EU on 1 May 2004 have individual targets under the Kyoto Protocol with the exception of Cyprus and Malta, which have no targets.

**See also:**

DG Environment's emissions trading web site:

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

National Allocation Plans:

[http://europa.eu.int/comm/environment/climat/emission\\_plans.htm](http://europa.eu.int/comm/environment/climat/emission_plans.htm)

Community Transaction Log:

<http://europa.eu.int/comm/environment/ets/>