REVIEW OF EU EMISSIONS TRADING SCHEME

Free Text Answers – EU ETS Survey



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PREFACE

The EU Emissions Trading Scheme (EU ETS) was launched in January 2005. It is the largest cap-and-trade scheme in the world and the core instrument for Kyoto compliance in the EU. This first environmental market established in the EU involves thousands of operators who have obligations for limiting the carbon dioxide emissions from their plants. In an average week more than 10 million allowances are traded, resulting in a market worth several billion Euro already in the first year of operation.

Article 30 of the Directive implementing the EU ETS requires the Commission to review the application of the EU Emissions Trading Scheme and report to the European Parliament and to the Council. The report may be accompanied by proposals for amendments to the scheme.

The European Commission's DG Environment appointed McKinsey & Company and Ecofys to support it in developing the review. Amongst other things, they were asked to develop an understanding of the impact of the scheme on the competitive position of participants and to analyse possibilities for the design of the scheme after the second trading period.

Their work deals with a number of the issues listed in Article 30 as ones that should be addressed in the Commission's report, as well as other relevant issues. Each report discusses approaches taken in the first phase and important lessons learnt. The analyses focus on the post-2012 design. For each design element, future options are investigated. This involves discussion of the advantages and disadvantages of design options, harmonization opportunities, and impact on competitiveness.

The work conducted in the period June 2005–July 2006 consists of a web survey to consult stakeholders on their views on the EU ETS, as well as extensive topical analyses.

This report reflects the views of the stakeholders in the EU ETS and does not constitute official views or policy of the European Commission.

Other reports delivered in the scope of this work are available at http://ec.europa.eu/environment/climat/emission/review_EN.htm



INTRODUCTION 1

The European Commission is currently reviewing the EU Emissions Trading Scheme (EU ETS). McKinsey & Company and Ecofys assist DG Environment in this review in 2005 and 2006 by providing a fact base for the discussion.

As part of the review a web-based survey has been conducted under McKinsey's guidance from June to September 2005. The Survey was open to all key stakeholders willing to participate. Log-in data was sent out to 517 companies, government bodies, industry associations, market intermediaries and NGOs (Non-Governmental Organisations).

The overall response rate was around 60%: Of 517 e-mails sent out, 302 responses were made on behalf of entire organisations. This generated 330 responses in total, since some companies responded more than once if their organisations were active in a number of sectors. The survey responses show a good spread among the various stakeholders: 167 industrial companies (representing 51% of all responses), 84 associations (25%), 35 NGOs (11%), 24 government bodies (7%), and 20 market intermediaries (6%).

The answers to the multiple choice questions are published in a separate document. This document represents the answers typed in the free text fields, but only where respondents have given their explicit consent. Even if respondents consented, McKinsey sanitised all information which could reveal the identity of the responding organisation. However, McKinsey did not change any text or correct for any grammar mistakes or misspelling.

In some instances, the answers are cut off in the middle of a phrase, because the free text field did not allow for longer entries. Still, participants were given ample opportunity to state their opinion in longer text blocks at the end of the survey.

DG Environment, and McKinsey, would like to thank all stakeholders for their contribution.

¹ This report and the analyses and conclusions set forth herein are based on information that has not been generated by McKinsey & Company. It has, therefore, not been subject to their independent verification and is presented to you for information purposes only. McKinsey makes no representation or warranty, express or implied, as to the accuracy or completeness of the underlying assumptions, estimates, analyses or other information contained in this report, and expressly disclaims any and all liabilities based on such information or on omissions therefrom.

² Note that response rates can vary slightly by question since it was possible to skip survey questions. However, this did not occur often and the response rate was high for most questions. Readers can judge validity for themselves, as we reveal the response rate for each question.

³ The percentage for pulp & paper is for the EU15.

2 FULL TEXT ANSWERS

2.1 Further important topics in EU ETS apart from "functioning of allowance market," "allocation periods," "inclusion of sectors and gases," "benchmarking as an allocation method," "harmonization of naps," "definition of combustion installation," "new entrant and closure rules," "use of cers and erus," "excess emission penalties," "accounting and taxation," "pooling," and "emission reduction targets"

2.1.1 Cement

Competitiveness-Electricity prices

Competitiveness & Electric power prices. The core concern of capital intensive industry, is long-term predictability of obligations, consistent with world-wide framework, economical and environmental effective.

Competitiveness-electricity prices

Competitiveness - Electricity prices - NO windfall profits!

Indirect impact to power price

2.1.2 Chemicals

Indirect impact of ETS on electricity prices an on the price and availability of the raw materials and hence the impact on comptetiveness. Therefore no limits for companies for the use of credits from project mechanisms.

Windfall profits: influence of the emissions trading system on electricity

2.1.3 Other

Process of emission data certification and approval of the authorities

All treatments, including allocation, should be the same whether the operator is the owner of the installation or not.

Adequate definition of process related emissions and an allocation mechansim taking them into account

Indirect impact to power price

2.1.4 Pulp and Paper

Indirect impact of the EU ETS on electricity prices and hence the impact on competitiveness

International level playing field, windfall profits energy sector

Indirect impact of the EU ETS on electricity prices and on the price and availability of rawmaterials (wood and recovered paper) and hence the competitiveness

2.1.5 Power

support of early actions and clean technologies

Process of emission data certification and approval of the authorities

Equity in split between trading and non-trading sectors

Although not an ETS matter directly, the global harmonisation of climate efforts is absolutely important

- 1) A proper definition for process related emissions and an allocation mechanism which take them into account
- 2) The impact on electricity prices

2.1.6 Steel

Indirect impact of ETS on electricity prices and on the price and availability of the raw materials and hence the impact on competitiveness

Impact on electricity prices

Impact on electrical energy prices

- 1) A proper definition for process related emissions and an allocation mechanism, which take them into account
- 2) The impact on electricity prices

The impact on electricity prices

Adequate definition of process related emissions and an allocation mechanism taking them into account

2.1.7 Governments

Linking to Other Schemes

2.1.8 NGOs and Market Intermediaries

Inclusion of CDM A/R

Use of carbon storage

Linking of forest-related projects (e.g., in the CDM)

Access of the EU ETS system to other countries (extra EU countries)

That the allowance is robust (e.g. identifiable, measurable and verifiable)

2.1.9 Associations

Indirect impact of ETS on electricity prices and on price and availability of raw materials (e.g. wood) and hence the impact on competitiveness. We urge that there should be no limits for the companies for the use of CERs and ERUs.

Indirect impact of ETS on electricity prices and availability and price of raw materials

Competitiveness - electricity prices

Installation definitions

Competitiveness - Electricity Prices

Process emissions; monitoring and verification

Impact on electricity prices (carbon pass through), JI/CDM availability / functioning of the CDM Executive Board

Effect of EU ETS on electricity prices

Does ETS deliver reductions?

A proper definition for process related emissions and an allocation mechanism, which takes them into account

Link ETS caused on power prices

Process emission definition is missing, indirect impact of ETS on top of power price is missing

Exclusion of small installations

De minimis rule for small installations

Competitiveness - Electricity prices

Opt-out for small emitters

Establishment of minimum CO₂ emission quantity to enter the emission trading system

Competitiveness of industrial consumers; Impact on Electricity Prices

Impact on power prices

2.2 COMMENTS ON IMPORTANCE OF TOPICS CONCERNING EU ETS

2.2.1 Aluminium

It is to be noted that while the Aluminium sector is not included in the first phase of the ETS, some of our installations may be due to non-harmonised interpretation of the combustion installation. This is totally unacceptable

One consideration under the review is the possible role the EU ETS can play post-2012 if negotiations on extending the Kyoto framework into a new commitment period were to break down. A possible scenario is that regional and national frameworks complemen

2.2.2 Cement

It is essential to widen the scope of the EU-ET and extend it to the worldwide scene. If this is not done, the European effort to reduce CO₂ emissions will lead to relocation elsewhere, which is, of course, no solution for the global emission reduction an

Climate Change is a world-wide, not a European issue. The European Union can only contribute to achieving the objective within a world-wide framework. Without such an integration, the ETS will put the competitiveness of the EU at risks without any environ

Fighting climate change is a world wide issue. Up until a global drastic reduction is undertaken, nothing will be achieved. Europe alone, focused on industry, could lead to a disaster with no climate change effect. Therefore, the system, or an equivalent

It is essential to widen the scope of the EU-ETS and extend it to the worldwide scene. If this ist ot done, the European effort to reduce ${\rm CO_2}$ emissions will lead to relocation elsewhere, which is, of course, no solution for the global emission reduction a

We believe that the system will not be expanded into countries outside of Europe unless being better cost effective.

2.2.3 Chemicals

Schemes already exist in Canada, even in some US states

It is essential to expand the EU-ETS worldwide. If this will not succeed, the European efforts reducing CO₂-emissions will lead to broad relocations. This is no solution for global emission reduction and there would be also a contradiction of the Lisbon s

We believe that other important regions with a large contribution tot GHG-emissions e.g. Australia, China and India will not implement a cap and trade system like the EU-ETS, since it might threaten their economic growth. Thus we see a local restricted EU

The scheme will have to be expanded outside the EU; without this it will not be effective to reduce emissions on a global level and will not survive economically with ever stricter emission contraints only in Europe.

Emissions Trading, and GHG reduction, is a tough discipline. Everybody praises its virtues but at the same time tries to be exempted. We don't see a rapid expansion of ET outside EU.

2.2.4 Other

The process (and a few decrees) of ETS hasn't prepared yet in my country We are over the half of this year and here are a lot of Companies in my country which will be take part into the emission trading market.

Given the different structures of energy markets and industry in the different countries and their varying targets under the scheme we only believe that certain limited areas are suitable for harmonisation.

In the following, production figures only refers to plants subject to the EU ETS. In the introductory industry section, the percentages of assigned allowances between the EU-25 state members are calculated excluding Italy (because we ha

We believe that the system can only survive and be successful if it becomes a global system or a least if it will be coupled with other similar systems world wide. Otherwise it will create major competitive disadvantages for the EU.

1) Remark about the practicality of developing community-wide Benchmarks: this is only to be envisaged in the absence of any cap&trade system. Otherwise the impact on business competitiveness will even be increased. This way of allocation is only envisage

We believe that the system will not be expanded into countries outside of Europe unless being better cost effective.

It is important to include other gases from industrial processes, which are from easily identifiable point sources, which are readily monitored and whereby trading will provide financial incentives for investing in new technology. This will give a faster re

2.2.5 Pulp and Paper

Indirect effect of the EU ETS on power price and on competitiveness is the main concern for our company.

Emission reduction targets for 2008-2012 are linked to the Kyoto protocol and the decision taken between the eu member states.

Indirect effect of the EU ETS on power prices and hence on competitiveness is the main concern of the European pulp and paper industry. It is also something that companies cannot influence on like is the case with direct emissions from the mill.

2.2.6 Power

Benchmarks only make sense when there is no cap. All the emissions related to the generation or the destruction of materials should be included. Loss of credits on closure equals to ex post adjustment. There should be no limits on CDM credits. The bottom

We ask for taking measures for supporting "early actions" and "clean technologies" (e.g. cogeneration) by giving them more quotas.

The process (and a few decrees) of ETS hasn't prepared yet in my country. We are over the half of this year and here are a lot of Companies, which will be take part into the emission trading market.

Given the different structures of energy markets and industry in the different countries and their varying targets under the scheme we only believe that certain limited areas are suitable

for harmonisation.

Signals beyond 2012:

If the Power Generation Sector is to invest to make significant carbon reductions, long term investment signals are required. It is difficult to make long term investments in low carbon technology when the magnitude of abateme

Given the acknowledged defects in the emissions trading system design, it is critical that unrestricted access to JI/CDM credits is made available – if only to ensure a politically acceptable price for carbon is maintained and the instrument does not coll

With reference to the proposed list of topics, we have given the highest importance to the topics which have a direct impact on compliance costs. Higher-than-average importance has been given to topics influencing reduction targets; in this respect, we th

Emissions Trading, and GHG reduction, is a tough discipline. Everybody praises its virtues but at the same time tries to be exempted. We donot see a rapid expansion of ET outside EU.

If ET scheme is not expanded into countries outside of Europe, it will not be possible to get any result regarding CO, emissions reduction.

If the EU ETS is expanded into countries outside the EU, a combined limit to the use of allowances coming from other emissions trading schemes and credits for CDM/JI projects should be established in order to create a stable framework for investments in I

Probable, that in some countries trading scheme will expand but it will be not widely spread. Activities, such as the agreement of USA and six other countries indicates on it.

One consideration under the review is the possible role the EU ETS can play post-2012 if negotiations on extending the Kyoto framework into a new commitment period were to break down. A possible scenario is that regional and national frameworks complemen

We believe that the system can only survive and be successful if it becomes a global system or a least if it will be coupled with other similar systems world wide. Otherwise it will create major competitive disadvantages for the EU.

2.2.7 Refineries

Given the different structures of energy markets and industry in the different countries and their varying targets under the scheme we only believe that certain limited areas are suitable for harmonisation.

Emissions Trading, and GHG reduction, is a tough discipline. Everybody praises its virtues but at the same time tries to be exempted. We donot see a rapid expansion of ET outside EU.

2.2.8 Steel

Benchmarks only make sense when there is no cap. All the emissions related to the generation or the destruction of materials should be included. Loss of credits on closure equals to ex post adjustment. There should be no limits on CDM credits. The bottom

Benchmarking is not recommended: bonus/penalty for efficiency is already built in the mechanism of gradually reducing allowances over time. Some of investors' decisions taken in the past might be penalized unfairly if benchmarking were to be introduced. B

Whatever the choice concerning benchmarking will be, the focus must be above all and in any case on the harmonizations within countries and extension of the interested countries. Market is globalised and companies cannot and mustn't afford differencies in

If ET scheme is not expanded into countries outside of Europe, it will not be possible to get any result regarding CO₂ emissions reduction.

Any kind of system implemented only in EU area for the companies participating on a markets where the sales prices are globally defined, will create disturbance of the competition. As the European industry is overall normally more efficient on energy and

- 1) Remark about the practicality of developing community-wide benchmarks: This only to be envisages in the absence of any "cap&trade" system. Otherwise the impact on the business competitiveness will be even increased
- 1) Remark about the practicality of developing community-wide Benchmarks: this is only to be envisaged in the absence of any cap&trade system. Otherwise the impact on business competitiveness will even be increased. This way of allocation is only envisage

2.2.9 Governmental Bodies

Emissions trading is likely to form an important and enduring part of the international climate change architecture, and a global emissions trading regime is increasingly seen as playing a key role in the future climate change framework. A number of nati

NGOs and MARKET INTERMEDIARIES

While liquidity is clearly one of the most "important" issues for an emissions trader, its presence or absence is largely a function of the other key building blocks of the scheme, ie, the Phase 2 emission reduction targets, length of allocation period, e

We believe the economic efficiency of the scheme would be greatly improved if it was either expanded to other countries outside of the European Union, or linked to other similar schemes (that is, schemes backed by countries with strong environmental and I

My organisation believes the possibility to link to systems in other countries and regions is an important one, but the question here is asking for the wrong kind of information. The likelihood of a link coming to pass does not say anything about the desire.

My organisation believes the possibility to link to systems in other countries and regions is an important one.

For the developing countries to participate in the system at any significant level the EU must accept credits from CDM A/R projects, i.e. tCERs and ICERs.

It is necessary that a political decision of the E&U ministers will guide and urge changes to the EU ETS as per 2008; Commission is suggestion that important changes can not be done; That would be a mistake, since the EU ETS 2005-2007 period is meant as

Two important questions are missing from the previous page of the survey:

1) free allocation vs. Auctioning: it appears that the solution for the current discussion about windfall gains of the electric utilities is continued free allocation

As a market-place operator the crucial issue is the liquidity of the market. No trading; no role for a market-place. One of the issues that will undermine the credibility to traders is if they are uncertain of the quality of the allowance that they have a

Since the European system is a role model for other similar schemes being developed around

the world (even in countries which have not ratified the Kyoto Protocol are mimicking the EU ETS in developing their own system), EU should encourage these countries

2.2.10 Associations

Benchmarking should be defined thoroughly before being used across the consultation document. A methodology should have been presented in the consultation document. Companies believe the current system, based on absolute value emission

It is essential to expand the EU ETS worldwide. If this will not succeed, the European efforts reducing CO₂ emissions will lead to broad relocations. This is not a solution for global emissions reductions and would be contradictory to the Lisbon strategy,

The system as implemented in the EU is unlikely to be expanded. International ET is highly desirable. To make the EU-ETS the basis for IET would require major modifications.

In the our country the implementation of the scheme is too complex. The obligated companies are spending great resources, which should have gone into emission reduction, on supporting a growing infrastructure of administration. In many cases the level of detail in

Climate Change is a worldwide, not a European issue. The European Union can only contribute to achieving the objective within a worldwide framework. Without such an integration, the ETS risks to put the competitiveness of the EU at risk without any enviro

Any emissions trading scheme should take account of the competitive position of the industry covered. Some parts of European Industry would be seriously hampered by the proposed scheme, as it does not include competitors from third countries. Improvements

All the above issues are important. Some of the issues are more short term and others are more long term strategic issues. My organisation finds it more relevant what we want than what is expected: There should be a international instrument

The above mentioned issues are not comparable with each others. Some of them are long term strategic issues (like further actions beyond 2012) and some are more short term issues.

The global climate change policy where all the regions

In addition to the 12 points in the questionaire it is important to underline that uncertainty at company level about allowances in 2008-2012 and uncertainty about the situation post 2012 disturbs the functioning of the EU-ETS. The fact that JI and CDM-credits are not having

It is possible that in the future harmonisation will occur between the EU ETS and other greenhouse gas emission trading schemes around the world, such as the Chicago Climate Exchange. Such an expansion is probably not likely to occur in the medium term.

1) Warning: Practicality of developing community-wide "benchmarks" (4th topic)

The orginal goal of the system was OK, but as currently designed and applied ETS is detrimental to the competitiveness of our industry -closures linked to the increased power prices caused by ETS are happening-that no other sensible country will ever joi

The system as implemented in the EU is unlikely to be expanded. To make the EU-ETS the basis for IET would require major modifications and better common rules.

Other countries are not likely to join as:

- the scheme is very complicated and its effectiveness is still to be demonstrated.
- industry's growth is jeopardised

- the impact of EU ETS on electricity
- 1) Analysis: The ceramic industry in EU-25 and the EU ETS . The ceramic industry is concerned by the EU ETS, in Annex 1 of the Directive 2003/87/EC the following definition is used: "Installations for the manufacture of ceramic products

It is essential to widen the scope of the fight against climate change and extend it to the worldwide scene. Without such an integration the ETS risks to put the competitiveness of the EU at risk without any environmental result. If this is not d

The answers we received from our members show a balance between those that believe that the ETS will be expanded into countries outside of Europe and those that believe it will not.

In principle, an isolated European EmissionTrading Scheme (EU ETS) discriminates European manufacturers and leads to a distortion of the markets. In case no binding global climate change agreement will be implemented (post Kyoto), a continuation of the c

The current cap and trade regime with its consequent transfer of wealth from consumers to the electricity producers is not likely to be implemented outside Europe. However, such wider implementation is very important. Therefore, a significant review of th

The impact on power prices through the mechanism of opportunity costs has to be stopped immediately; otherwise many electro intensive factories in Germany will have to close. At least 150.000 jobs could be lost. The result of windfall p

It is essential that emission trading is developed as a global tool as soon as possible. The EU should also analyse and where appropriate use other measures currently available outside the EU, to reduce greenhouse gas emissions.

3 Comments on implementation of policy instruments for emission reduction

2.2.11 Cement

The EU-ETS is one of the most complex policy instruments and has been developed under high time pressure. The comparison with other instruments is MS- and sector specific and too complex to answer. The biggest problem for the Cement producers is the cumulative burden of all different instruments. ET-industries should not be double jeopardized (ET an energy tax). But of course energy- or CO₂ tax is a less bureaucratic instrument for excluded CO₂-emitters.

Comparison is difficult as the other policy instruments, taxes and voluntary agreements are not regulated nor harmonized at European I level.

The EU-ETS is an innovative policy instrument, for which many complex systems have to be developed at European and national level (e.g. the NAPs, registries, inventories, verifications, markets). Due to the short time between voting and entering into force of the directive, the time available for development has been excessively short.

No doubt this has tremendous negative impact on the effectiveness of the system, especially due to the allocation principles used in the NAP.

The EU ETS is a new and very complex instrument; managing those issues in 10 different countries has been very difficult. The comparison with other instruments is not very relevant.

Even in countries where communication has been good and professional on behalf of government representatives, there has been at some point ruptures in the decisions.

The ETS-EU system is one of the most complex policy instruments with plausible results on the outcome. This instrument will have an adverse influence on competitiveness of the European energy intensive industry thus hindering employment and not improving environment.

Industry needs planning reliability concerning the applicable law. The timetable is an important factor, besides achievable environmental goals. Time to implement new legislation is as important as an adequate time period for a stable environmental law.

The EU-ETS is one of the most complex policy instruments and has been developed under high time pressure. The comparison with other instruments is MS- and sector specific and too complex to answer.

The biggest problem for the Cement producers is the cumulative burden of all different instruments. ET-industries should not be double jeopardized (ET and energy tax). But of course energy- or CO2 tax is a less bureaucratic instrument for excluded CO2-emitters.

The ETS is one of the most complex policy instruments and has been developed under high time pressure. In my country we have nearly no experiences with other policy instruments, but the high energy taxation is also an instrument to reduce CO₂-emissions in the whole industry. So we have not only the burden of emission trading but also of the energy taxation.

2.2.12 Chemicals

What is helpful is a clear direction for longer term and evidnce of listening from authrotires, especially where policies overlap and where an industry such as industrial gases does not fit neatly into any sectors

Industry needs planning reliability concerning the applicable law. The timetable is an important factor, besides achievable environmental goals. Time to implement new legislation is as important as an adequate time period for a stable environmental law. Changes every year (or changes of e.g. the ETS before the start of the system are not useful.

It is our feeling that the challenges listed in the above question are not that much specific for the impact of different policy measures. The main difficulty related to the ETS is the considerable hurry that characterized the preparation and adoption of the respective legislation. As a result, many things were left undecided, which lead to implementation problems. Especially, the indirect effects of the ETS were not assessed deep enough, and so unwished impacts occur (for example rising the link with power prices). Also, the adoption of the ETS did not lead to repealing other energy policy instruments, like for example energy taxes. Also, long-term security of the ETS is completely unknown at this point of time. The cumulative burden of all different instruments like energy taxes, ETS, taxes on thermal usage of energy rich wastes, etc. is a problem. ETS-industries should not be jeopardized by ETS and energy tax.

Authorities both the EU Commission and national had a particular cap & trade system in mind creating numerous economic distortions and an ineffective scheme for obtaining environmental results and did not want to listen to the feasible alternative of performancebased allocation (equal performance standards, ex-post). For example, under cap & trade (exante caps) harmonisation of rules for new entrants and closures is theoretically and practically impossible if the requirements of the Directive have to be met (stimulation of investments to reduce emissions and energy efficient technologies in particular; shifting production from closed inefficient plants to existing efficient plants, etc.). It is like the search for a square circle.

Our company urgently needs a scheme with predictable prices for ${\rm CO_2}$ and legal certainty for a longer period so that investments in energy efficiency and ${\rm CO_2}$ -reduction can be justified.

The delay in the finalization of the NAP have caused uncertainties on the obligations and on the procedures.

The comparison with other policy instruments is not meaningful, because they are not equivalent in terms of CO₂ reductions. In any event, the implementation of the ETS is comparatively much more demanding.

Implementation of EU ETS was very much easier because we already had all the data and most of the systems in place as a result of our pre-existing voluntary agreement. If it was not for this, the answers would have been very different.

2.2.13 Other

The government openness was very helpful. Implementation has been hampered by resource shortages within the regulator's office. Monitoring plans are not yet agreed and sector guidelines have only recently been issued

Major topics which should have been dealt with at the directive level were left to national transposition (e.g. allocation rules, banking, definition of combustion installations, etc.) resulting in undue complexity, uneven competition, and implementation delays.

It has been difficult at times to apply policy when during implementation the policy has not been finalized or it has been changed shortly thereafter.

The system is unnecessarily burdensome administrational. It is costly, unwieldy, impractical and not user-friendly. A particular issue is the use of ISO17025 accredited data, which is completely over the top. Even national gas CV data is not accredited. It is just extra work and cost for no benefit.

Disproportioned high administrative burden for monitoring & reporting in the light of the size of our sector!

The ETS is one of the most complex policy instruments and has been developed under high time pressure. In our country we have nearly no experiences with other policy instruments, but the high energy taxation is also an instrument to reduce CO_2 -emissions in the whole industry. The reduction of CO_2 -emission in the lime industry is nearly impossible, because of the high rate of process CO_2 and the high efficiency of the industry. So in our country we have not only the burden of emission trading but also of the energy taxation.

2.2.14 Pulp and Paper

Some part of the regulation was not clear enough . for example for a group the possibility to do a poling within the facilities located in different eu countries. it is a new type of regulation and it needs time to implement in an international group when structure does not exist

The previous question is too complex to answer. All of these instruments have a impact on resources, compliance and information. The question is whether the EU ETS is worse or better. There was not much room for feedback and interaction. A voluntary agreement brings this from its nature. Generally the instrument itself is ok, but the interaction with taxation, accounting and trading make it a multidimensional problem that needs additional coordination internally and clear definitions of responsibility.

It is our feeling that the challenges listed here are not that much specific for separate policy measures but rather how they are prepared, implemented and enforced. Even if taxes and traditional command and control measures in principle are clear, they can be prepared badly and in such a way that they are unclear.

The main difficulty with the emissions trading as a new measure is related to the considerable hurry that characterised the preparation and adoption of the respective legislation; as a result many things were left open, which then leads to implementation problems. The procedure was also very 'political' and hard facts were not always valued very high.

Another big difficulty is related to the assessment, or rather the lack of pre-assessment, of the indirect effects of the EU ETS. Third issue is related to other policy measures that are to a large extent still in use; adoption of the emissions trading did not lead to repealing energy taxes, etc.

Long-term security is also lacking, as the existence of the global regime post-2012 is completely unknown at this point in time.

2.2.15 Power

EU Environmental Policy has no will to admit that even if EU CO₂ emissions disappeared fully, the global emissions would rise.

The government approach of openness has been helpful. Our power generation is a new entrant in EU ETS Phase 1 and late notification of the allowance position has caused difficulties.

My company recognizes the tight timescales in which Phase 1 of the EU ETS was implemented and emphasises the importance that the lessons learnt in Phase I are integrated into subsequent phases of the scheme. The key concerns are summarised below: Strategic impacts of policy implementation

- Lack of certainty concerning length of allocation periods.
- Lack of certainty in relation to long-term legal/mandatory targets and the duration of such
- Absence of clear signals from government in relation to long term policy objectives post Kyoto.
- Inflexible interpretation of the Emissions Trading directive and inflexibility on the governments behalf to review targets and aspects of the ETS policy in pre-allocation period of Phase 1.

Operational impacts of policy implementation

- Speed of implementation
- · Consequently the decision making process was made in the absence of sufficient stakeholder consultation
- Use of inaccurate projections resulting in shortfall
- Lack of recognition of realistic abatement opportunities in the timescale.
- Setting unrealistic targets that cannot be achieved through abatement and require the large scale purchase of allowances.

Implementation of the ETS too rushed and is leading to unnecessary distortions and uncertainties

We believe that instruments which allow for prior and on-going consultation with stakeholders are to be preferred because, in principle, they can lead to more efficient and effective implementation. Voluntary agreements and emissions trading have, in theory, been conceived for that. However, in practice, we have experienced quantitatively and qualitatively lack of interaction with competent authorities. Particularly in the case of the EU-ETS, the articulated set of provisions which have to be put into operation have been poorly managed by authorities, causing to us substantial operational difficulties

The delay in the finalization of the NAP have caused uncertainties on the obligations and on the procedures.

The comparison with other policy instruments is not meaningful, because they are not equivalent in terms of CO₂ reductions. In any event, the implementation of the ETS is comparatively much more demanding.

The comparison of ETS with other instruments is perhaps not very meaningful, because for ETS all was done for the first time and with an unrealistically short time-schedule. Some respondents may refer only to the experiences of the start-up of the ETS, whereas the others may refer to what they believe the ETS may be in the long-run.

During implementation of the ETS in all stages we have good cooperation with the Ministry of Environment. Other institutions concerning legal, financial, technical issues is not so active.

2.2.16 Refineries

Our government open approach was particularly helpful in refining sector, process was less open in some of the other countries and some uncertainties still remain

The delay in the finalization of the NAP have caused uncertainties on the obligations and on the procedures.

The comparison with other policy instruments is not meaningful, because they are not equivalent in terms of CO₂ reductions. In any event, the implementation of the ETS is comparatively much more demanding.

My company's adequate resources were overwhelmed by the number of meetings, consultations, and white papers. More time to consider proposals would have been better.

2.2.17 Steel

There is increasing evidence that consultations are only pro forma. There is no evidence of the contribution of these public consultations.

EU scheme is a totally new instrument, and its implementation call for new resources and figures, both internal to the organization and external. The committment of authorities in divulging correct information, implementing new instruments and create a well defined and easy-to-manage time-schedule for the creation of these resources has been totally insufficient. Moreover, there is the need to introduce experts directly from industry in the development of all mechanisms implied in the directive.

 The steel industry partecipates in different Member States in a Climate Change Agreement and is thus contributing significantly to the achievement of the Eus Kyoto target. In development of the European GHG emissions trading scheme insufficient recognition.

On development of the system the effect e.g. for the electricity markets where not taken into account (windfall profit). We can't believe that the system was intentionally designed to give electricity production this kind of extra profit from the free of charge allocated allowances (those are got for free and then second time paid by consumers of the electricity), with no real pressure the lower the emissions with in reasonable time.

Secondly we would like to draw attention to the burden sharing agreement that was meant for Kyoto protocol international emission trading and which is now the basis of national allocation: like meantioned in the earlier free comments -> result is the disturbance of the competition..

2.2.18 Governmental Bodies

Our answers relate to

- 1) EU Emissions Trading Scheme;
- 2) renewables obligation;
- 3) IPPC; and
- 4) Climate Change Agreements.

For EU ETS the answers relate to larger installations and that inclusion of small installations in the EU ETS raises more difficult challenges in terms of consultation and regulation.

In implementing the EUETS, the goventment had to have regard to the fact that it had taken early action to reduce emissions with a lot of measures in the national climate change policy. This increased the challenge in implementing the EUETS.

To date, our country has had limited experience with the above policy instruments, except for the use of direct rules. An issue often faced locally is problems in communication with industry as local industry often does not have the necessary background, expertise and resources to fully appreciate the implications and impacts of policy measures set out. Similarly, government entities involved in the implementation of policy instruments may also lack the necessary resources.

2.2.19 NGOs and Market Intermediaries

We would have to provide different answers for each of the affected jurisdictions.

We are not directly affected by commodity taxes, environmental standards or voluntary agreements, therefore we no experiance of instrument comparison

Being a relatively young NGO, we were not taking part in processes of adopting other measures than ETS, so it would be not appropriate to answer the previous question.

Overall the challenge to implement the ETS has been bigger compared to the other instruments, since there has been little experience with emissoins trading in most EU member countries.

There has been a lack of transparency at MS and EU Commission level, including a lack of clarification regarding rules, assessment and definitions within Commission guidelines and the resulting disparity between Member State's plans and the Commission's evaluation.

2.2.20 Associations

The main comment is that there has been short timeframe to implement this directive which complicated the coordination between the Government and the companies.

The first two tables can be completed only for the first column because there are no CtO2 taxes, subsidies or direct rules and volontary agreements initiated by the governement.

Industry needs planning reliability concerning the applicable law. The timetable is an important factor, besides achievable environmental goals. Time to implement new legislation is as important as an adequate period of validity. Changes every year (or changes of e.g. the ETS before the start of the system (as it has happened concerning the MRG etc.)) are not useful.

It is our impression that the challenges listed in the above question are not that specific for the impact of different policy measures. The main difficulty related to the ETS is the considerable hurry that characterized the preparation and adoption of the respective legislation. As a result, many things were left undecided, which lead to implementation problems. Especially, the indirect effects of the ETS were not assessed deeply enough, and so undesirable impacts occur (for example the link between electricity prices and ET allowances). Also, the adoption of the ETS did not lead to repealing other energy policy instruments, like for example energy taxes. Furthermore long-term security of the ETS is not given at this point of time. The cumulative burden of different instruments like energy taxes, ETS, taxes on thermal use waste etc. is a problem. ETS industries should not be jeopardized by ETS and energy tax.

It is necessary to state that there has been sustained effort by many government and regulator staff to make the systems work. They appear under-resourced and have resorted to temporary staff and consultancy to cope with demand. This has in some cases lead to a high turnover with associated learning problems and this has lead to frustration for industry. Deadlines have been put back again and again. Industry has had to make important far reaching economic decisions without information e.g. the Opt Out and "double accounting." There have been requests to trade associations for sector procedures, methodologies and feedback which appear at times to have been neither acknowledged nor taken into account. This has been frustrating and disheartening. It has drawn on what is already a highly under-funded and resourced trade association network. Whilst trade associations (and I state this very positively) welcome consultation and negotiation, government needs to recognise the limited resources those organisations have and the impossibility of gaining sector positions in timescales which are counted in days. As manufacturing becomes more globalised the resources to support the remaining EU industry also declines.

It was reported within the sector that the EUETS should be considered as a "tool" not a policy instrument.

The EU-ETS is one of the most complex policy instruments and has been developed under too high a time pressure. It has to be noted that the comparison is difficult, as taxes and rules applicable to voluntary agreements are not harmonised all over Europe.

The EU ETS has been introduced on a very rapid timetable that has proven to be too tight for many Member States to achieve their requirements (permitting, allocation, distribution of allowances etc.) and too fast to allow for appropriate harmonisation to occur between Member States. The result, at present, is a partially functioning system that is not consistently applied throughout the Community. It is vital that the 2005-7 period is seen as a "learning by doing" period and that the lessons learned are taken into account for the period 2008-12.

Our members prefer voluntary agreements which we believe can be effective in delivering the required improvements and at a lower administrative burden than a regulatory approach. Emissions trading may serve as a tool to achieve emission reductions at lower costs on a flexible basis.

Our sector is subject to significant quantities of regulation, which takes the form of both command & control regulations and market-based mechanisms (both price-based and quantity-based). My organisation firmly believes that the effective use of market-based instruments linked to environmental outcomes is the most efficient means with which the industry can achieve its targets.

These questions are difficult to understand

- 1) When comparing policy instruments, the promotion of market based instruments should only be considered if it can be clearly demonstrated that the alternative policies can deliver the environmental objective at least cost and without damage to the competitiveness of European industry. Our industry participates in different Member States in a Climate Change Agreement and is thus contributing significantly to the achievement of the EUs Kyoto target. In development of the European GHG emissions trading scheme insufficient recognition was given to the fact that there were already policies and measures in place in some MS such that the sectors affected should have been allowed to opt out of the EU-ETS for both the first and second phases. That this is not the case means that some European Industry faces double regulation and two additions to its cost base, namely the existing local instruments (like taxation on energy products or fulfilment of covenant) and the cost of purchasing allowances.
- 2) The development of fair and proportionate policy measures relies on the involvement of experts from affected industry sectors being included in the development process from an early stage. In addition, sufficient time needs to be given for industry to consider the full implications of a new piece of legislation prior to its publication.
- 3) There is increasing evidence that consultations are only pro forma. There is no evidence of the contribution of these public consultations.
- 4) ET is a totally new instrument compared e.g. emission limits which have been applied since decades. Thus it is natural that there is big need for resources and learning.
- 5) Some MSs have implemented very complicated systems (allocation and monitoring / reporting). This also impacts the competitiveness of some companies across the EU.

Preference for IPPC as being technology driven with a playing field linked to local conditions

We want here to underline the disastrous "learning by-doing" development process of the EU-ETS: unrealistic deadlines, changing rules, lack of information...

Lifetime of our furnaces can reach 15 years. New policy instruments should take this industrial cycle into consideration (most measures can only be implemented at furnace rebuild). This is especially true for the Emission Trading Scheme for which the time periods are arbitrarily fixed. The EU ETS is not a policy instrument but is the tool to implement policy.

The time for implementation was very short and the whole process of allocation was under imense time pressure. Again, the revision phase is under imense time pressure as the NAP II will have to be submitted by end of june not leaving much time to learn form the first phase and change the directive accordingly.

The EU ETS is one of the most complex policy instruments and has been developed under high time pressure. Important topics like total cap size have not been carefuly treated for the first try and authority was required to apply certain changes in the very last minute. With a longer preparation with more resources fairer allocation would have been given birth to however final allocation numbers in our country are still unknown (September 2005)

The answers to this survey are based on the replies from eight of our members. Seven out of eight have responded to the questions relating to the EU ETS, six out of eight to questions relating to Direct rules and standards. Four out of eight have responded to the guestion on taxes/subsidies and also four out of eight to the question on voluntary agreements. One of six member companies refrained from filling out this part of the survey.

Companies have commented on the problems/requirements relating to monitoring and reporting.

Concerning CO₂-taxes, apart from the EU-level, the development in the member-states is extremely important. The fact that the national implementation in this field can be very different from one member-state to another may influence planning security and the business framework for companies negatively. Due to the fact that EU has only limited influence in this area (unanimous vote in Council required), this instrument does also have its limits.

The lack of consultation has already commenced in the process setting the overall targets and the system of the EU burden sharing agreement.

It is inappropriate to compare the introduction of emissions trading with other EU policy instruments that have been introduced over of long period of time and at times of differing environmental and economic conditions and for varying reasons. Such a comparison could lead to suggestions that one policy instrument is generally better than the others whereas it is vital to gauge the potential impacts of each policy instrument prior to and after its introduction within the situation in which it applies, as well as coherence between policy instruments and the overall regulatory burden on EU Business.

The EU ETS has been introduced on a very rapid timetable that has proven to be too tight for many Member States to achieve their requirements (permitting, allocation, distribution of allowances etc.) and too fast to allow for appropriate harmonisation to occur between Member States. The result, at present, is a partially functioning system that is not consistently applied throughout the Community. It is vital that the 2005-7 period is seen as a "learning by doing" period and that the lessons learned are taken into account for the period 2008-12.

Additional reasons that prevent the EU allowances market from 2.3 further improving liquidity apart from "difficult market access," "lack of market transparency," "non aligned trading contracts," "registries lagging behind," "parties with long positions not selling," "non credible CO₂ forward prices," "lack of experience with trading," and "uncertainty about next allocation"

2.3.1 Aluminium

Only CO, included

2.3.2 Cement

The market is too young to assess it and will be closed in 2,5 years. Therefore, it does not provide the predictability it is supposed to.

Current allocation rules, being emission based, only reward reductions through fuel switch and production decrease, but do not reward early action nor investments. As a consequence emission reductions are deferred, awaiting more effective allocation rules

Market is closed on December 2007

Current allocation rules only rewards reductions though fuel switch and production decrease, but does not reward reductions through investments, product development and innovation. As a consequence, emission reductions are deferred.

Even a small amount of deals have an immediate impact on price development

Even a small amount of sales has an immediate impact on price increase.

2.3.3 Chemicals

Due to the fact, that approx. 69% of the participants of the ETS are very small (max. 50000to CO, p.a.) these companies cannot install the expensive trading infrastructure. These companies should be excluded from the ETS.

Proposed restriction by our government on use of CERs in Phase 1

no trading experience so far

2.3.4 Others

EU ETS only started in January 2005, first reporting period terminates in February 2006, only then trade will really start. Trading activities at the moment only for testing or speculation purposes

Even a small amount of sales has an immediate impact on price increase.

2.3.5 Power

Uncertainties in allowances, the government is still in late with giving allowances to parties

The quotas haven't been allocated yet in the first periode.

fuel prices development uncertainty

Poor party credit, lack of underwriters for carbon allowances, interaction of trades with other markets

No market management mechanism available

Poor functioning of the CDM

In our company decision making process about trading deals is quite complicate

Fundamentals of the market are hardly known (insufficient statistics, no experiences, weak prognosis)

2.3.6 Steel

The allocation is a production quota, which is necessary to operate

Uncertainty about the allowances trade comes from the lack of clearness about the management and inspection method on companies' emissions annual communication.

Main ETS participants, namely elec. producers, are keeping the allowances prices at the unreasonable high as they are passing the full carbon cost to the elec. prices. Full market cost incl. the imaginary cost of free of charge allowances.

Too many buyers and too few sellers.

2.3.7 Governmental Bodies

The market is very young and these responses are based on subjective views of the carbon market, rather than being based on robust evidence. As Government, we are not trading experts and are not best placed to respond to these issues.

2.3.8 NGOs and Market Intermediaries

Uncertainty of parties' positions due to legal challenges of allocation decisions

Asymmetry between the long players (who should sell now) and short players who don't need to buy until 2007

The exclusion of credits from LULUCF projects

Transparency generally relates to the availability of information of demand and supply characteristics, not the ability to find buyer and seller which is definition of liquidity

Associations

Today, all players consider the allowances market is driven by energy prices and the capacity of a few players to transfer their costs to their products and services. An economic analysis is required in order to explain the price mechanisms.

Trading allowances is not in the economical focus of the companies; economical focus is to produce and to sell chemical products .Allowances were issued too late (due date 28 February 2005)

Appr. 69 % of ETS participants are very small (max. 50.000 tonnes CO_2 p.a.), these companies cannot establish the expensive trading infrastructure and should be excluded from the ETS. CO_2 market is too young for correct assessment.

The market is dominated by large players such as the generators - see electricity prices versus CO₂ prices. Lack of banking removes manufacturing incentive: furnace life is often 12-15 years.

JI/CDM not operational

Supply and demand: too many buyers and not enough sellers. Main participants, namely electricity producers, gain significant economical benefits of high prices at the markets thru the opportunity costs. They keep artificially the price high (windfall profits)

Only CO, is currently in the scope

I have no idea yet

The market is too young to assess whether it is functioning properly or it would be lose in 2.5 years. Therefore it does not provide the predictability it is supposed to provide.

Some buyers have not yet come to the market since they think the price might go down next year.

2.4 Comments on effect of EU ETS on long-term decision making

2.4.1 Aluminium

Aluminium production is intimately linked with Energy (Electricity) costs. The ETS is having a strong impact on electricity prices and is therefore impacting all industry decisions. As Aluminium is traded as a global commodity, cost increases in Europe can not be passed on to customers. This will result in change sin sourcing - delocalisation from Europe to other areas.

2.4.2 Cement

In its current form, the EU ETS adds significant uncertainty for operational and investment decisions in the EU: the NAP rules are counterproductive, give the wrong signals and are most likely not sustainable, if not already for 2008-12, at least not for post 2012. The EU cannot continue to play cavalier seul in the world, but will have to fit in a global framework, which needs another architecture to engage not only the USA and Australia, but probably also many EU Member States.

The current counterproductive rules, the EU message that little will change for the 2008-12 period but the need to fit in a world-wide framework, leads to deferral of decisions and implementation of no-regret measures only.

Yes, we already have postponed major restructuring decisions due to uncertainty on the CO, market and the continuity of the rules. Also, we believe that the lack of visibility does not allow the market to promote CO₂ reduction investments whereas it should be its main role. The next step, with the level of CO₂ value in the market, is to put at risk major volumes of exports from two European countries.

In general our plants are optimized already - so we can identify CO₂-reduction-possibilities very hard. But if the investment causes an impact on CO₂-emission, the impact gets quantified and listed in the investment-calculation like other impacts (e.g. to save electricity or human resource).

We want to raise our CO₂-efficiency by changing fuels. It's nearly impossible to raise our energy-efficiency.

2.4.3 Chemicals

Problem is if you are investing for 20 years you need to know with a bit more certainty the gyt policy in this area

Costs for indirect emissions e.g. full opportunity cost of the energy production. Estimation and comparison of the long term economic impact of EU-ETS on investments in installations in and outside of EU25.

Decision whether a new entrant will be economic and whether it will be built in or outside Europe.

Our company will consider to invest elsewhere of instead of producing in EU if energy is a major part of the production costs. We are committed to produce in the most efficient way but in EU we do not benefit from that since emission allowances are based on grandfathering. In particular the effect of the scheme on the electricity price is disturbing our cost structure in Europe

The EU-ETS should and is expected to have a major influence on investment decisions, however currently predictability and legal uncertainty are completely lacking. Therefore, investments to reduce emissions are completely on hold; the major theme of allocation rules across Europe is that benefits of current lower emissions because of recent investments in emission reductions, are greedily taken away with argumentations that make no sense at all. The scheme should enable economic growth, growth of welfare in the old and new Member States, while at the same time renewal of the industrial base is stimulated under long-term credible allocation rules to secure predictability and legal certainty. Same production plants get different allocations in different Member States. Efficiency is apparently no yardstick or if it is historical production is a yardstick as well and numerous rules limit the effect of efficiency.

Cap & trade is a theory that is build upon a limited number of wrong assumptions that are not based upon facts. Cap & trade enhances frozen market shares in violation with the EC Treaty competition rules. This system has perverse effects as it leads to serious economic distortions and it hinders innovation.

An important shortcoming is that early action is not clearly rewarded in most Member States. In my country it is rewarded, but there is a maximisation rule, the calculation method is scientifically incorrect (with a so-called beta-factor) and producers can just be unlucky with reference years; these factors do not stimulate efficient producers to undertake further reductions.

The current guidance note on allocation is on all essential elements in contradiction with itself, it is an attempt to combine cap & trade with the requirements of the Directive and the ECTreaty. This combination is theoretically not possible. The reasoning to show that letting new entrants buy all allowances should be equal treatment speaks for itself. This note argues that no distortions are allowed but immediately allows that a variety of allocation methods can be applied. The guidance note needs a complete revision to achieve sensible and effective allocation rules, which means abandoning the cap & trade theory.

The explanatory memorandum of the draft Directive by the Commission states that the Directive fully complies with the polluter-pays principle. This is true. However, scientific literature clearly shows that cap & trade based on historical grandfathering "runs contrary to the polluter-pays principle core, violating even the principle's weak form ..." Apparently the transposition of the Directive, allowed and even enforced by the Commission for example by forbidding ex-post correction for actual production, leads to an ineffective scheme with numerous distortions. The Commission (in particular DG Environment, DG Competition) has the power and the legal obligation to provide for an effective scheme obeying the requirements of the Directive and the ECTreaty.

Our installations are engaged in GHG reduction measures. Our power generation development is based on NG combined cycle generation. We are engaged in CDM projects and on JI.

We are considering further investment in CHP plant. Many factors come into account, and uncertainty re Phase 2 allocation is one of them.

2.4.4 Other

Our business is focused on energy efficiency. In most cases, curbing emissions implies increasing energy efficiency. Return on energy efficiency investment is improved by putting a value on carbon, but the main driver is the cost of energy.

Sensibility studies on investment decision involving energy consumption include hypothesis on CO₂ allowances price

Investments reducing CO₂ emissions will be favored

costs for emission certificates form one important factor for the rentability calculation for new plants (whether takeovers or Greenfield projects); but: to shift production capacities outside the ETS area is no option for us, because in our sector production is always local (high specific weight of our products -> high transportation costs!)

There are other issues like energy taxation, environmental requirements,...

2.4.5 Pulp and Paper

The EU ETS and its indirect effect on electricity prices become an important factor influencing on investment decisions. An other point is that we need a clear procedure for expansions or new plants.

CO₂ credits, used or saved, should be considered as a financial value and therefore they have influence on costs and return rates. Indirect effects on the price of electricity are of very high importance and therefore affect decision making.

The EU ETS and its indirect effect on electricity prices has indeed become an crucial factor influencing on EU competitiveness and thereby investment decisions.

2.4.6 Power

Future expansion of our production (utilising the capacity and new investment) is necessary but receiving the necessary allowances is a big question mark.

I think, the EU ETS is one of many other issues. Because, there are other important eg.: operational permit, environmental permit and other things eg.: fuel prices, maintenance etc...

Relevancy of ETS impact on NPV of an investment is virtually high but it is compromised by the long-term unpredictability of regulatory base and actions.

Investment decision are based on long term forecasts. We have to test our decisions against likely outcomes of carbon pricing and allocations

The impact of the EUETS is to establish a cost of carbon which is factored, in the same way as other costs, into our decison-making process

Our current view is that the EU ETS, as presently constituted, is not capable of sending the long term signals required to underpin investment in low/zero carbon technologies. Political decisions in the EU & Internationally have the potential to significantly affect the demand for CO, abatement, creating risks for investors that limit the viability of long term investment decisions. If the Power Generation Sector is to invest to make significant carbon reductions, long term investment signals are required. It is difficult to make long term investments in abatement when the magnitude of abatement required in the long term is unknown.

Forward CO, costs, as a component of forward fuel costs, along with capital costs and forward electricity prices are the drivers for investment decisions.

Regarding: PRICING IN - At present the Electricity Regulator has specified only the net carbon costs may be priced into electricity charges. Consequently an expected average cost of carbon for 2005 is factored into operational decisions.

Future investment plans in new generation capacity have to take into account that within the

EU-ETS, the emission of CO₂ will have a cost that will have to be assessed when analyzing the feasibility of the different type of technologies

The results of the EU ETS will have an influence on the next years policies both at a European and at international level. If the ETS will prove to be unsustainable from a competitiveness point of view, it is likely that also the climate change strategy and the actions adopted to combat climate change will be revised both at European and at international level. A possible revision of those actions will have of course an impact on our company decision making on long-term issues.

Our installations are engaged in GHG reduction measures. Our power generation development is based on NG combined cycle generation. We are engaged in CDM projects and on JI.

CO₂ aspect has been integrated in our investment/divestment/acquisition procedures, with monetary valuation of CO₂. The procedure is part of our investment manual.

CO₂ allowance price is now a new cost to take into account in decisions in all time frames. It affects power purchases and sales at different time frames, and also longer term decisions, like investments. Internalization of environmental costs is an unstoppable trend, and the importance of these costs will grow both at short and long term. Reduction of emissions of CO₂ along with other environmental issues have been a key issue in my company's decision to invest heavily in CCGTs and renewables.

We assess all environmental aspects and consider EU ETS as well in our company's strategy and development plans.

My company plans to install a new lignite-fired unit in 2012. Carrying out this project significantly depends on the rate of free, guaranteed CO₂ allowances.

Allocation method and expected price level are decisive for fuel choice. If allocation method is uncertain investment decisions involves too high risks to be justified. CO₂ allowance cost will be a major cost component for power plants based on fossil fuels.

2.4.7 Refineries

We are used to making decisions taking into account uncertainties and EU ETS is one of these which has signficnat cost.

Our installations are engaged in GHG reduction measures. Our power generation development is based on NG combined cycle generation. We are engaged in CDM projects and on JI.

2.4.8 Steel

The decisions will take into account the minimising og the risk to have to pay for CO₂. Future projects are evaluated on basis of risks for CO₂ constraints. The system induces a great incentive to relocate production to less constrained areas.

Investment in Energy Saving Equipment

The EU-ETS system uncertainties for the future make almost impossible to decide about long term investments and incentivate to delocalize productions in unconstrained areas of the world.

Long term decisions concerning investments e.g. increase of production capacity surely have ETS as a key issue, especially for decisions concerning geographical locations of new/ revamped installations. There is a concrete risk to loose interest in new investments in EU countries.

Long term decisions, especially about future investments towards new capacities or the enlargement of existing capacities, are affected. In this context uncertainty about the scheme has a negative influence on decision making.

Uncertainty in electricity price has strong impact on decisions

Due the seriousness of the future climate change actions needed and the fact that it seems that EU is working with rigid systems that seems not to be globally accepted, naturally in long term capacity decisions the EU ETS is one of the key issues considered.

Uncertainties about the scheme, the future allocation and the prize for the CO₂ certificates does hinder long term investments decisions, wait and see seems to be the rule, in a global steel market it is, in contrary to the local energy markets very hard to prize in CO₂ costs

All type of long term decisions, especially about future investments towards new capacities or enlarging existing capacities are affected. In this context uncertainty about the scheme has additional negative influence on decision making. "Wait and see" is the attitude arising in consequence.

The decisions will take the minimising of the risk to have to pay for CO2 into account. Future projects are evaluated on basis of risks for CO₂ constraints. The system induces a great incentive to relocate production to less constrained areas.

Ultimately the EU is seen as a less attractive prospect for current and future investment...

2.5 Additional comments on allocation periods

2.5.1 Cement

The cement industry is a capital-intensive industry and therefore needs long-term predictability. Long term predictability (15-30 years)means that the rules are known from the beginning and are not changed during a period. The optimal period length depends on the allocation methods, which should preferably be based on CO₂ efficiency than on absolute cap. Any absolute cap should be accommodated with ex-post adjustments. We think that their allocation according a benchmarking system ist the most useful way. The companies "best of class" must not be charged with a reduction target. This way is the one which is compatible with the Lisbon strategy on growth and employment. Supposing the application of the benchmarking system, the Member States question of the planning reliability in the face of the Kyoto Target is remaining.

Critical for the success of the ETS is the long-term predictability of the obligations that will come to the industry, i.e. 10 to 15 years if not to say 30 years.

Long-term predictability means that the rules and targets are known from the beginning and do not change during the period. With an absolute cap - independent of production volume the uncertainty and unpredictability increases with the length of the period.

Long-term predictability and long-term periods with an absolute cap are incompatible. Only Performance Based Allocation can deliver predictability, either with short periods without ex-post adjustment for production, or with long periods with ex-post adjustment. In fact, in case of Performance Based Allocation with ex-post adjustment the length of the commitment period becomes irrelevant.

Our capital intensive industry needs long term rules (periods of investment are beyond 30 years). If periods of ETS are short and, on top of that, rules risk to change, it becomes impossible to take risks.

Second, the 5 years period with no ex-post adjustment is a major problem. If the market grows, additional tons sold suffer a marginal extra cost of CO₂. If the market declines, there is an excedent of allocations which is equally illogical.

The cement industry is a capital-intensive industry and therefore needs long-term predictability. Long term predictability (15-30 years) means that the rules are known from the beginning and are not changed during a period. The optimal period length depends on the allocation methods, which should preferably be based on CO₂ efficiency rather than on absolute cap. Any absolute cap should be combined with ex-post adjustments.

The cement industry is a capital-intensive industry and therefore it needs long-term predictability (15-30 years). That means that the rules should be known from the beginning and should not be changed during a period.

The optimal period length depends on the allocation methods, which should preferably be based on CO2 efficiency than on absolute cap. Any absolute cap should be accommodated with ex-post adjustments.

2.5.2 Chemicals

We think that the allocation according a benchmarking system is the only useful way. The companies "best of class" must not be charged with a reduction target. This way is the one which is compatible with the Lisbon strategy on growth and employment. Only when the benchmarking is established, the periods can be extended up to more than ten years.

Longer allocation periods bring more certainty for investing planning. If the ETS is international which equal national targets that are also energy efficiency oriented, the periods could be longer - if the ETS continues as now, due to the great uncertainties related to the framework, the periods cannot be too long

Supposing the application of the benchmarking system, the Member States question of the planning reliability in the face of the Kyoto Target is remaining, independently if 5 year or a longer period. There must be always the possibility to adjust allocation like the yearly correction of the GDP. The success of the EU-ETS depends on the allocation methodology used.

Energy- and capital-intensive industry needs long-term predictability. The optimal periodlength depends on the allocation methods, which should preferably be based on energy and CO₂- efficiency than on absolute cap. Any absolute cap should be adapted with ex-post adjustments. The Flanders model should be taken into account.

We very much oppose against the principle that operators get emission allowances without any relationship with the actual production. We promote instead an allocation of allowances per unit of production, taking into account the technological potentials to reduce the emission. If the reduction potential is increasing the allocation to the regarded operators can be reduced gradually so that operators can respond by improving the processes thus avoiding costs for buying emission allowances. In short, we want a trading scheme based on performancebased, ex-post allocation and in that case the length of a trading period becomes immaterial.

If the current allocation rules remain longer trading periods are no cure to the fundamental problems but would lead to other problems such as an even greater uncertainty for investments (new entrants), downward pressure on economic growth and welfare.

Operators should be in a position to decide and implement reduction measures, with a long term view.

2.5.3 Others

Most investment decisions are long term and having the structure of the allowance path would reduce uncertainty considerably even if the actual amounts might change as each period approached.

Most emissions reductions imply investments with a long lead-time. Knowing the allocations reasonably ahead is therefore critical. Consistently with this view, allocations for 2008-2012 should definitely be known by 30 June 2006, as provided in the directive

Allowing trading across allocation periods would increase certainty. The allocation could be changed, but trading between periods could soften the effect and allow longer views to be

4 years in our company is the time lag between deciding an investment and the investment running at full capacity

We are a very dynamic and fast paced industry. The market is always changing. Allocation periods would need to be fairly frequent as growth, changing trends and foreign exchange movements all have large impacts on the cost.

Business plans are set up at least 3 years in advance!

2.5.4 Pulp and Paper

In general, longer allocation period should bring more certainty that capital-intensive industries require.

If the system was international (with national targets that are not very different or without national targets), and with efficiency related targets, the allocation period could naturally be long. But if the system continues as it now is, the allocation periods cannot be too long, because of great uncertainties related to the framework within which it is operating.

Power

More important than the length of the period itself is to observe the same and equal rules.

A long term plan for allocation should be set up to provide long term certainty for investors. while the exact allocation may not be clear, a long term plan for how allowances will be allocated should be derived

The duration and certainty of allocation periods have a significant impact on both the operation of the EUETS allowance market and also on the decision making process of business. The shorter allocation periods are and the more frequently they are amended or expected to be amended, the greater the uncertainty and hence risk to businesses and their decisions. Increased risk leads to greater volatility in prices and may deter investment.

In order to provide a degree of market certainty in the carbon market it is essential to deliver

a statutory target for carbon emission reduction (up to 2025) and have a number of shorter/ medium term allocation periods within that time frame. Alternatively, it could be acceptable if the commission were to develop a much longer-term allocation period (up to 2025) in the absence of a longer-term statutory target.

If the Power Generation Sector is to invest to make significant carbon reductions, long term investment signals are required. It is difficult to make long term investments in low carbon technology when the magnitude of abatement required in the long term is unknown. Our current view is that the EU ETS, as presently constituted, is not capable of sending the signals required to underpin investment in low/zero carbon technologies. Political decisions in the EU & Internationally have the potential to significantly affect the demand for CO, abatement, creating risks for investors that limit the viability of long term investment decisions.

Increasing allocation periods would provide greater certainty of compliance requirements. This will also establish a reasonably predictable medium to long term demand curve and carbon price visibility encouraging investments on the time-scales (15-20 years) necessary to deliver deep emission cuts.

Advanced knowledge of allocations should be based on the length of the allocation period. If future allocation periods are likely to be longer than 3 years, advanced notice of allocation periods should be lengthened accordingly. Future allocations should be determined once a sufficient period of time has elapsed in the current allocation period. A shorter notice of allocations in advance of the allocation period will increase market uncertainty concerning carbon prices and hence limit the availability of capital for long-term investment.

Installations face two elements in relation to allocation uncertainty; the total/sectoral amount and the methodology – both of which may change between each period. A longer allocation period would reduce uncertainty but, if subject to change, would be of little value in this regard. It would be of benefit if at least one of the elements could be fixed i.e. a constant methodology or allocation in perpetuity.

for the electricity companies it is very important to have certainty on the issues that affect their long-term strategy. We consider that a 10 year allocation would be reasonable.

Ideally, the length of allocation periods should be consistent with the life of investments. 10 years would be shorter than the life of investments in the electricity sector, but would allow for some flexibility to possibly adapt to the evolution of scientific knowledge and public policies. Substantial anticipation of decisions about the allocation is necessary to avoid, as much as possible, information gaps in the typical reference periods of industrial plans.

Operators should be in a position to decide and implement reduction measures, with a long term view.

For 10 years allocation period: Closer (than 3 or 5 years) to the investments' pay-back time.

For 3 years in advance: the realisation time of many investments equals 2-4 years However, we would like to emphasise that the overwhelmingly biggest uncertainty that also tends/is likely to postpone or prohibit the climate-friendly investments is the absence of longterm (beyond 2012) global climate policies.

First of all, once the allocation is done, it must remain unchanged in order not to distort the market, as participant's behaviour could be affected in order to acquire a better position for the future revision of the allocation. Moreover, it makes no sense, on one hand, to extend the length of the trading period in order to increase certainty and minimize risks related to investment decisions, and, on the other hand, to change allocations inside the period increasing uncertainty at its turn.

Regarding the length of the trading period, if high percentages of free allocation continue, the distributional effects of this free allocation will increase as the trading period becomes longer. That's why, my company supports maintaining the length of the trading period at 5 years. However, information about the total amount of allowances to be allocated for the following 15 years should be included in the NAPs in order to give a needed reference to investment decisions.

If auctioning is established to allocate a main part of the distributed allowances, the distributional effects of free allocation will nearly disappear. Then, the allocation period could increase to about 15 years in order to increase certainty and decrease risks in investment decisions.

We agree, if the allocation period will be longer, the allocation have to be revisited during period and this will make scheme more complicated and arises new uncertainties.

The main reduction measure in the power industry is reinvestment in power plants. Several years of planning and approval are necessary in advance. Therefore conditions must be available early enough to handle the risk exposure.

If a longer allocation period is chosen revisions should be avoided whenever possible.

2.5.5 Refineries

We think there is value in the long term direction of allocations being set even though the exact numbers may change as a period gets closer. This enables investment plans to be made with a reasonable band of uncertainty

Operators should be in a position to decide and implement reduction measures, with a long term view.

There is an obvious need for additional certainty with respect to capital planning decisions. Knowing our allocations several years in advance would provide more certainty.

2.5.6 Steel

The allocation level effectively fixes maximum production levels. To face such a situation decisions should be unambiguous and stable in time. Investments decisions in steel business are typically for more than 20 years and can go up to 50 years.

Investment decisions in our sector cover 20+ year periods, and must be planned at least 3-4 vears in advance.

There is a need to have a clear view of the external scenarios for the longer period as possible, due to entity and duration of investments in the steel sector. Long term targets and fixed rules for extended periods are a reference for less uncertainties in the investment, as it is the possbility for banking between periods.

The allocation level effectively fixes maximum production levels. To face such a situation decisions should be unambiguous and stable in time. Investments decisions in steel business are typically for more than 20 years and can go up to 50 years.

Research and Development in new technology is also an important aspect of delivering carbon savings. However, such projects take time and investment to deliver.

From the investment decision point of view long term targets should be clear and shouldn't

create more investment uncertainties.

Therefore rules should remain unchanged within the period and allowances need to be transferable across phases. In those circumstances where banking would be allowed between trading periods the length of each period would be less relevant.

Normally decisions on large capital investments are done for more than 10 years. ETS should not create any extra uncertainties.

The investment cycles in the steel industry are very long, investment decisions needs a great trust in long term stability of government and their framework. Rules should not be changed within longer periods

The allocation level effectively fixes maximum production levels. To face such a situation decisions should be unambiguous and stable in time. Investments decisions in steel business are typically for more than 20 years and can go up to 50 years.

Research and Development in new technology is also an important aspect of delivering carbon savings. However, such projects take time and investment to deliver any benefits, thus, need stable conditions.

From the investment decision point of view long term targets should be clear and shouldn't create more investment uncertainties.

Therefore rules should remain unchanged within the period and allowances need to be transferable across phases. In those circumstances where banking would be allowed between trading periods the length of each period would be less relevant.

However, a possibility to adjust for market changes would be beneficial.

2.5.7 Governmental Bodies

We consider that the length of allocation periods and the timing of allocation decisions are key aspects of the future design of the EU ETS and merits further discussion but are not yet in a position to express an opinion on these questions. There are strong arguments that for retaining the flexibility provided by 5 year allocation periods while the Scheme is being established and allowances are substantially allocated free of charge. However, the scheme will only achieve the desired outcome of the incorporation of the cost of carbon into investment decisions for the medium and longer term if industry has greater certainty about the price of carbon in the future.

Industry considers that longer allocation periods and earlier decisions on allocations is one way in which greater certainty could be provided. It would therefore be premature for us to express a clear preference on this issue while we are still in the process of weighing up how best to address the question of how to provide additional certainty in the longer term. We trust that we will have further opportunities to discuss this and other related issues s between at a later date. There is also a read across between the question of optimum future periods for ETS and the EU position on optimum length of future commitment periods post 2012.

There is the need of middle and long term functioning of ETS, much more than the 5 years period; But it is unclear, what happens, if in reality more CO₂ was emitted in a period than is allocated

2.5.8 NGOs and Market Intermediaries

Five year allocations with a year's notice are not long enough to provide the long-term signals required for new investments to reduce emissions (eg, a more-expensive, more-efficient

generation plant). They also create a threshold effect, where potential investments for the following phase are delayed pending the resolution of that phase's allocations which are only known a year prior to the start of that period. Extending the allocation period to 10 years or more and/or determining the allocations as far as possible in advance of the allocation period would ameliorate this problem. An alternative approach would be to adopt a rolling 10 year allocation window, eg, set allocations for 2008 to 2017 in 2006, but then in 2007 set the allocation for 2018 and so on. (Even doing this for a rolling 5 year window would represent a significant improvement).

Rather than making the decision in advance, the best option would be to give the allocation rule a long time in advance. For instance, it could be decided that in the next 4 periods, each country should allocate 5% fewer EUAs than in the previous period. One year in advance, the countries should make the decision about the actual allocation and the sector burden of these 5 %. This would allow investors to have an idea of the general direction, and allow countries to make the actual allocation only one year ahead.

While long-term allocation would be preferable, given the uncertainty on post-2012 this is not realistic. Hence all debates on long-term allocation are meaningless unless the EU + member states decide to "cover" a possible gap of emissions once there is a post-2012 regime. If not, there need to be other solutions to the lack of certainty.

Important that draft allocation is called for 2 years in advance

Allocation periods should be in sync with any future international regime

The optimal length of the allocation period is strongly dependent on the mode of allowance allocation. Under auctioning (which we recommend) we recommend a long period setting an emission path for the next 10 years. Under grandfathering though, the allocation period has to be shorter to be flexible enough to respond to changes in the ETS sectors, when deciding about sector and installation level allocation.

But I am not 100% certain that this is the best approach. Auctioning (on a yearly basis) could probably be an additional approach

A market-place will undoubtedly increase the liquidity of a market. Price transparency based on transactions inspires confidence in a market. It is easier for all to plan strategies, including trading strategies, if information is published as far in advance as possible. Many problems currently exist because the expertise is not in the right place within the company with too much focus on strategies to reduce emissions and not enough on how to cover the risks of not reducing emissions and reaping the benefits when emissions are reduced.

Period length is of secondary importance - long-term certainty of allocation mechanisms and cap levels (from eventual reduction targets) are most important and that extends to 20-30 years.

Allocation periods do not need to be extended as long as it is clear through other policies that the respective government is committed to absolutely reduce greenhouse gas emissions in line with science base requirements to reduce those emissions, and as long as other policies are implemented that support a downward trend in emissions, such as strong and effective energy efficiency standards on the demand side, policies favouring co-generation, policies requiring stricter industrial recycling, e.g. in aluminum industry, policies that increase energy efficiency in transport sector and lead to a modal shift, policies that decrease transport demand

2.5.9 Associations

For 2008-2012 period, my organisation considers that legislative modification is needed and

therefore, the corresponding allocation plan should be presented about 3 to 6 months before the start of the period in order to integrate the legislative modifications adopted. After 2012, industry needs long term views: in this perspective, allocation periods should, at least, be made for 10 years with an adjustment mechanism in cas of modifications. The post 2012 allocation methodology should be based on specific emission targets which allow more flexibility for growth.

In view of the long lead times for investment in power generation, it is important that there is sufficient clarity in the Commission's long-term planning to allow the Power Generation Sector to deliver the substantial investment programme needed to reduce CO, emissions and maintain electricity supplies in the period to 2020.

Our industry needs stable framework conditions for investment and production planning which are not given in the case that every 5 years new caps with new costs, which cannot be calculated, are fixed.

We think that the allocation according to a benchmarking system is the only useful way. The companies "best of class" must not be charged with a reduction target. This is compatible with the Lisbon strategy on growth and employment. Only when benchmarking is established, the periods can be extended up to more than ten years. Longer allocation periods bring more certainty for investment planning. If the ETS is international with equal national targets that are also energy-efficiency-oriented, the periods could be longer – if the ETS continues as now, due to the great uncertainties related to the framework the periods should not be too long.

Supposing the application of the benchmarking system, the Member States' problem of planning reliability in the face of the Kyoto target is remaining, whether there may be 5 years or a longer period. There must always be the possibility to adjust allocation similar to the yearly correction of the GDP. The success of the EU ETS depends on the allocation methodology used.

Energy- and capital-intensive industries need long-term predictability. The very best periodlength depends on the allocation methods, which should preferably be based on energy and CO₂ efficiency rather than on absolute caps. Any absolute cap should be adapted with ex-post adjustments. The Flandern model should be taken into account.

The heavy manufacturing community must have long term certainty to invest. The current cap and trade system is asking industry to make predictions at installation ("micro") level that government cannot make or is struggling to predict at a "macro" level. The often heard answer to the destruction of certain industries is too simple i.e. "there will be winners and losers. These losers represent EU: industries, jobs, communities, lives and national resources. Long term certainty in cap and trade needs to be tempered with ex-post adjustment based on real supply and demand characteristics. It will of course be necessary for agreement to be reached at EU level to make this possible. Once investment in the EU is stopped in industries (with long lead in times or that have equipment such as furnaces with comparatively long lifetimes) will not only be very reluctant to rebuild in the EU but may have shifted production entirely to countries without such constraints. It would be very difficult to get it back. This issues needs addressing to avoid leakage.

Capital-intensive industry need long-term predictability. Long term predictability (15-30 years) means that the rules are known from the beginning and are not changed during a period. The optimal period length depends on the allocation methods, which should preferably be based on CO₂ efficiency rather than on absolute cap. Any absolute cap should be combined with expost adjustments.

Extended (10 year) trading periods will become impossible to administer. It could also lead to an allocation revision which would create uncertainty. The allocations should be fixed and impossible to change during the trading period.

Kyoto ends in 2012. My organisation advises not to continue the EU system unless a global system has been agreed for the time after 2012. The system must be thought through for viability in a global competitive market. The system should stop and focus be put on a global regime, and the emphasis in Europe must be on energy efficiency. Whatever the climate change instruments adopted, there is still a need to put more effort into developing the technological solutions needed for fundamental step-change improvements in the longer term. There should be more coordination on an international basis with industry sectors capable of developing relevant technologies and more direct support for such work.

It is not the number of years in each trading period that is the most important for companies. It is rather the consistency of the pre-set allocations during each trading period that matters. It is important that the allocations fixed should not be changed during the trading period. It is very difficult to give any comments on how long the trading period should be in the future or when the allocation need to be made. The reason is that all the elements of emissions trading depends highly on the other elemenets of the scheme (method of allocation, new entrants etc.) These questions and their impacts need to be analysed more.

The nationally based allocation is in conflict with a global economy where national borders become less important. Therefore the need for certainty to invest dictates early information on allocation, On the other hand this way of planning is in conflict with the high mobility in international patterns of trade and FDI. A more flexible alternative to Kyoto is therefore necessary.

If the Kyoto model is continued after 2012, early notice is necessary. Longer trading periods than 5 years could be an advantage, increasing certainty in decision making. However, this would depend upon allocation methods and can therefore not be answered by only looking at "the number of years" in the trading period.

Current approach does NOT provide sufficient certainty. Length or decision period are not the issues, but the lack of certainty that allocation rules will not change from period to period. This makes planning for long-term investment more difficult. Moreover, long-term reduction targets (which determine to a large degree the outcome of allocation) are unclear and thus provide uncertainty. Providing more certainty should focus on these issues instead of length or decision period.

Contracts are determined for periods of up to 30 years. Certainty about the regulatory environment is crucial in enabling companies to make the most efficient investment decisions possible.

Preference depends on New Entrant, closures and allocation regime, ie declining industry and no NEC process = long allocation period preferred, whereas expanding industry and NEC process = short allocation period preferred. . If Grandfathering baseline or predicted output then required growth rates difficult to forecast, whereas if benchmarking capacity then longer allocation period is viable

The allocation level effectively fixes maximum production levels. To face such a situation decisions should be unambiguous and stable in time. Investments decisions in our business are typically for more than 20 years and can go up to 50 years (note: this might justified the NO to the question above).

Research and Development in new technology is also an important aspect of delivering carbon savings. However, such projects take time and investment to deliver.

From the investment decision point of view long term targets should be clear and shouldn't create more investment uncertainties.

Therefore rules should remain unchanged within the period and allowances need to be transferable across phases. In those circumstances where banking would be allowed between trading periods the length of each period would be less relevant.

Post Hoc Adjustment is needed to fine tune long term production forecasts.

Long term planning is essential for business investment decisions

If the decision about the allocation should be made further ahead of the start of a trading period, how early in advance should the allocation be decided? 3 years in advance

The manufacturing industry needs long-term certainty but this is not possible with a cap and trade when you have to foresee your production 5 years in advance (this is more a characteristic of a centrally planed economy than a liberalised market). Therefore, the allocation periods should be of more than 10 years, coupled with an ex-post adjustment mechanism of the allocations.

From my experience with the our allocation plan I know that 5 years is already a very long period to oversee. Extending this period will make the allocation process a shot in the dark.

Our industry is a capital-intensive industry and therefore needs long-term predictability (15-30 years) ehich means that the rules are known from the beginning and are not changed during a period. The optimal period length depends on the allocation methods, which should preferably be based on CO₂ efficiency rather than on an absolute cap. Any absolute cap therefore should only be accommodated with ex-post adjustments.

Among our members there are different opinions about whether the allocation might be revisited and changed in case of a longer allocation period.

It is key that changes to the allocation procedure are predictable and provide clarity and sufficient lead time for ETS participants. It needs to be understood that in a period of 1-3 years only small projects can be delivered. Larger CO, reduction projects require clarity for a period of 4-10 years. As a minimum the future total pool of allowances should be made known well in advance, as this is important for the market to know.

Industry absolutely needs predictability of standards and legal certainty, since it has long periods for planning and financial returns. Therefore, there must be no changes of rules during the periods. The allocation should be based on CO, efficiency with ex post adjustments. It is not the length of the trading period, but the length of the validity of allocation methodology and rules which matters. Here must be stability and predictability.

It is not the number of years in each trading period that is the most important for companies. It is rather the consistency of the pre-set allocations during each trading period that matters. In order to make the most efficient investment decisions, companies need to know in advance what the allocations will be for the trading period ahead. These allocations should then be fixed and not possible to change during the trading period.

In other words, certainty of allocation is the first priority for us only second comes the length of the trading period.

In today's global economy where national borders are less important, there is a need for certainty to promote investments, such certainty dictates the need for early information on allocations. On the other hand, early decisions on allocations are in conflict with the high volatility of international trade patterns and FDI. A more flexible alternative to the current Kyoto Protocol is therefore necessary. If the Kyoto model is continued after 2012, early notice is required. Longer trading periods than 5 years could be an advantage, since it will increase certainty. However, this issue is more complex and would depend upon allocation methods

and can therefore not be answered by only looking at "the number of years" in the trading

If banking between trading periods is allowed, the number of years in each trading period would be less important.

2.6 Additional comments on benchmarking for existing assets

2.6.1 Aluminium

Aluminium is a global industry and as such any standards must be set globally. The industry has already made some global commitments and we should continue on this road of voluntary, global agreements.

We favour global standards linked to voluntary agreements.

2.6.2 Cement

My country's cement industry is of the opinion that benchmarking is an interesting alternative to look at provides that benchmarking is understood as "perfomance based" (not based on BAT) and that corrections for site specific factors like size, technology, raw material moisture etc. are definitely part of such a fomula. Within the sectors covered by the ETD and in the cement sector itself, performance based allocation should be encouraged as arching principle as a way to avoid distortion of competition and to reward the best performers who have taken early actions. In this case, the allowances allocation should allow for some form of ex-post adjustments and keep the necessary flexibility that will be required. The cement industry strongly opposes the carbon intensity of the fuels being the only benchmark for the distribution of certificates between the branches which is rigth now the system.

None of the above questions can be properly answered by simply ticking one of the boxes. Under benchmarking we understand "Performance Based Allocation" but certainly not Best Available Technology Benchmarking.

My Company is of the opinion that the performance standards should be set at European level, with a limited number of objective factors that allow to adapt the performance standard to national or regional conditions, such as the availability of resources (such as for the cement industry slag, fly ash or puzzolanic material).

Performance Based Allocation should go in two steps:

- 1) From country to industry sector level with the production volume defined as a forecast volume (o.a. based on macro-economical parameters)
- 2) From industry to installation level, based on production volumes in a recent reference period or technical capacity.

We are of the opinion that benchmarking is an interesting alternative to look at provided that benchmarking is understood as "performance based", and is not based on BAT. Performance based allocation should be seen as a way to avoid distortions of competition and to reward the best performers who have taken early actions.

Moreover, the performance based allocation of allowances should provide some form of expost adjustments and keep some flexibility (to take into account local circumstances, such as technology, the accessibility to secondary raw material and alternative fuels...). This is why we strongly favour national benchmarks but believe that more than 3 benchmarks will be needed

to reach the necessary flexibility.

Finally, we would like to distinguish two approaches in the allocation process. This will explain our balanced answer on activity rates that multiply the CO2 efficiency benchmark:

- To define the total bubble to be allocated to a sector (e.g. the cement industry) : as an activity rate, we would use the expected / forecast production.
- To distribute this sectoral allocation to individual installations: as an activity rate, we would use historic (in a reference period which is the same for all installations) production volumes.

Benchmark for each product and process

We have the opinion that benchmarking is an interesting alternative to look at provides that benchmarking is understood as "performance-based" (not based on BAT) and that corrections for site specific factors like size, technology, raw material moister etc. are definitely part of such a formula.

Within the sectors covered by the ETS and in the cement sector itself, performance based allocation should be encouraged as arching principle as a way to avoid distortion of competition and to reward the best performers who have taken early actions. In this case, the allowances allocation should allow for some form of ex-post adjustments and keep the necessary flexibility that will be required.

We have a small cement plant. Now all around the world cement plants with more than 5000 tonnes per day are built. So the efficieny of this larger plants are better than of our small plant although we have a modern plant. But what shall we do? We don't need 9 plants with 5000 tonnes in our country.

2.6.3 Chemicals

We do not believe that the benchmarking system is feasible without considering the specific situation of the site. Therefore we strongly support the benchmarking system but we insist on a various number of specific benchmarks (more than 3...).

Because of the problem that small emitters are often out of the scope of possible benchmarks we believe that the benchmark will work only for the branches expressly named in the annex I of the ET-directive. Problematic installations are often covered via the 20 MW clause of Annex I, Nr. 1 and do not constitute a branch (eg.: a car producer can not be compared with a chemical industry or textile industry). We think that these installations should be excluded from ETS, because the allocation can not be made via benchmarking. Therefore only the bigger plants should obliged to the EU-ETS an the threshold value should be 50 MW and 50.000 to. CO₂ p.a. (this threshold value of 50.000 to. CO₂ p.a. should be established for plants of any branch).

The formula "Expected/forecasted production x CO, efficiency benchmark" is to be basically preferred.

Benchmarks should be performance based energy efficiency values – no absolute caps should be set in order to allow efficient companies to grow.

The development and utilization of benchmarks will be very much dependent on the future of (different) national targets.

Benchmarks should be "performance based" and not "BAT-based". This demand is guilty especially for the SME-structure of the ET-industry. It is necessary to have a set of correction factors for site specific factors like size, technology, raw material, etc.

10-20 benchmarks are sufficient for a major coverage of emissions of the chemical industry. We have recently determined EU benchmarks for major chemicals (steamcrackers, ammonia, etc.) based on industry accepted practices executed by knowledgeable consultants.

Benchmarking should be strictly applied for new entrants.

There should be no distinction between benchmarks for existing assets and new ones which get allowances via NER's

Process structure amongst competitors quite different

2.6.4 Others

Has significant remaining reserves and the introduction for further costs risks leaving some of these in the ground, the result will be the import of resources from further afield which may involve higher levels of emissions. This is a particular issue as emissions per produced ton of oil will tend to rise later in field life as water may be produced or reservoir pressure is reduced.

We think that benchmarking supersedes all other methods in terms of fairness and effectiveness. However this can only be true if several conditions are met, including the following:

- it must be the only method and targets must be the same across Europe
- targets must be realistic; in essence, this means that they should not be aligned with the "best in class" but with "above the average, reasonable progress rate being taken into account"

It appears clearly that there is not enough time left to put in place an allocation based on benchmarking for the 2008 – 2012 period. Therefore, for this particular period the allocation methods should be different, and as close as possible to those used for 2005-2007 in order to avoid uncertainty and loss of experience.

- 1) We are a small but diversified sector as far as products and production processes are concerned, and appropriate "average" benchmarks are difficult to establish
- 2) Strong national differences exist (eg related to quality of products with impact on production processes and CO₂ emissions)
- 3) Because of this complex situation, there is a high risk that benchmarks will be unfair

My company believes the EU scheme should in the first instance include all EU and EEA states as well as all countries listed in the Annex 1 document of the Kyoto protocol, if the bilateral can be negotiated.

we are very much in favor of the Belgian (Flemish) system (site specific energy audit as basis for allocation);

but: our industry is too inhomogeneous concerning raw materials, products and production technologies to cover it with only very few benchmarks without any correction factors

2.6.5 Pulp and Paper

We need some sort of efficiency measurement (benchmark?), otherwise efficient mills will be penalized at the expense of inefficient ones. So, benchmark should not be rejected unless better tools are known and implemented.

It is impossible to give answers to these questions without considering the framework. If we had an international framework international benchmarks would be the most desirable. On the other hand, if the EU keeps on having a burden sharing agreement also in the future, harmonised EU-level benchmarks would not be the most favoured allocation method. Additionally, it is not only the EU ETS that has to be taken into account. The EU has plenty of policies with similar aims that have to be taken into account when the method allocation is decided.

So our view is that benchmarking is not a feasible method for allocation unless certain preconditions are met:

Benchmarks are performance based energy efficiency benchmarks and no absolute caps are set in order to allow the efficient companies and sectors to grow; Whether the benchmarks should be European or national are to a certain extend linked to the existence of the burden sharing agreement and the different targets the Member States have; complete harmonisation is difficult as long as the targets are very different.

Practical problems related to benchmarking are solved in a fair way (benchmarks will have to take into account a big number of variables like raw materials, processes, products produced, etc.).

2.6.6 Power

The system described in the survey introductory remark would lead to the collapse of EU economy. Specifics need be accounted for even in one country, e.g. as it is being done at best available techn. in the current IPPC system.

These responses are applicable only power generation

When benchmarking for existing assets it is important not to treat them inequitably vis-avis new entrants. The fact that existing assets may have made their investment decisions prior to the existence of an emissions trading scheme should not mean that they are penalised.

My company considers that benchmarking is feasible and a good basis for fair and equitable allocation methodology for the Power Generation Sector within Member States. Developing a common benchmark for the whole of Europe would limit the ability of EU members to establish domestic energy policies. We do not see harmonisation of benchmarking for the power generation sector across the EU as a priority given the significant differences energy policy across the EU member states.

A unified benchmark will favour certain member states depending on historic power generation investment decisions. Therefore, ascertaining the level of allocations between sectors within member states should be at the discretion of member states. Benchmarking will reduce the ability of member states to squeeze certain sectors.

We recognise harmonisation may be of more significance in other sectors where there is stronger competition between companies in different member states and allocation methodologies could have significant impact on operating costs of these industries and create competitive distortions.

The effort involved in designing appropriate benchmarks is generally impracticable and would further complicate the distributional aspects of the scheme.

The questions posed are too restrictive.

Benchmarking for existing assets, if applied, must take age, technology and fuel into account in the interest of Fuel Diversity and Security of Supply.

Product-specific benchmarks can drive towards a single generation technology, which is a risk to the security of electricity supply.

- Low-carbon generation technologies are in advantage with Product-specific benchmarks

We are in favour of benchmarking because it can promote competition on a fair basis and guarantee equal treatment of existing assets and new investments. To this purpose it is essential that benchmarks in the power sector are differentiated at least by fuel, so that appropriate diversification is not hindered.

Benchmarking should be strictly applied for new entrants.

Simplicity and a proper steering impact speak for the alternatives we preferred above (one benchmark, EU-wide benchmark)

As to the allocation method and the distribution of 100 points: We see that recent production may mean a too short reference period, where statistical fluctuations may cause unwanted impacts.

In the same question we understand that "Expected/forecasted production x CO₂ efficiency" benchmark could only be applied on the sector level (and should definitely be applied there in order to take into account the dynamics of the industrial sectors). On the contrary, it is hard to believe that this could be applied on the installation level, because the allocation authorities would indirectly "define" the operation of the installation.

There should be only a single benchmark per unit of production. If we consider different benchmarks for each type of fuel or technologies, the allocation will unduly favour high carbon fuels and technologies, at the expense of low carbon ones. Therefore, one benchmarking per unit of production is essential in order to support the very much needed new low carbon intensive investments.

On the other hand, benchmarks should apply to expected/forecasted production in order to promote reductions in emissions. Recent production ("updating") should not be used in order not to distort the market, and it is not wise to use historic production because as EU ETS moves forward, historic production will have no sense when they are compared with future sector production structure.

Regarding the EU-wide benchmark allocation, it should be taken into account that if a harmonisation of allocation at installation level is established, it will jeopardize the achievement of national emissions reduction commitments (e.g. Burden Sharing Agreement) in some countries. Different countries need different efforts to be made by their respective sectors subject to the ET Directive, in order to comply with the particular objectives. Therefore, it would make very little sense to have, at the same time, national reduction objectives and a EU-harmonized allocation at installation level

In favour of benchmarking only if fuel specific benchmarking is included. The reason is to safeguard an efficient use of available energy resources.

Support of CHP outside of ETS, e.g. via CHP directive. Avoid mixing objectives for the policy instruments.

Allocation is a powerful instrument of the national energy policy. As long as energy policy and reduction goals are national issues a Europe wide harmonisation seems not to be possible. We are in favour of long term harmonisation in line with harmonisation of the European energy policy.

2.6.7 Refineries

We think fair bench-marks for refineries will be difficult. Extensive data collection has been undertaken already in the sector but due to the individuality of each site fair benchmarks need much more work.

Benchmarking should be strictly applied for new entrants.

We oppose benchmarks because they are complex and may not be transparent. If there are to be benchmarks, they must be EU-wide to ensure a level playing field.

2.6.8 Steel

A benchmark system with a cap on estimated production level and hence no ex-post adjustment and no warranty there will be enough credits is useless. The negociation will concentrate on production forecasts. The system must provide a certainty that globally there will be sufficient credits.

A benchmark system is not workable. A base-line system is preferable (on sector average). As long as you have a variable such as future production, complicated reasoning does not matter. What counts in the end is how much do you need and how much you get.

Benchmarking is not recommended: bonus/penalty for efficiency is already built in the mechanism of gradually reducing allowances over time. Some of investors' decisions taken in the past might be penalized unfairly if benchmarking were to be introduced. Benchmarking is Ok for new entrants.

IF deciding for a benchmarking system, a different apprach from cap&trade system must be implemented. Moreover, benchmarks needs to be chosen with focus on the single sectors, and must be worldwide implemented.

International benchmarks only to be envisaged in the absence of any cap & trade system. Otherwise the impact on the business competitiveness will be even be increased. We oppose to any kind of benchmark (or whatever we call this allocation methodology) as an alternative to grandfathering under the current ex ante rules.

Benchmarking allocation methodology is only to be envisaged in the context of a post adjustment mechanism at the end of trading period which reflect the production level. Consideration needs to be given as to how sector targets would align with Member State targets.

A "sector approach" based on specific emissions should be implemented at world wide level;

The total amount allocated to a sector must be balanced by the needs and the characteristics of that sector. Otherwise, inevitably there will remain all kinds of distortions between inside and outside the trading space.

Among the different "systems" that might be applied at sector level the one that could be finally selected should meet the following requirements (taking also into account the first prerequisites mentioned here above):

- It is essential that the same baseline is used throughout the "trading space";
- Every good performing plant operators should make a bonus;
- Should the system be firstly initiated within the EU it should easily be expanded outside since there should be no more distortion of competition (within EU or worldwide it should turn out to the same equity and fairness);
- The system should cover production increases (the "new entrants" from today);
- Early actions should be rewarded;

• There should be incentive and therefore bonus for innovation and breakthrough.

The international benchmarks should be developed. Instead of cap and trade systems the baseline and credit should be implemented for the mature technologies where there is no alternatives to switch.

A pure benchmarking system is only acceptable in a non cap and trade system. Otherwise our competition disadvantage would even be greater, than it is now.

2.6.9 Governmental Bodies

While the scheme continues to be based predominantly on free allocation, we are strongly in favour of consistency across the EU and developing EU-wide benchmarks will facilitate this (although the need for benchmarks would be removed if allowances are distributed in the future via auctions).

The rationale for our answer on the preferred method of benchmarking is as follows. Basing allocation on historic production becomes less feasible with future phases as the baseline data is very unlikely to be representative of future production. Updating to use more recent data creates a perverse incentive so using recent production is not appropriate. Some companies may be reluctant for accurate production data to be published at installation level. The third option is based on fixed factors which can be specified up front for each class of installation so should be more transparent and administratively easier. Plant capacity is likely to change less frequently than production levels.

The above responses relate to existing EU ETS sectors (i.e. stationary technical units). Other sectors (such as aviation) may be more suited to different approaches to benchmarking.

Our country currently has only few installations that fall within the scope of the emissions trading scheme, a situation that is not foreseen to change in the near future. It is important that due consideration be taken of particular national situations, few installations are of high importance to economic development.

Greater testing of all benchmarks should be undertaken across a wide spectrum of installation types and sizes. In our opinion insufficient testing was carried out on the phase I new entrants benchmark leading to surprising allocations for some instillations. Benchmarking should be equitable across all sectors. Benchmarking should consider recent production figures into the final allocation.

2.6.10 NGOs and Market Intermediaries

There are three main disadvantes of benchmarking:

- 1) Benchmarking allows for the possibility to regulate the industry by adjusting the benchmarks accordingly.
- 2) Benchmarking allows for subsidisation of sectors by adjusting the benchmarks accordingly.
- 3) Benchmarking may influence the decisions to emit in such a manner as to prevent that emissions are allocated optimally.

Comments are not based on practical experience but rather on theoretical analysis.

Benchmarks should be product-specific and based on best available technology, not current industry average

Benchmarks should be product-specific and based on best available technology, not current industry average

I prefer a CO benchmark: x ton CO₂ / ton product and y gr. CO₂ / kWh (with correction for power sector for CHP and gas or a possible phasing in of this benchmark)

On the benchmarking options, one key option was missing, and we would have assigned 100 points to that one:

Actual production x CO₂ emisssion factor . This gets very close to the energy intensity targets in the US. While it does not limit emissions at an absolute cap, it does provide incentives to reduce "at the margin", and it does reduce price hikes if production is higher than expected.

We are not pro benchmarking since we believe that the allocation is in the end a political questions and we doubt that any benchmarking system can be created taht is objective enough to avoid the lobbying and discussions that have accompanied the first NAPs.

It is not clear in those questions, what kind of benchmarking system you are referring to, given that this section is about existing assets.

Do you assume,

a) that after the benchmarking a compliance factor will be added, to meet the targets? or b) that there will be no additional CAP?

For new installations a capacity-based and product-based benchmark might apply, under consideration of all other provisions. Also, were every installation to buy allowances and were there no free allocation to existing ones a capacity-based benchmark could be applicable –in dependency of the other provisions (new entrance rules, reserves etc.).

2.6.11 Associations

More sectors have begun studies which will provide some information about the advantages/ drawbacks of using benchmarks by the end of 2005. So, it is not yet possible to give a definitive point of view by the present time. It is however clear that national characteristics will have to be taken into account.

Whilst benchmarking on a national basis is an interesting method to consider, given the nation- specific nature of the power generation industry we consider that it is not suitable for EU-wide benchmarking. We do not see the advantages in EU- wide versus national benchmarking.

Benchmarks should be available for all kinds of products which are affected by the EU ETS. If e.g. a plant generating process heat for a chemical process is part of the ETS the benchmark should not be for energy conversion (kg CO₂/kWh) but for the whole process (kg CO₂/kg product). In case of a benchmark for energy conversion only the chemical process could be inefficient and waste energy (and CO₂) but would still meet the benchmark if process heat generation is efficient enough.

We do not believe that the benchmarking system is feasible without considering the specific situation of the site. Therefore we strongly support the benchmarking system but we insist on a various number of specific benchmarks (more than 3).

Because of the problem that small emitters are often out of the scope of possible benchmarks we believe that the benchmark will work for the sectors expressively named in the annex I of the ET directive, only. Problematic installations are often covered via the 20 MW threshold of Annex 1 and do not constitute a comparable sector (eg.: a car producer can not be compared with a chemical industry or textile industry). We think that these installations should be excluded from ETS, because the allocation can not be made via benchmarking. Therefore only the bigger installations should be obliged to the EU ETS and the threshold value should be

50 MW and 50.000 tonnes CO₂ p.a. (this threshold value of 50.000 tonnes CO₂ p.a. should be established for any installation covered by Annex 1 point 2, only)

The formula "Expected/forecasted production x CO, efficiency benchmark" is basically to be preferred.

Benchmarks should be performance-based energy efficiency values - no absolute caps should be set in order to enable efficient companies to continue to grow.

The development and use of benchmarks will in the future be very much depending on (different) national targets.

Benchmarks should be "performance based" and not "BAT-based". This is required especially because of the SME structure of the ET industry. It is necessary to have a set of correction factors for installation-specific factors like size, technology, raw material, etc.

A benchmarking methodology was developed for our Sector for Phase 1 New Entrants. This methodology could be continued into future phases with the CO₂ efficiency benchmark revisited at each phase if necessary although modifications would need to be made to the new entrant benchmark in order to accommodate existing technology replacement lifecycles

Benchmarking is not a substitute for allocation but only one blunt tool for deriving comparative emission figures.

My sector will require

- a) Sub sector methodologies
- b)Each sub sector has a range of furnaces and process with their own characteristics and will require sub sector characteristics to be taken into account.
- c) It needs to be recognized that some highly specific installations processes can never be benchmarked e.g. glass for nuclear power stations. Whilst maximum harmonisation in methodology is necessary, national and site specific considerations are essential as in IPPC e.g. availability and cost of different fuels and materials.

We are of the opinion that benchmarking is an interesting alternative to look at provided that benchmarking is understood as "performance based" and is not based on BAT.

Within the sectors covered by the ETD performance based allocation should be encouraged as an overarching principle which would provide a means to avoid distortions of competition and to reward the best performers who have taken early action. In this case, the allocation of allowances should provide for some form of ex-post adjustment and keep the necessary flexibility that will be required (in order to take into account local circumstances, burden sharing agreement, technology, use of waste as alternative fuels, accessibility to secondary raw materials, cement production per capita, ...). Performance based allocation would allow a more equitable approach and help avoid distortions of trade.

The idea would be to develop a European template with parameters to be applied at national level (see below).

It is important to highlight that there are two approaches and very often two different allocation methods in order to define on one hand the total bubble to be allocated to activities belonging to a single sector and on the other hand to distribute this bubble to the different operators within this sector. The definition of the activity rate should be different for the two steps: the forecast activity should be used at sectoral level (as in the current French NAP) whereas the distribution between the installations should be based on production volumes in a reference period (the same period for all installations) (as in the current Italian NAP).

We have filled in the box on allocation methods for existing assets as shown above to

reflect this important distinction made in most NAPs which is not otherwise made in the questionnaire.

We are strongly opposed to the classical benchmarking as defined in this questionnaire. It can only apply to very small numbers of very large plants in other industry's. Applying these proposals to our industry would result in much smaller reduction for the 'best of class' plants and the early closure for those at the other extreme. This system also does not allow market growth and increased capacity. However, other forms of benchmarking might be interested to look at. An 'energy benchmark' as e.g. applied in Belgium would even be a good solution. This system includes a site specific energy efficiency audit for each installation and is thus a much more convenient basis for allocation.

My industry believes in a global market which would imply global benchmarks. However, there could be legal problems for global or EU benchmarks.

My organisation believes that benchmarking is in principle a fair concept depending upon rules. However, the EU It must be prevented that no set obligatory high performance standards are being set (e.g. BAT) which would remove any margins of maneuver flexibility and prevent any trading possibilities. Depending on a future scope of the system many additional benchmarks may be required.

Note however, that many parts of our sector are not suitable for a benchmarking approach because they are too diverse and cover too great a product mix. Where a switch to benchmarking is proposed any implementation should allow for proper consultation and provide for a transition period of sufficient length.

Benchmarking/performance standards is an interesting alternative. In theory benchmarking/ performance standards is the most fair method of allocation. However, it is not easy to create this kind of system.

Our industry is favour of global performance standards. At least consideration should be given to the use of performance standards where appropriate and available.

EU-Wide benchmark as an idea is very relevant to pursue, but it needs to be further developed and consequences need to be analyzed, in order to investigate whether the impact of few or no corrections is too grave for individual companies.

Moving from idea to practise it seems very difficult to develop a reasonable benchmarking for various sectors. Taking all relevant issues into consideration. There is a risk that applying benchmarking will become a new element of competitive distortion in the NAPs. This should be avoided. E.g. one problem with benchmarking is that when applied on energyintensive industries using local, natural resources, the need for energy will vary a lot, even though that the production output seems identical.

Developing benchmarks for our sector will be a complicated process because of the age/size/ design/product of each installation. Specific energy consumption can vary by as much as a factor of 10 between plants (production capacities are very different).

- 1) Refering to CHP for climate-relevant differences is strange. What is meant here ... a bonus for efficiency?
- 2) Benchmarking for power generation can be done relatively easy. It allows treat similar installations in different MS is a similar way if EU-wide benchmarks are used. Thereby they provide harmonisation and a level playing field. Benchmarking for industry can perhaps be more difficult, unless bechmarks in those sectors are based on fuel input instead of product output.
- 3) The difference in feasibility between industry and electricity sector requires that allocations for participants both are not affected by these difficulties (overallocation or underallocation). Possible solution could be achieved by separating industry and electricity with each sector

its individual cap.

International benchmarks should be developed for mature technologies where there are no alternative technologies to switch.

It is not possible to have a cap and trade system when using a benchmarking allocation methodology. Instead the performance based allocation method with ex-post adjustment should be applied. CHP installations should be benchmarked against each other and against the separate processes for generating electricity and steam.

Consideration needs to be given as to how sector targets would align with Member State targets.

We favor a global standard linked to voluntary agreements

X More than 3 benchmarks (e.g., considering different processes, technology classes of assets, etc.) + different products:

- We strongly oppose EU sectoral benchmark or benchmark linked to a cap and trade system, but we are opened to performance based guides associated with correction factors and taking into account the type of products, the nature of raw material and notably its moisture content
- We must take into account the existing installation technical set up over Europe subject to BATs coming out of IPPC Directive and in particular life time which is the core of all our installations.
- Performance based guides in the industry should only affect emission from combustion.
- A sector approach should be based on specific emissions. The total amount allocated to a the sector must be balanced by its needs to prevent all kind of distortions.
- Special attention should be given to:
 - Both options should be available CO₂ per tonne of input (based on energy efficiency) and CO₂ per tonne of output (based on product types)
 - Fixed value for decarbonation.
 - Avoid complexity and administrative burden especially to SMEs.

The way questions are formulated is clearly not neutral (for us, the way benchmarking would be designed is an important issue, but we don't want benchmarking necessarily!)

Benchmarking is not an allocation method, but a comparison between comparable processes!

Our industry will need much more than three benchmarks: there are many different subsectors and processes.

An EU harmonisation is desirable but local specificities should be taken into consideration (e.g. local temperatures, quality of raw materials and fuels...) like in the case of the IPPC.

Across Europe there is a wide product range so that it is difficult to define categories and hence European benchmarks.

My organisation is of the opinion that benchmarking is an interesting alternative to look at provided that benchmarking is understood as "performance based" and is not based on BAT. Within the sectors covered by the ETS performance based allocation should be encouraged as an arching principle as a way to avoid distortion of competition and to reward the best performers who have taken early actions. In this case, the allocation should allow some form of ex-post adjustments and keep the necessary flexibility that will be required (in order to take into account local circumstances, burden sharing agreement, technology, use of AFR, accessibility to secondary raw materials, cement production per capita, products share etc.). Performance based allocation would allow a more equitable approach and would help avoid unfair practices.

Past efforts and studies were unable to achieve a workable benchmarking method for our industry.

There is great variety between the six EU ETS companies in our sub-sector. Benchmarks should therefore take into account the different product categories

We gave 100 points to the added allocation method for existing assets: Expected/forecasted production \times CO₂ efficiency benchmark with ex post control.

Benchmarking is an instrument under many other. It can make the system more flexible. For Benchmarks you need a broad database for each influence coefficient. It seems reasonable only for power plants, since a sufficiently large number of plants exists here, which are comparable regarding fuel inventory, plant size, equipment technology (gas turbines, CHP) and extent of utilisation. However this benchmark may not be applied for specifically designed power plants.

Consideration should be given to the use of benchmarking or performance standard where appropriate and available, as in theory at least, using a benchmarking allocation method is more logical and more in line with the polluter pays principle than the current allocation method. However, there is clearly insufficient information currently available to fully endorse benchmarking as an alternative allocation method. EU-Wide benchmarking needs to be further developed and the consequences should be analyzed, in order to investigate whether the impacts of few or no correction factors are too heavy for individual companies.

It would be difficult to develop a reasonable benchmarking that takes all relevant sector specific issues into consideration. There is a risk that the application of benchmarking will become a new element of competitive distortion in the NAPs. This should be avoided. E.g. one problem with benchmarking is that when applied on energy intensive industries using local, natural resources, the need for energy will vary a lot, even though the production output seems identical.

The setting of a CO₂ efficiency benchmark is not the only allocation methodology that should be considered.

2.7 Use of money raised through auctions apart from "use in general state budget," "distribute within affected industries," and "earmarked for special purposes"

2.7.1 Chemicals

Support reduction measures within the affected industry

2.7.2 Other

Development of technology, set up of environmentally friendly projects to offset some of the environmental damage

to be used within the respective industry sector for investments in carbon friendly technology

2.7.3 Power

Support reduction measures within the affected industry.

The main idea is to distribute it among the affected industies so that they do not lose competitiveness with other industries not subject to CO, constraints. This objective must in any case be compatible with the promotion carbon-friendly technology

Give the money back to the industries taking part in the emission trading system.

2.7.4 Refineries

Support reduction measures within the affected industry.

2.7.5 NGOs and Market Intermediaries

Earmarked for funding registry operations, domestic offset projects, research on carbonfriendly technology

could be a mixture between promotion of low carbon technology and re-distribution to affected companies

Both distributed to industries, and earmarked. (selection of multiple options should have been possible here)

2.7.6 Associations

Investment in JI/CDM

process emission should receive 100% free allocation

Distributed within the affected industries and Earmarked for special purposes.

2.8 Additional comments on auctioning

2.8.1 Aluminium

Auctioning can not be used when different sectors have such different economics (possibility of passing on costs to customers) and drivers Cost of abatement).

2.8.2 Cement

At current and expected CO₂ prices, 10 % or more auctioning will inevitably lead to the closure of cement production in Europe and relocation to outside the EU, entailing additional CO, emissions from transport and thus only a negative environmental effect.

With the level already reached by the CO, market, any form of auctioning would mean progressive delocalisation of the cement industry. This question cannot be solved without an answer on discrimination with non-EU cement producers.

100% auctioning would inevitably lead to a relocation of the cement industry outside Europe with only negative effects on achieving the environmental and economical objectives of the

ETD.

Compared to other branches it is **impossible** for the cement industry (as for the lime industry) to buy allowances for further growth or for parts of the recent production in case of auctionning. The reason is the carbon intensity of cement production combined with the low price mass product cement.

A study (2004) which was the basic study for the allocation in Austria clearly showed how different the ET branches are affected by emission trading

2/3 of the first period allocation currently covers CO_2 coming out of the calcinations of limestone. On a fair and on a competitiveness point of view, process emission should receive 100% free allocation but be considered as a non tradeable allocation based on a fixed factor. For a small and energy intensive plant it will be impossible to get cheap allowances from auctioning. In addition, cement has on of the highest emitted CO_2 ratio related to turn over without the possibility to pass on extra cost to customers used to long term contracts. So the production is only possible until the time having free allowances.

2.8.3 Chemicals

The auctioning would cause enormous problems. The level of poss. auctioning should be kept low.

Auctioning should not be encouraged as it distorts the market orientation of EU ETS and reduces required liquidity of the companies.

Auctioning will increase the costs for European producers. This effect can be neutralized by paying back the outturn to the producers on the basis of their production volume.

It should be noted that with regard to environmental effectiveness output related allocation has the same effect as auctioning . With auctioning the cost price difference is determined by the difference in (carbon) efficiency. With output related allocation this is exactly the same. Take the PSR (Performance Standard rate) and two companies A and B with different efficiencies. The cost-price difference is then: Eff. A – PSR – (Eff. B – PSR) = Eff. A – Eff. B – PSR + PSR = Eff. A – Eff. B q.e.d.

For a number of processes such as refineries energy efficiency is the fair denominator as long as performance-based allocation is not yet global. It would lead to unfair costs without an environmental justification as carbon rich fuels would need to be shipped outside the EU.

Auctioning is almost equivalent to impose additional reductions, without giving the operators the time required to make relevant investments.

Auctioning is a tax on industry. Revenues must be recycled to those industries otherwise they will relocate outside the EU.

2.8.4 Other

Funds raised from auctions should not be returned to general Treasury or EU funds. Auctions should be organised centrally to inprove access and frequency.

We can hardly understand how auctioning could work at a national level. Although it is theoretically feasible, what would be the situation if allowances auctioned by a country were all purchased by foreign operators? As for auctioning at the European level, it raises other difficulties, and it is not quite sure that it would be acceptable to member states.

Auctioning could be easily be hijacked by power generators buying beyond their needs to increase the price of CO₂, most emitters are manufacturers, not market players. Auctioning increases exposure, risk and early costs, making the EUETS even more anti-competitive in a global market than it already is. It will cause increased imports and manufacturing closures within Europe

Auctions increase the lack of visibility of the ETS and will favour big organisations: we are a "small" sector and a "small" organisation.

2.8.5 Pulp and Paper

Auctioning will increase the cost for all the covered sectors thus again decreasing the competitiveness of EU based industry

2.8.6 Power

We are strongly in favour of any auctions being EU wide with standardised process. We are also against auction proceeds going into general taxation funds, either EU or country-specific funds.

Auctioning of core allowances will not change the overall supply and demand balance, hence does not affect the actual price of carbon. It does facilitate the internalising of the cost of carbon however the Government should recognise that it has introduced auctioning (purchasing) by default in Phase I by setting targets that cannot be met through abatement. This forces operators to buy allowances from the market. Auctioning allowances in Phase Il will further erode enterprise value of installations and place significant pressure on incumbents to reduce total allocations through unrealistic abatement or the purchasing of allowances during what should be a transitional period.

The use of auctioning should be examined in the context of the total number of allowances allocated compared with the business as usual requirements. Auctioning a proportion of the NAP would effectively reduce the total NAP available to all incumbents by the total quantity of allowances auctioned, placing an additional pressure on incumbents to reduce total allocations through unrealistic abatement or the purchasing of allowances.

Auctioning of Allowances from Closure

We favour the auctioning of smaller parcels of allowances on a more frequent quarterly, or at an absolute minimum six monthly basis (e.g. Quarter 1 and 3) to assist in market liquidity. There is the potential that very large volumes of allowances entering the market just once a year could cause illiquidity in the traded market and dramatic swings in price.

Auctioning at the end of an allocation period could potentially delay investment decisions that would offer real returns if the auction periods were more aligned to cyclical market trends. In addition, auctioning at the end of an allocation period will increase the likelihood of carbon price spikes caused by too many buyers coming to the market to offset carbon emissions at the end of a period.

We support the harmonisation of the auctioning process across the EU. Any auctions or sales should be open to all participants in the European emission certificates market and this should be a principle adopted by all Member States. However if market mechanisms are functioning effectively, limiting participation may be helpful in reducing the administrative burden of the auctions without affecting accessibility.

We also believe that ensuring transparency, non-manipulation and security should ultimately

determine the choice of a disposal method.

Rather than direct auctioning of allowances, consideration should be given to allowing member states release tranches of allowances onto the trading market according to harmonised rules and timescales. This would lower transaction costs for all parties, in particular industry, who otherwise would be required to monitor auctioning arrangements and develop specific bidding strategies for all 25 member states (up to 11 in first period).

We believe that free allocation to existing and new installations provides greatest certainty to operators, which is critical in supporting investment decisions and encouraging long-term planning. It also minimises the risks of sudden price shocks.

Auctioning is considered to deliver benefits in terms of administrative simplicity, economic efficiency and equity. However, these benefits are not clear-cut or unique.

The greater efficiency that allocation by auction is considered to deliver is entirely dependent on the use to which revenues are put. The re-distribution effects of auctioning and recycling are significant and may impact severely on the economic competitiveness of certain sectors. Achieving an equitable distribution of revenues from auctioning is likely to prove bureaucratic and costly.

Various models for auctioning are available. The introduction of an efficient auctioning procedure on a EU-wide scale would require a significant degree of harmonisation on the method and administrative arrangements to be put in place to avoid competitive distortions between member states.

Other benefits attributed to auctioning, in particular ease of treatment of new entrants, can be addressed within a free allocation mechanism.

Auctioning is almost equivalent to impose additional reductions, without giving the operators the time required to make relevant investments.

Concerning auction frequency: e.g. 4 times per annum

Concerning auctioning percentage: by 10-30% we mean "a gradual shift upwards" Concerning "What should be done with the money raised through the auctions?"

In countries having CO_2 taxation the income from auctioning could be used to compensate the loss of public income caused by the removal of CO_2 taxes.

The Power Sector is not subject to global competition, and electricity markets will include CO_2 prices in electricity prices. Therefore, electricity sector should not receive free allowances. Auctionning is then the more suited method of allocating allowances in the power sector. Free allocation is a way of giving an economic compensation. Another more transparent way is to perform first an allocation without compensation (auctionning) and distribute later the money raised in the allocation. Probably in this way, the objectives of compensation and promotion of carbon-friendly technologies could be made more compatible.

Income from auctions increases government budget, not those who should really increase efficiency.

Auctioning will function like a tax and rise full cost. Therefore it will be an obstacle for new investments (higher power prices necessary to attract new investments).

If applied to existing installations it can create stranded investments.

2.8.7 Refineries

As power generation, if there is to be significant auctioning, which we do not agree with, we would strongly support EU wide processes for auctioning and oppose the flow of auction funds into general Treasury or EU funds

Auctioning is almost equivalent to impose additional reductions, without giving the operators the time required to make relevant investments.

Any auction procedes should be redistributed to affected operations or new units, rather than held by the government.

2.8.8 Steel

Auctioning comes down to an unpredictable tax. It is an a priori expense without CO, effectiveness.

Auctioning makes the carbon leakeage, for the operators on markets where the price is set on global market level, even worst (thus global CO, to raise), if the truly global system will not be implemented. For the locally priced operators the auctioning could cut down the unnecessary windfall profits.

We are strictly against auctioning. In a global steel market auctioning is pure poison for the future of the steel industry in the EU.

The application of an auctioning mechanism as an allocation methodology for Phases Il and III are to be rejected dedicatedly. An auction raises grave concerns as regards the competitiveness of the iron and steel industry both within and beyond the EU. Due to the competitive nature of the sector, the EU steel sector does not have the luxury of sectors such as energy generation who are able to pass the cost burden of purchasing allowances down the line to their consumers. To exclude the iron and steel industry from Europe by Auctioning of Allocations will mean that production will not cease, it will just move outside of Europe into countries with less regulation and with less environmental protection.

Process related emissions, which cannot be reduced unless there is a general reduction in production, must not be subject to any kind of auctioning.

2.8.9 Governmental Bodies

To ensure that a trading market works most efficiently with the right to emit CO, being paid for by those who value it most, auctioning allowances would be the most efficient method to allocate EUAs. Auctioning EUAs would mean that operators would bid for allowances to cover their projected emissions and subsequently buy or sell allowances in the market place. Under such a scheme there would be no need for complex mechanisms for allocating allowances for free.

We therefore consider that the long term vision for the development of the EU ETS should be towards 100% auctioning of allowances. However, we accept that there may be resistance from some industries for moving towards 100% auctioning in the absence of equivalent carbon constraints on industries in competition with EU installations. We have recently completed consultation with stakeholders on the frequency and timing of auctions for distribution of allowances in Phase I and II and are in the process of considering responses. It is therefore too early for us to express a clear preference on the timing of more mandatory auctioning.

2.8.10 NGOs and Market Intermediaries

All Allowances should be auctioned and the revenues used in General State Budgets. Exceptions may be necessary for cases of hardship.

The long-term vision should be for all allowances to be auctioned across the EU. However, given the impact on international competitiveness, this may only be possible once countries outside the EU adopt similar trading schemes and/or the EU adopts carbon-related export credits and import duties to level the playing field for EU industry against countries with no corresponding carbon constraint. Even if all allowances cannot be auctioned due to this practical restriction, auctioning an increased proportion of allowances would improve participants awareness of and incentives to actively manage their emissions portfolio. This would lead to more efficient trading opportunities when compared to the inertia that results from the vast majority of participants receiving their likely requirements for free and consequently having no need to act and/or to factor carbon prices into their commercial decisions.

It is important that auctions are structured to minimise their potential to interfere with the liquidity of the secondary market, eg, if large, uncertain volumes are put into the market at irregular or unknown intervals. Auctions must therefore be frequent (potentially daily via existing power exchanges for example), in small volume and with the timing and overall quantities of the auction to be well-signalled to market participants in advance.

Auctioning makes only sense if there is long-term post-2012 regime and if issues such as market pwoer in the allowance market are solved. In my country we see that the big pwoer producer buy up Green certificates to drive push up prices up for the smaller ones. This is likely to happenb in an illiquid ETS market.

The choice given in the questionnaire indicates the inherent problem with anything but auctioning, there is always a risk that that too many allowances are given FOR FREE.

A combination of cap-and-trade scheme and promotion of carbon-friendly technology should be the ultimate solution.

The previous question should have allowed multiple selection of both recycling, and earmarking. Also, question on auctioning vs. free allocation should have been asked separately for industry and electricity producers

In theory, the money raised through auctions should go to the general state budget. To improve political feasibility and acceptability it might be necessary to redistribute the money to the affected industries. Great care should be taken though to avoid that this leads to wrong incenctives. It is very important to find a neutral, well-defined redistribution mechanism, otherwise the redistribution would lead to the same lengthy and contra-productive lobbying process than grandfathering

Auctioning is not a good idea for long term price planning it solely gives a price at a particular point in time which may be high or low depending on demand and supply. Putting ceilings and floors just removes purchasing/selling opportunities. They are ideal for one off sales but for sales of a standard commodity a continuous market is far better suited. If they are run concurrently with a continuous market they disrupt trading and operations.

We would expect Member States to move to 100% auctioning following 2012. My organisation believes that grandfathering allocations does not support the "polluter pays"-principle and can create uncertainties due to potential state aid issues. Further, from an economic point of view auctioning of allowances is a fairer process than the negotiation approach which is inherent to the grandfathering system.

2.8.11 Associations

Auctioning is an allocation methodology that merits further consideration, but it is important that auctions do not distort the market. Auctions should take place at least once a year and their timing should be sensitive to the return of allowances from plant closures to the market. Auctions should take place at least three months before the end of an allocation period so that auctioned allowances can be factored into the market while abatement remains an option.

Auctioning would cause enormous problems. The level of possible auctioning should be kept low.

General CAVEAT: experience has shown that revenue raised by governments usually is treated as additional income. There is usually no such thing as revenue neutrality.

As a Sector we do not support auctioning. Allowances should be free issue particularly if installations allocations are based on a benchmark methodology

Auctioning favours sectors with high revenue.

It is not sector or even country limited.

Too high a cost of securing an allocation for the year, or worse for a whole phase, would be out of proportion to the financial viability of the manufacturer within the EU and only serve to speed up the process of manufacturing migration. It may be necessary to carefully consider the relationship of the allocation, issue and payment periods.

The direct influence of CO₂ prices onto electricity prices should also be highlighted. Auctioning is likely to lead to an increase of the price of CO₂ on the ETS. The impact on electricity producers may lead the latter to charge to electricity users, particularly power intensive industries like the cement industry, the cost of all allowances via the "opportunity cost" principle.

The indirect cost increase to power intensive industries will be higher than justified in a cost reflective approach.

We fear that auctioning would further increase the burden of the ETS and harm the industry competitiveness against non-EU countries. However, it has to be retained if auctioning is one of the only ways in which companies can get additional allowances.

My Industry sector is against auctioning of emission allowances since that would further increase the cost of emissions trading and thereby have a negative effect on competitiveness compared to the rest of the world. Auctioning distorts the market orientation and prices, and reduces liquidity. Cash-strong parties could dominate the system in an abusive way.

Our industry is strongly against auctioning as a method of allocation. Auctioning would further increase the cost of emissions trading and thereby have negative effects on competitiveness of European business when compared to the rest of the world.

In a perfect market and from an economic efficiency point of view it is favorable if all allowances were auctioned. However, the economic burden of this would deteriorate EU competitiveness even further, and no system of transfering the money back to the EU companies seems at this point possible to implement in a way that can deminish the competitive distortion sufficiently. However, on a longer term in a global frame work auctioning of allowances could be the right way to implement an allowance system. However, there is still the problem of how to transfer the money back to companies in a sensible way.

Auctioning represents a tax on industrial energy users - electricity suppliers will be able to

pass the costs on to industry who because of world markets cannot increase their prices correspondingly. Auctioning of allowances at levels of greater than 10% will result in economy-scale taxation on industry.

Increasing the percentage of auctioning provides no solution. Leads to mixed system with practical difficulties and inequalities.

Therefore, auctioning could only be done reasonably if all allowances would be put on sale. However, this requires that the distribution issue of money raised is solved adequately. Makes it a long-term solution.

Our major concerns remain with the use of an auctioning mechanism as an allocation methodology for Phases II and III. During Phase II there is the potential for up to 10% of an installations allocation to be purchased through an auction and in Phase III the use of auctioning could be adopted as the allocation methodology for full installation allocations. This raises grave concerns as regards the competitiveness of our sector both within and beyond the EU. Due to the competitive nature of our sector, we do not have the luxury of sectors such as energy generation who are able to pass the cost burden of purchasing allowances down the line to their consumers. To exclude them from Europe by Auctioning of Allocations will mean that production will not cease, it will just move outside of Europe into countries with less regulation and with less environmental protection.

Process related emissions, which cannot be reduced unless there is a general reduction in production, should not be subject to any kind of auctioning.

Should use the grandfathering principle

- 2/3 of the first period allocation currently covers CO₂ coming out of the burning of our product. On a fair and on a competitiveness point of view, process emission should receive 100% free allocation.
- Furthermore we consider auctioning as a detrimental device for a small industrial sector with many SMEs.
- The total sector accounts for 1.7% of the total EU allocation. The bargaining power will then be limited compared to large industrial players. In addition, we have the highest emitted CO, ratio related to turn over without the possibility to pass on extra cost to customers used to long term contracts.

Auctioning can have far-reaching consequences on an industrial sector (auctions for the G3/ UMTS network have destroyed many companies in the telecom sector in Europe, making this sector less competitive vis-à-vis foreign competitors).

Auctioning favours sectors with high revenue (e.g. power generators where monopolists still exist).

My organisation is against auctioning, because it would further deteriorate the competitive position of European industry.

Our industry cannot give the price raise to the customer. Actioning would further raise the costs and would therefor be a complete disaster.

100% allocation with auctioning would ineviately lead to a relocation of our industry outside Europe; therefore the money raised through the auctions should be distributed within the affected industries.

We remain firmly against auctioning of allocations as it would add an additional burden and competitive disadvantage to European industry. Auctioning diverts resources which could be of greater value if used directly in implementing measures to reduce GHGs emissions.

Auctioning might impact negatively on the stability of the market and increase volatility whereas the companies concerned wish to see stable or at least calculable conditions.

Experiences with revenue raising by government shows, that this regularly does not remain "cash-neutral" for companies. It has to be expected that revenue raised by auctioning will be used as additional "income" for other purposes (as is illustrated by the German "eco-tax" regime and the use of its revenue for subsidizing the pension system.

European industry is strongly against auctioning of emission allowances since that would further increase the cost of emissions trading and thereby have a negative effect on competitiveness compared to the rest of the world.

If auctioning is to be used for the 2008-2012 trading period, We insist that it is used in the same way throughout the EU 25 Member States, otherwise there could potentially be unfair competition within EU.

Process Emissions, which cannot be reduced unless there is a general reduction in production, should not be subject to any kind of auctioning.

2.9 Additional comments on harmonisation of allocation methods

2.9.1 Aluminium

Different treatment of combustion definition is distorting the market. Definitions must be harmonised.

2.9.2 Cement

The cement industry is in favour of a EU wide approach while keeping the necessary flexibility at national level. As the box "Harmonised EU-wide approach" did not foresee this, the box "national approach" has been chosen.

My Company is in favour of a EU-wide harmonized approach with some level of flexibility to adapt to national or regional circumstances.

The concept is a Performance Based Allocation, based on cement (i.e. benchmarking), with EU harmonized technology performance standards with adjustment factors to adapt for national circumstances of availability of alternative raw materials.

The production factor should be set in two steps: a national forecast of cement production, considering the national macro-economical situation and import-export conditions, for the allocation to the cement sector; the production in a recent reference period for the distribution to the companies / installations.

It would be better to speak of an harmonized frame at European level, adapted to national specificities. The basic idea would be to develop a common European-wide template on a performance-based approach with set of pre-defined parameters to be applied nationally. Those parameters will provide the necessary flexibility at national level and take into account varying national conditions. They will have to be limited in number for the system to be workable.

We are in favour with an EU-wide approach while - as mentioned unter the paragraph related to the "practicality of developing community-wide benchmarks as a basis for allocation" -

keeping the necessary flexibility at national level. As the box "Harmonised EU-wide approach" did not foresee this, the box "indifferent" has been chosen.

Process emission allocation should be a fixed value for all cement producers. There should als be fixed values for the fuels in the whole EU.

2.9.3 Chemicals

The above question is hardly answerable, because our allocation method is a proper way for us in principle. If the EU can find a common way to use the allocation method of "expected production x CO₂ efficiency factor" the answer for all questions is that we support an EU wide harmonisation.

If the EU would agree on historic approach, the answer is clearly no.

The question of the national Kyoto Target is very important. National targets must not be part of a harmonisation of the allocation methods.

Local circumstances are in most cases used as an excuse not to eliminate competitive distortions. However, business practice is different. Why would so many installations undertake benchmark studies, for example steamcrackers and refineries. A bad performance has always a reason, it is argued. But business reality is that action needs to be undertaken. Another reality is that for example for steamcrackers no correlation exists between vintage and energy efficiency and emissions. This has been reported to the IPPC office in Seville. Even within one Member State great differences exist with the same local circumstances and opportunities. And for ammonia European plants are most efficient in the world, but yet great differences exist within Europe.

Of course there are general trends, like previously cheap energy in the USA and expensive energy in Japan, but this does not mean that companies should not act.

The carbon constraint is yet another challenge that urges for action.

The allocation methods are generally not aligned to Kyoto targets and they will continue to be so without EU harmonization.

2.9.4 Other

Since the production business varies greatly between countries we think that harmonisation would be difficult

A difference should be made for practical reasons between 2008-2012 (incremental improvements from 2005-2007) and the following periods (full harmonization, based on benchmarking).

Harmonised marketplace with products moving freely needs harmonised allocation methodologies

Allocations are based on Kyoto with a "national" burden sharing and a reference to a base year: therefore a national approach should be kept for base year.

My sector is an international industry. Allocations must be done at member state level or there will be large competitive distortions around the EU which could result in some companies re-registering their AOCs to ensure they take advantage of those more favourable EU states.

Only an EU-wide harmonised approach can avoid serious distortion of and unfair competion on the market, which in fact is the case at the moment!

Process emission allocation should be a fixed value for all lime producers.

2.9.5 Pulp and Paper

Harmonisation between Member States is necessary because the ET scheme has an impact of the competitiveness of one paper mill compared to another country. However the biggest harmonisation problem is the one between the EU and the third countries.

2.9.6 Power

Eventual harmonisation needs to be agreed upon in detail, several years before its application.

Different countries have different energy mixes and different positions relative to their Kyoto targets so harmonisation which does not penalise those which have already taken steps as compared with those which have not is likely to be impractical.

In general, we see harmonisation of benchmarking for the power generation sector across the EU as less of a priority given the significant differences energy policy across the EU member states.

An allocation methodology based on a formula other than a national approach would cause a market distortion in favour of member states that have favoured certain power generation techniques in the past.

We recognise harmonisation may be of more significance in other sectors where there is stronger competition between companies in different member states and allocation methodologies could have significant impact on operating costs of these industries and create competitive distortions.

It would appear impossible to develop a "one-size-fits-all" approach to allocation since member states energy and economic structures and policies differ so widely.

Our answers above refer to the present situation of differentiated national targets, as defined in the Burden Sharing Agreement. In our opinion, a real harmonisation of allocation methods would imply re-discussing the Burden Sharing Agreement on the basis of objective emissionintensity indicators. Present national targets require efforts which are not evenly distributed among Member States. Member States have to take into account their specific national context and this inevitably creates distortions in the treatment of sectors across Europe.

The allocation methods are generally not aligned to Kyoto targets and they will continue to be so without EU harmonization.

A gradual harmonisation is a pre-condition for the functioning of an open energy market.

Using historic data to allocate is not a clever method because as EU ETS moves forward, it will make less sense using historic reference (and using recent references, "updating", will distort the market). If some historic data is used in the allocation process, it's better to have a national approach.

Share of auctionning and free allowances can be specifically decided for each individual sector and in various proportions. Therefore, it would be better to have a national approach to allow for more flexibility from period to period.

If still free allocation is maintained in the power sector, a national approach will be more coherent with the national strategies established to achieve national reduction targets.

We consider that allocation methods have to be harmonised among EU Member States but with same alternatives for countries to take into consoideration well- grounded local specifics.

Base years: revision for 2008-2012 possible – but latest year of base period 2004 – otherwise the wrong signals are given to the market participants (emit as much you can to get a better allocation during the next period).

About allocation method: Allocation is a powerful instrument of the national energy policy. As long as energy policy and reduction requirements are national issues a Europe wide harmonisation seems not to be possible.

Long term a harmonisation should be the goal. But a precondition is that the other political instruments are harmonised too. And the harmonisation has to take into account the different natural resources and the different economic status of the EU members.

2.9.7 Refineries

Due to different policies and different industrial make-up in the EU 25 we think genuine harmonisation would be difficult.

Harmonisation could also tend to penalise countries where a large part of the effort to reach targets has been already made and benefit installations in countries where effort still has to be made.

The allocation methods are generally not aligned to Kyoto targets and they will continue to be so without EU harmonization.

2.9.8 Steel

One must be able to move and maintain his right to an allocation throughout Europe.

It is a must that allocation methods and "market schemes" are harmonized thruogh EU.

The European Trading Scheme might lead to a clear distortion of competitiveness within EU steel sector. Some of the integrated steel making plants will not get the needed amount of allowances to cover their current and future emissions. Production growth forecasts (increasing capacities oe new investments) should be acknowledged in the same way in all member States and all related allowances should be allocated free of charge.

Possible distortions are described hereafter:

- a) Process related emissions: as most of these emissions are not reducible, setting a cap on these emissions would mean setting a cap on the production of steel. This unfair treatment should be corrected in the future. Emissions trading at installations level is not necessarily appropriate to every sector: any new scheme should result in an exemption for all irreducible industrial processes related emissions. The impact of the EU ETS on process emissions is not addressed adequately in this survey.
- b) **Export gases:** the possibility for each Member State to allocate allowances to the operator of the installation transferring the waste gas should become the across EU rule as soon as possible. A large majority of Member States have already decided to fully use this opportu-

- nity by allocating allowances to the steelmaker. If this rule is not applied at the same way in all the countries, a clear discrimination cold be seen (e.g. Italy), between steel plants when some are the owner of their power plants and some others are not.
- c) **EU wide transfers:** as the only possibility to reduce emissions is often to cut back capacity or to close a plant, the operator should have the same insurance everywhere in the EU that he will be allowed to keep the corresponding allowances and to transfer them without any restriction across Europe when relocating the corresponding production capacity.

Due the EU internal and international competition (market price for the products) the systems should be harmonised.

The European Trading Scheme might lead to a clear distortion of competitiveness within the EU steel sector.

Some of the integrated steel making plants (the so-called blast furnace route) will not get the needed amount of allowances to cover their current and future emissions. Production growth forecasts (increasing capacities or new investments) should be acknowledged in the same way in all Member States and all related allowances should be allocated free of charge.

Two circumstances causing distortion of the market are detailed as follows:

- a) Process related emissions: as most of these emissions are not reducible, setting a cap on these emissions would mean setting a cap on the production of steel. This unfair treatment should be corrected in the future. Applying a compliance factor to all kinds of emissions irrespective of their nature has the discriminating indirect effect to set a cap on the process related emissions and therefore on the production of steel.
- b) EU wide transfers: as the only possibility to reduce emissions is often to cut back capacity or to close a plant, the operator should have the same assurance everywhere in the EU that he will be allowed to keep the corresponding allowances and to transfer them without any restriction across Europe when relocating the corresponding production capacity.

2.9.9 Governmental Bodies

Regarding the share of free allowances, we believe that the Directive should be revised to establish a minimum level of allowances which must be distributed via auction or sale in each Member State. This level should be set in a way which is consistent with a move towards 100% auctioning in the long term. However, Member States should be free to auctioning a higher level of allowances if they wish. We would like to move to a more harmonised allocation methodology and believe that an EU-wide benchmark is the best way to achieve this for those allowances that are allocated for free. For this reason we are indifferent about harmonisation of the base years. It may be necessary to allow Member States to apply for dispensation to apply an alternative approach where justified by exceptional national circums tances.

Differences in country specific situations acroos the European Union have to be kept in mind when considering further harmonization of the scheme, including allocation methods. A case in point is the particular situation of our country, being a non-Annex 1 party to the UNFCCC, not having any emissions limitation/reduction targets and therefore no associated assigned amounts.

2.9.10 NGOs and Market Intermediaries

Base year shall be harmonised across EU25 as well.

I would prefer greater harmonization across the EU, but still with some EU wide rules for special cases, such as early action, and other special circumstances. But these should be set up EU-wide and not at national basis, in order to have a level playing field (competitiveness) Besides avoiding to distort incentives, more harmonisation means also less transaction cost in setting up NAPs

Harmonization of the commodity is essential. So long as this is achieved then overall harmonisation of the allocation is a competitive issue. On the whole I would have thought it would be prefereable not to see competitive advantages or trading loopholes created by national policies.

The EU-wide harmonisation needs to extend to the mechanics and the rules but needs to take place within the burden sharing arrangements. Hence, country-specific limits from the burden sharing need to be observed and form the framework for actual application of rules and methods.

2.9.11 Associations

Base year periods should be before 2000-2002

The level of impact that EU ETS has on existing or new assets depends very strongly on national circumstances. Given this we see no need nor advantage in harmonising sector allocation across the EU-25. Conversely we see this as a potential impediment to equity of allocation.

If the EU can find a common way to use the allocation method of "expected production x CO₂ efficiency factor" the answer for all questions is that we support EU wide harmonisation.

The question of the national Kyoto target is very important. National targets must not be part of a harmonisation of the allocation methods.

A definition for process emissions (e. g. from steel making, lime production etc.) is needed.

The allocation methodology should take into account the capability of a Sector to reduce emissions particularly accounting for recent significant capital investment in latest technology and the requirement to have to operate new investment plant for a significant number of years to pay back the investment. The target for reduction should consider both the Sector ability to reduce combustion emission and process emission as the potential to reduce emissions may not be proportional between process and combustion. If a benchmark methodology is used an installation should not be expected to improve beyond the benchmark level in the phase it applies to.

Consideration needs to be given to continuing harmonisation into post Kyoto periods. An attempt should be made to ensure that measures exist to retain environmental competivity through equilibrating standards of total product manufacture and distribution if necessary through built-in credit or debit.

Local national and product specific limitations must of course be accounted for where necessary e.g. access to renewables.

The unequal burden sharing already introduces complications here.

With the EU companies should be able to transfer allowances to encourage production efficiencies.

Our sector is in favour of a EU wide approach while – as mentioned under the paragraph related to the "practicality of developing community-wide benchmarks as a basis for allocation" - keeping the necessary flexibility at national level. As the box "Harmonised EU-wide approach" does not foresee this, the box "national approach" has been chosen.

The basic idea would be to develop a common European-wide template on a performancebased approach with set of pre-defined parameters to be applied nationally. Those parameters will provide the necessary flexibility at national level and take into account varying national conditions. They will have to be limited in number for the system to be workable. JI/CDM should be fast tracked.

Harmonisation of the allocation method based in historic emissions may be impossible, since not all the M.S. will have available data for the most recent years, which are the most representative ones and therefore convenient. Harmonisation would lead to use "older" base years, thus losing relation with the present situation and the next future probable evolution. Harmonisation is necessary to ensure that similar installations receive similar number of allowances regardless of the M.S. where they are located. On the other hand, harmonisation could intensify current comparative differences between similar installations in different M.S Our industry mainly consists of small installations which suffer from relatively high costs and administrative burden and should therefore be opted-out consistently throughout the EU. Harmonised rules/guidelines should be applied for new entrants and closures.

Base years have been decided and set differently in member states. It appears very unlikely that changes would be agreed.

Allowances should be allocated on a 100% free bsis to ensure against putting EU industry at competitive disadvantage. This principle should be harmonised in all member states.

We doubt that allocation methods can be realistically changed short-term. In a new, globally agreed system post 2012, especially internationally and globally operating companies would strongly prefer more uniform approaches.

The structure of the question is not logical. The question of "share of free allowances" is the most relevant. After that the question of allocation method is relevant. The question of base year for allocation is relevant only if grandfathering is used, but totally irrelevant if for example benchmarking is used. Thus we see it is very difficult to answer to the question by choosing some of alternatives given.

Our industry is - in principle - in favour of harmonisation of allocation method among EU Member States, because it is the way to safeguard the competition (equal companies get equal amount of allowances). At least the basic method (free of charge) and the key principles should be harmonised at EU-wide. However, the question how "deeply" the criteria should be harmonised depends highly on many things. During the Kyoto period the main obstacle for wide harmonisation of allocation criteria has been the unfair burden sharing agreement/ absolute targets for Member States. Beyond Kyoto period depends on the international climate change policy.

Harmonisation is essential to avoid unintended disturbance of competition. The ideas of creating a level playing field on the internal EU market should be in focus also in this area

Harmonisation should also address:

- formats of allocation plans
- transparancy in such plans
- allocation rules and reserve for new entrants
- treatment of closure of installations
- way in which the available cap for ETS participants is calculated in each MS

The European Trading Scheme might lead to a clear distortion of competitiveness within the EU industry

Some of the integrated plants will not get the needed amount of allowances to cover their current and future emissions. Production growth forecasts (increasing capacities or new

investments) should be acknowledged in the same way in all Member States and all related allowances should be allocated free of charge

We describe hereafter situations where we have identified possible distortions.

- a) Process related emissions: as most of these emissions are not reducible, setting a cap on these emissions would mean setting a cap on the production of steel. This unfair treatment should be corrected in the future. Applying a compliance factor to all kinds of emissions irrespective of their nature has the perverse indirect effect to set an indirect cap on the process related emissions and therefore on the production of our products
- b) **Export gases:** the possibility for each Member State to allocate allowances to the operator of the installation transferring the waste gas should become the across EU rule as soon as possible. A large majority of Member States have already decided to fully use this opportunity. When this rule would not be applied everywhere at the same time (not all Member states have applied this principle to the full extent in their national regulation), we would observe a clear discrimination between companies belonging to our sector when some are the owner of their power plant and some others are not.
- c) EU wide transfers: as the only possibility to reduce emissions is often to cut back capacity or to close a plant, the operator should have the same insurance everywhere in the EU that he will be allowed to keep the corresponding allowances and to transfer them without any restriction across Europe when relocating the corresponding production capacity.
 - Process emission allocation should be a fixed value for all producers
 - Need for a definition of process emission
 - Process emission allocation should be a fixed value for all producers

Harmonisation in the Post-Kyoto period (Post-2012) will be very important. Local considerations should be taken into account in the second phase of the EU-ETS (2008-2012). The Burden-sharing agreement makes harmonisation more difficult.

Until 2012 there will be different conditions within the different EU 25 due to the burden sharing agreement. After 2012 there should be only one European approach.

Our industry is in favour of a EU wide approach while - as mentioned under the paragraph related to the "practicality of developing community-wide benchmarks as a basis for allocation" - while keeping the necessary flexibility at national level. As the box "Harmonised EU-wide approach" did not foresee this, the box "national approach" has been chosen.

Among our member there are different views on further harmonisation of allocation methods. Four out of the eight respondents are in favour, whereas three prefer a national approach that may be periodically revised.

To promote a properly functioning market and equal competitive conditions for EU enterprises, it is crucial when allocating allowances to ensure similar installations receive comparable amounts of allowances.

Definition

Experiences from the current allocation period show that there are inconsistencies between Member States in the interpretation of the installations that are covered under the EU ETS Directive 2003/87/EC. The continuation of such inconsistencies could lead to serious competitive disadvantages for the affected installations within the EU. Industry would therefore require that the scope of the EU ETS Directive and the interpretation of definitions such as that of "combustion installations" should be made consistent and harmonised throughout the EU. The full harmonisation process should be finalised before Member States start developing the second round of National Allocation Plans (NAPs). This should also be consistent with the issue of exclusion of smaller installations.

Opt-out for smaller installations

The inclusion of many small and medium sized companies within the EU ETS places on them unnecessary reporting and administration burdens whilst their GHG emissions are negligible. It is recommended that an emission threshold be set (for example, at least 25,000 tonnes CO₃ eq. This corresponds to 55 percent of the installations included today, but only 2.5 percent of the total EU CO₂-emission (CEPS Task Force report, July 2005)). Below this threshold a company would be opted-out from the EU ETS unless it chooses to be voluntarily included. In any period, once this threshold is exceeded in any single year, the company remains within the ETS for that period.

It is vital that such an opt-out is in place (either formally or informally) for the period 2008-12.

Member States shall maintain a register of those companies "opted-out" and require a specified level of emissions monitoring and reporting. To avoid disproportionate burdens on small installations or governments, there should be a possibility for a voluntary opt-out, provided that installations are subject to equivalent action.

New Entrants and Closures

Harmonised rules and guidelines for New Entrants and Closures should be applied. A New Entrant should be defined consistently as either a new installation or an existing installation that has become covered by the ETS Directive due to changes in its production or production process. New Entrants should receive all the allowances needed if the best available technology is applied and similar investments in old installations across Europe should receive similar amounts of allowances. If the reserve of allowances is not large enough, Member States shall use Kyoto mechanisms to fill the gap.

The closure of an installation should be defined in the same way across European countries. The installation could not be considered as an operating installation, if it does not have an IPPC-permit (if needed). At least the allowances, which are already transferred into the installation's accounts (in the registry) should be entitled to the installation and should not immediately have to be returned after closure. The transfer of allowances during the rationalisation of production facilities, by closing inefficient plants and transferring production to a second facility either within the same, or different, Member State must be addressed.

Accounting and tax treatment

The treatment of emission allowances for tax purposes (especially value added tax) and within company accounts are subject to inconsistent interpretations throughout the EU. This is a particular issue for multi-national companies. Where possible, harmonised rules for tax and accounting for emission allowances should be applied throughout the EU.

2.10 Other items, which should fall within the definition of new entrant apart from "new greenfield installations" and "brownfield capacity additions"

2.10.1 Cement

One should ensure that in case of a plant rationalization (i.e. the closure of an –inefficientplant combined with the transfer of the production of this installation to a new or existing -more efficient- installation), the operator keeps its allowances.

In most NAPs, such a scheme is not possible insofar as allowances from closed installations are cancelled, while transfers of production benefit from allowances from the reserve, often on a benchmarking basis.

One could be inspired by the French NAP which foresees the solution proposed above.

One should ensure that in case of a plant rationalization i.e. the closure of an (inefficient) installation combined with the transfer of the production of this installation to a (new or existing) (more efficient) installation, the operator keeps its allowances.

2.10.2 Chemicals

De bottlenecking existing facilities should also be eligible for new entrant allowances

National allocation plans should include regulations that benefit economic growth. This regulation is a possibility to enable further industrial growth and to contribute technical and ecological improvements.

New efficient plants as well as high efficiency capacity creep are a major means in the chemical industry (and many other industries) to increase the energy efficiency and to maintain the competitive position on the world market. Hindering this hinders industrial renewal. The questionnaire is in conflict with the ECTreaty and the Directive (Annex III, 5). The text suggests that we have to bear in mind that allowances for new entrants mean fewer allowances for incumbents. This means equal treatment is not mentioned and it suggests that violation of the ECTreaty might be allowed. A limited reserve, first-come first-serve, is also an unacceptable violation which leads to lack of business predictability and legal uncertainty. The Commission should not allow such options in an inquiry under her responsibility.

New Entrant means new CO₂ source, either in an existing installation or in a new facility.

Additionally, if a new downstream chemical plant results in existing boiler or CHP plant being forced to work harder and emit CO₂, then that plant should qualify.

2.10.3 Other

In our country new production creates an eligibility for new entrant allowances in our country regardless of whether it uses its own facilities or makes use of a host. This definition should be continued as it encourages efficient development.

NER should be country-wide or EU-wide, not allocated to, nor disproportionately taken from, national sectors

New entrants and new growth will have to be carefully defined. New routes are not necessarily new growth as it might only be an old route that has been moved.

2.10.4 Pulp and Paper

Growth of our paper industry must be possible without being penalized by additional ET costs. Only growth can ensure future competitiveness in our industry.

Reduction of emissions of instalations not covered by the scheme should lead to increase in alocation to the installation which caused it (e.g. when existing local CHP plant takes over the heat supply from former small heaters.)

UK definition which also includes new production developed through offshore facilities should be retained

The definition of new entrant should be amended in the following way: (h) 'new entrant' means any installation carrying out one or more of the activities indicated in Annex I, which has obtained a greenhouse gas emissions permit or an update of its greenhouse gas emissions permit because of a change in the nature or functioning or an extension of the installation, subsequent to the date of notification to the Commission of the national allocation plan according to Article 9 (1);

This amendment will allow new entrants to be the considered as such in the same way across the European Union. The current definition is too vague, which allows that a new entrant in one Member State would be regarded as an incumbent in another Member State simply because the NAPs were not submitted according to the schedule indicated in Article 9 (1). This is a clear distortion of competition. This change would also encourage Member States to submit their NAPs on time.

In our country a fundamental role in the evolution of power generation capacity will be played by conversion of existing conventional oil-fired plants into advanced high-efficiency coal-fired units. This should be a very important field for the new entrant reserve.

New Entrant means new CO₂ source, either in an existing installation or in a new facility.

Concerning "new entrants reserve for free": ... but the allocation should remain close to the level of the allocation for existing installations.

About harmonisation: Allocation is a powerful instrument of the national energy policy. As long as energy policy and reduction requirements are national issues a Europe wide harmonisation seems not to be possible.

Long term a harmonisation should be the goal. But a precondition is that the other political instruments are harmonised too. The harmonisation has to take into account the different natural resources and the different economic status in the different member states. About reserve for new entrants: At least during the following periods new entrants need an allocation. Otherwise investments necessary for decreasing emissions and maintaining the power price will be delayed.

2.10.5 Refineries

New Entrant means new CO₂ source, either in an existing installation or in a new facility.

2.10.6 Steel

Increase in capacity through better process management.

Increase in capacity via increased efficiency

Increase in capacity thru better process management.

Output increases due to more efficient process operation.

2.10.7 Governmental Bodies

The definition of 'new capacity' needs to be made clear, at an EU level. The different activities

eligible for allowances from the new entrant reserve should be reduced as the Scheme progresses until there is no longer a new entrant reserve and all installations (including incumbents) buy allowances from auction or the market.

2.10.8 NGOs and Market Intermediaries

Plant closure rules should be seen in the context of new entrants rules. Assuming new entrants do not receive free allowances, then allowances of the closed installations can be kept under the provision that the allowances are used for a new installation replacing the closed one. This will provide an incentive for a low-carbon replacement, as the remaining amount of allowances can be sold on the market. If new entrants receive free allowances, the allowances of a closed installation shall be cancelled.

In addition, 'closure' of an installation should be clearly defined.

Comment 1: the new entrants question should be separated between new industry participants, and new electricity producers. If it is decided that auctioning is used for electricity, then obviously new entrants there would not get any credits for free. The opposite should be the case for industry.

Second comment: If an intensity approach is pursued (allocation based on actual production), then the new capacity to existing capacity, will be solved by itself. And obviously, new entrants could be treated the same way.

For phase2: Provision of a reserve needs to be free if existing installations are allocated on the basis of a grandfathering scheme; other mechanisms would lead to a distortion of competition at the expense of new entrants. With an auctioning scheme on existing installations, there does not need to be a free provision of a reserve, hence the question is not clear. Free allocation should be based on product benchmarks

For phase 3: In order to provide economic incentives for greater energy efficiency and a switch to energy sources with lower CO2 emissions, my organisation believes that emission rights to new entrants should not be allocated from a special reserve, but should be bought by the new entrants on the regular allowance market. This would lead to the effect that new investment decisions would have to factor the CO2 costs into the investment decision from the very beginning.

2.10.9 Associations

One should ensure that in case of a plant rationalisation i.e. the closure of an (inefficient) installation combined with the transfer of the production of this installation to a (new or existing) (more efficient) installation, the operator keeps its allowances.

In most NAPs, the allowances from the closed installation are cancelled, and the transfer of production benefits from allowances from the reserve for new entrants (often on a benchmarking basis). As a consequence, the investment made in order to improve efficiency and to reduce CO₂ emissions is not rewarded, as the system does not allow the operator to sell emission rights.

Where change or innovation leads to a reduction in overall CO, emissions such as in the development and manufacture of a carbon saving product but where it might be repsonsible for an increase in carbon emissions during its own production that element should be eligible for an allocation. This will benefit the scheme as a whole.

One should ensure that in case of a plant rationalisation i.e. the closure of an (inefficient)

installation combined with the transfer of the production of this installation to a (new or existing) (more efficient) installation, the operator keeps its allowances.

In most NAPs, the allowances from the closed installation are cancelled, and the transfer of production benefits from allowances from the reserve for new entrants (often on a benchmarking basis). As a consequence, the investment made in order to improve efficiency and to reduce CO₂ emissions is not rewarded, as the system does not allow the operator to sell emission rights.

Any review should contain guidance on how to address this issue of plant rationalization. The following should be considered:

"A special situation is to be distinguished: the transfer of an activity to be seen as the closure of an installation combined with the transfer of the production of this installation to one or several installations belonging to the same operator. In the case of activity transfer, all or part of the allowances may still be allocated to the operator. The benefit of this exception excludes allowances allocation from the new entrants reserve. When the operator of several installations definitely closes one of these, and when the activity of the closed installation is transferred to one or several installations of the operator on the EU territory, the operator may ask to keep all or part of the allowances allocated to the closed installation pro rata the level of activity maintained in the new installation." (free and improved translation from the French NAP).

Additional demand for heat and power which cause a combustion installation to run at a higher rate in situations where the demand is the result of the addition/extension of capacity in the plants it serves. This is to provide equity with new entrant combustion installations and annex 1 manufacturing plants in competing sectors which are both eligible for free allocations from the NER.

Capacity increases through better process management

Reserve for new entrants within the same sector, if not used distribute to others in the sector for the next period

- The closing of unefficient plant to set up more efficient plant should be rewarded.
- A Closure and a transfer to a new asset within the member State makes a sense, because the allocation of free allowances is given from the Member state to its own citizen
- CONCERNS: fuels supply disruption cases should be taken into account via a reserve. Substantial modification of some fuels supplies resulting in either an availability outage or an economical unbalancing effect due to legal or administrative decision. For instance, animals flours considered as bio-mass is "market" is mainly influenced by prohibition/authorization decided by governments to use these meals in the animal food industry and by granting/suppression of state subsidiaries to the different parties. Therefore, a government change of guidance could suddenly be discontinued for the our producers and compel these latter to use some other fuels; requiring CO₂ issue allowance.

This hypothesis could not be covered by the initial allocation which is previously and definitely determined by period.

In these cases, the producer which has to cope with a biomass shortage will not be considered as a « new entrant » as the fuel substitution is not a change which concerns the nature or the functioning of the installation. Therefore his sole available solution to continue his business will be to buy allowances to the market. At a level around 20 Euros/tons, such an additional cost is simply not bearable taking into account markets prices.

To promote utilisation of biomass and bio fuels in the our sector, we suggest that Member Sates should be authorised to guarantee free availability of allowances covering the emission of GHG resulting from the utilisation of classic fuels replacing Biomass and biofuels in case of shortage.

To avoid any undesirable side effects and speculation, my organisation suggests that these additional allowances should not be transferable.

Consequently, the production sector would like European authorities to consider the following amendment to the Directive establishing a scheme for greenhouse gas emission allowance trading within the Community:

Article ... Annex?

Shortage of Biomass - Bio fuels

« Member States may apply to the Commission for certain installations to be issued with additional allowances in case of shortage or unavailability of Biomass or Bio-fuels which would require the operator of those installations to use another combustible that would lead him to an increase of the quantity of allowances to be returned according to its greenhouse gas emissions permit. The Commission shall determine whether shortage is demonstrated, in which case it shall authorise the issue of additional and non-transferable allowances by Members States to the operator of those installations»

One should ensure, that in case of a plant rationalisation i.e. the closure of an (inefficient) installation combined with the transfer of the production of this installation to a (new or existing) (more efficient) installation, the operator keeps its allowances.

In most of the NAPs, the allowances from the closed installation are cancelled, and the transfer of production benefits from allowances from the reserve for new entrants (often on a benchmarking basis). As a consequence, the investments made in order to improve efficiency and to reduce CO_2 emissions are not rewarded, since the system does not allow the operator to sell emission allowances. Any review should contain guidance on how to address this issue of plant rationalization.

The following should also be considered:

"A special situation is to be distinguished: the transfer of an activity to be seen as the closure of an installation combined with the transfer of the production of this installation to one or several installations, belonging to the same operator. In the case of activity transfer, all or a part of the allowances may still be allocated to the operator. The benefit of this exception excludes allowances allocation from the new entrants reserve. When the operator of several installations definitely closes one of these, and when the activity of the closed installation is transferred to one or several installations of the operator on the EU territory, the operator may ask to keep all or part of the allowances allocated to the closed installation pro rata the level of activity maintained in the new installation." (Free translation from the French NAP)

2.11 Additional comments on new entrant and closure rules

2.11.1 Cement

A differentiation within the tem "new entrant" in "Greenfield facility" and others is not useful. An investment in an european site should be welcomed anyway. A closure and a transfer to a new asset with the Member State makes sense, because the allocation of free allowances is given from the Member State to its own citizens.

Equal treatment of incumbents, capacity changes and new entrants is absolutely crucial for

the effectiveness of the ETS.

Capacity changes and new entrants should receive free allowances in exactly the same way as incumbents but not at the detriment of the incumbents.

A new entrant is only a new entrant during the first commitment period of its existence. As from the next, it is an existing installation. A change of methodology from one to the next commitment period does not make sense.

Equal treatment can only be achieved in one way: performance based allocation, being a performance standard (CO, per unit of production) multiplied by production (production volume per year). Upon closure, production volume becomes zero, so should be the allowance, upon capacity increase or new entrant free allowances should go parallel with permitted production volume, in both cases as from the year of closure respectively entrance. Conceptually, in such a system there should be no separate definition of an absolute volume for a reserve for new entrants. The absence of a reserve for new entrants may however not be interpreted as no free allocation for new entrants.

New entrants or restructuring including across borders should be made possible and with equal treatment. Also, the reserve for new entrants should be kept at a minimum in order not to increase the burden on the sector.

2.11.2 Chemicals

A differentiation within the term "new entrant" in "Greenfield facility" and others is not useful. An investment in an European site should be welcomed anyway.

New installations will get allowances for free (at least for the time of their depreciation) if they meet BAT at the time of their operation. If the new installation does not meet BAT, only a part of allowances will be issued for free.

If closing units or (equivalently) units that reduce their production will not keep their allowances we have in fact an 'ex-post' allocation (like Germany included in the Allocation plan). In order to be consistent new units or (equivalently) units that increase the production should get allowances based on the same standards as existing operators.

Under cap & trade allowances should be retained. But as argued, cap & trade is not a sustainable option. Ex-post control solves all problems with new entrants and closures. Looking for solutions for new entrants and closures under the cap & trade theory is like trying to find the square circle. The requirements of the Directive cannot be met.

The cap & trade theory suggests that new entrants must buy all allowances and closures retain allowances. What would happen if this were pursued when the trading period was extended from 5 to 25-30 years? New efficient plants are hindered instead of stimulated as the Directive requires and what is also the objective of emissions trading in general. Transfer rules are also unjust and in conflict with competition rules. An incumbent replacing an obsolete plant is stimulated indeed but a real new entrant without such an obsolete plant has a major competitive disadvantage.

One important aspect of cap & trade is completely missing in the questionnaire. Cap & trade enhances frozen market shares. This effect increases as CO₂-prices increase. This effect is contrary to the environmental objective as it hinders growth by innovation. Enhancing frozen market shares is also in conflict with the competition rules of the ECTreaty. Example: winning or losing market share for electricity producers is at current CO₂-prices a zero sum game.

It is important to integrate closures and new entrants in order to minimize the new reserve for

2.11.3 Others

A new entrant reserve is required to ensure that where possible maximum recovery of resources occurs

These questions are only the tip of the iceberg. Firstly, it is necessary that "installation" be defined homogeneously across Europe, which is by no means the case. Secondly, closure, transfer and new entrant should be homogeneously defined as well. And thirdly consistent rules should be set.

Generally speaking, keeping the allowances of closed installations protects incumbents. On another hand, it stimulates emission reductions by facilitating investments in more efficient technologies. This is why we favour a solution where allowances can be kept for some time (basically: the current commitment period) but not too long.

New entrants should be treated equally to incumbents, and not be disadvantaged against late-movers. Closures should keep their allocation to the end of the year in which they close. Companies that rationalise and increase capacity at one plant by closing another should not be penalized for becoming more energy efficient. In this case, ex-post adjustment could be used.

closure should not apply to those situations when an operating entity has gone bankrupt, especially if the permits have been grandfathered or allocated free of charge. If auctioned and brought the permits can be used as assets in a case of bankruptcy but if grandfathered they should be returned to the market for the new entrant fund

Int he terms of aviation new entrants should only be permitted to obtain their permits or permits should be held in trust until new entrants become operational as many collapse before they reach this stage.

We ask for EU-wide harmonisation concerning rules for the transfer of allowances from closed facilities to existing other facilities with increased capacity.

2.11.4 Pulp and Paper

If the existing installations get the allowances for free, it is difficult to see why new entrants should pay for them.

The scheme has to encourage investments in general and in particular replacement investments in more efficient plants. If a company closes an old and less efficient plant/parts of it and opens a new and more efficient plant/machinery the company should be allowed to transfer the allowances of the closed plant/equipment to the new one as an incentive for plant rationalisation.

Free allocation for new entrants is OK as long as they do not get an over-allocation. A business plan is not yet reality. So I strongly believe that part should be free and part should be paid for. That's why it must be possible to transfer allocations after closing down a plant and moving the activities. This part can be used to offset the part that has to be paid for.

As existing installations should get the allowances for free, it is difficult to see why new entrants should pay for them.

The scheme has to encourage investments in general and in particular replacement

investments in more efficient plants. If a company closes an old and less efficient plant/parts of it and opens a new and more efficient plant/machinery the company should be allowed to transfer the allowances of the closed plant/equipment to the new one as an incentive for plant rationalisation. The transfer need to be within MS boarders as long as the emission targets are national through the burden sharing agreement or similar arrangements.

2.11.5 Power

We believe it is important not to erect barriers to new entry. If new entrants have to buy all their allowances, higher power prices will be required to stimulate new entry. This leads to higher prices to industry and disadvantages EU industry further. Also barriers to new entry may increase security of supply concerns.

My Company does not support a new entrants regime and believes that new entrants should purchase allowances from the market. The retention of a new entrant reserve (NER) would discriminate against carbon free technology and support the development of non-carbon free technology through the issuing free allowances to new build (e.g. CCGT). The purchasing of allowances would not affect the financial assessments of new entrants in ESI, the dominant sector in the scheme, as the price of CO₂ (carbon) would be reflected in predictions of electricity prices.

Allocating free allowances to new entrants would probably require the creation of a setaside new entrant reserve. The creation of such a reserve would significantly increase the complexity of the scheme and reduce certainty for participants. For example, the size of the reserve cannot be accurately calculated in advance. This would lead to uncertainty for participants as they would be unsure:

- when the allowances in the NER would be released into the trading system through allocation to new entrants; and
- whether the NER would hold a surplus of allowances or a deficit, each of which would require different actions to address with differing impacts on market price.

Withholding allowances from existing incumbents within a set-aside reserve for new entrants would disadvantage these existing incumbents relative to existing installations in other countries that do not allocate free allowances to new entrants.

In addition, the rules required to administer a NER and account for all eventualities would undoubtedly be extremely complex increasing the administrative burden on Government.

A closure regime should mirror the arrangements for new entrants. If the NER is withdrawn in Phase II then closing plant should be allowed to retain allowances to the end of the allocation period. The intent of the EU ETS is to create a traded market for ${
m CO_2}$ to deliver the ${
m CO_2}$ cap at lowest cost. Closing CO₂ inefficient plant and selling its allowances for the allocation period to another market participant (e.g. one with better CO₂ efficiency) is clearly a valid abatement technique within the context of a traded market. Withholding allowances from plant that closes will provide a greater incentive for CO, inefficient plant to remain open and thereby delay the investment to deliver the EU CO₂ emissions target. In addition, allowing installations that close to retain their attributed allowances creates a much simpler allocation and trading mechanism that avoids the complexity of defining "closure" that covers all eventualities (including mothballing, prolonged plant repair periods, outages for construction work, etc).

Government participation in the EU ETS market should not be permitted given their ability to manipulate the market. The market was established in the belief that industry was best positioned to identify least cost options for compliance. Government participation disturbs this principle

Our answers refer to the present need to differentiate national behaviours, so that policy

objectives such as security of supply, diversification of energy sources and reduction of energy costs can also be taken into account. For example, this means avoiding to penalise coal, including new investments.

In general, we believe that existing installations and new entrants should be guaranteed an equivalent treatment. More particularly, if existing installations are granted allowances for free, the same should apply for new entrants, on the basis of equivalent allocation methods. As for the transfer of allowances owned by closing installations, this should be allowed according to market rules.

It is important to integrate closures and new entrants in order to minimize the new reserve for new entrants.

As/if the new installations would receive their allowances according to new entrants rules there is no need to allow the closed plants to keep them.

The allowances once transferred on the accounts, should be left to the plant operator, meaning only for one year.

Allowances to new installations should be allocated in the same way as it is done with the existing ones. The size of the reserve should be established at national level, and the involvement of governments in buying/selling allowances should be marginal in order not to distort the market and/or the allocation. Adding new capacity to existing installations and new installations should be treated equally. However, in the power sector, the importance of new installations in the future seems much higher than adding capacity to existing installations. Regarding plant closures, old amortized installations, should not receive any allocation at all, because there's not point in giving them any kind of compensation (allowance allocation is an eonomic compensation). Moreover, if they received no or very few allowances, their retirement decision won't be influenced by any kind of plant closure allocation rules. On the other hand, there's no reason to justify that old amortized installations' owners should retain their allowances while other agents have been assigned much less allowances to support their new insvestments. This will distort decisions to invest in new installations. The transfer rule, linked as it is to new investments, is a clear distortion to competition, as it favours former owners of installations, even though their new installations could be less competitive than the corresponding to new facilities not linked to the retirement of former installations.

About harmonisation of new entrants rule: Allocation is a powerful instrument of the national energy policy. As long as energy policy and reduction goal are national issues a Europe wide harmonisation seems not to be possible.

Investments are necessary to decrease emissions. Therefore new entrants should get an allocation – at least during the following periods. That's why a reserve for new entrants is necessary.

2.11.6 Refineries

Refining is a highly competitive international business, investment in new capacity will happen somewhere if the market requires it. If the barriers to new investment in EU refineries are raised by insisting that new capacity has to buy all allowances, the likelihood is that the investments will be made at non-EU refineries instead. If this happens, world-wide emissions will not be reduced. With the barriers at a reasonable level, investments should still happen at EU refineries but taking energy efficiency into account.

It is important to integrate closures and new entrants in order to minimize the new reserve for new entrants.

2.11.7 Steel

New entrants should really be new and not be an intra European relocation to receive an allocation twice for the same market. Efficient plants should be able to grow with the credits of closures of other plants.

Allowances for new entrants should be not given for free to investors based in uncontrained

It is important that no allocation can be received as a new entrant when it is a closing here

 opening there. At the same time, the closure of inefficient installation could open space for new/more efficient entrants.

New entrance should be really new ones. If the allowances are tranferred from closed plant for the new plant this should be considered within the allocation.

- 1) Remark on the formulation of the question related to the transfer across borders between EU MSs: closing FACILITIES cannot keep something when they do not exist anymore, only the COMPANY to which the new asset belongs can keep the allowances!
- 2) New entrants should be really new ones: mechanism should prohibit a company to keep allowances from closure in one MS and get allowances free of charge when operating a new plant in another MS. In other words an intra European relocation should not be granted an allocation twice for the same market.
- 3) Efficient plants should be able to grow using allowances from closure of less efficient ones within one company.
- 4) Site rationalisation should be permitted across Member States.

2.11.8 Governmental Bodies

My country wants to move towards greater use of auctioning or sale of allowances. Such a transition may well be phased, depending on the outcome of the Commission's review of the Scheme and the extent of movement by other Member States. Any move, in the long term, to extensive use of auctioning would take account of actions by other EU Member States and could be used as an allocation methodology for new entrants.

All new first time instillations should be given priority and free allowances. In doing this new projects will not be discouraged from opening in the UK or Europe due to possible free allowance shortfalls.

2.11.9 NGOs and Market Intermediaries

Plant closure rules should be seen in the context of new entrants rules. Assuming new entrants do not receive free allowances, then allowances of the closed installations can be kept under the provision that the allowances are used for a new installation replacing the closed one. This will provide an incentive for a low-carbon replacement, as the remaining amount of allowances can be sold on the market. If new entrants receive free allowances, the allowances of a closed installation shall be cancelled. In addition, 'closure' of an installation should be clearly defined.

If gov'ts and EC start acting as buyer/seller in the market, you will undermine the scheme's purpose rapidly.

If new entrants do not receive free allowances, then allowances of the closed installations can be kept under the provision that the allowances are used for a new installation replacing the closed one. This will provide an incentive for a low-carbon replacement, as the remaining amount of allowances can be sold on the market. If new entrants receive free allowances, the allowances of a closed installation shall be cancelled. In addition, 'closure' of an installation should be clearly defined.

There should be an annual new entrant reserve created under EU-wide harmonised rules. Unallocated permits at year end should be auctioned on the market during the second month of the new year. A buffer zone should be created in the first month of the year for an auction in which Governments can buy permits from an EU-wide pool of the previous year's closures in order to balance their new entrant reserves for the new year.

It is important to know that a facility after closure doesn't meet the ETS requirementds anymore, regarding monitoring etc. That closing facility will therefor not be allowed to get a CO, permit, and that is why that facility would not get allowances issued and the next years anymore. It can keep the allowanceds of the present year and the saved allowances.

The previous questions is not needed if we have a benchmarking approach based on actual production x CO₂ factor: while there would not be a fixed ceiling on emissions, new entrants in industry would always get their allowances according to the general rules, and would be treated just the same way as expanded capacity of existing installations.

It is difficult to retain incentive to reduce emissions when total emissions quota is removed in the event of site closing. However so long as new entrants rules allow expansion of capacity at an individual site to qualify then it would seem logical that if a site closes then it loses its quota in subsequent allocation periods.

For phase 2 only: Transfer of allowances depends on other provisions. Were any installation to buy all allowances required a transfer would not be needed. If free allowances allocation on a grandfathering basis a transferability of allowances sets important incentives to invest in low carbon technologies and fuels, therefore a transferability would be important. Likewise should a transfer of allowances be limited to national borders as long as individual allocations do bear the risk (as happened in NAP1) of substantial over allocation of industry sectors in individual countries.

Given the provisions, governments need to set aside a big enough reserve (based on assessments of potential new entrants) and should not interact with markets. Remaining allowances need to be retired at the end of the period.

2.11.10 Associations

It is important to enable transfers within the EU in order not to favour investments outside EU.

A differentiation within the term "new entrant" in "greenfield facility" and others is not useful. An investment into a European site should be welcome anyway.

How can "closing facilities" be unequivocally defined? Is there a workable definition at all?

Closing facilities should be allowed to keep allowances and transfer allowances under rules such as Rationalization. A closed facility is after all providing an emission reduction within the NAP just as much as a facility which is improving its efficiency therefore the allowances are of equal value and should be available to sell on the market to those less efficient operators.

The issue of government intervention is critical. Intervention should be highly restricted and monitored. It should be limited to a quantity of allowances associated with the needs of the new entrance reserve.

We are of the opinion that existing assets, new entrants and increased capacity should be treated equally. A reserve for new entrants should be provided for free (by Governments) but not to the detriment of existing assets.

Harmonised rules/guidelines should be applied across the EU to ensure that allocation methods do not determine where new installations are set up.

In principle, harmonised rules/guidelines should be applied, but there first needs to be greater transparency in the rule that member states have applied to inform a fuller consultation.

Harmonised rules/guidelines should be applied across the EU. If the basic method of allocation is free of charge also the new entrants should be given allowances free of charge. New entrants should receive all the allowances needed if the best available technology is applied. If the reserve of allowances is not large enough, Member States shall use Kyoto mechanisms to fill the gap. Otherwise the companies are treated un-equitable and the investments are decreased.

The closure of an installation should be defined by the company itself. The istallation could not be considered as an operating installation, if it does not have an IPPC-permit, when needed. At least the allowances, which are already transferred into the intallation's accounts (in the registry) should be entitled to the installation and should not have to be returned after closure. Companies should themselves determine when an installation is closed. The transfer of allowances during the rationalisation of production facilities, by closing inefficient plants and transferring production to a second facility either within the same, or different, Member State must be addressed.

Harmonisation of allocation to new entrants is necessary to ensure that the allocation method does not dictate the location of new installations across EU.

Allowing closing companies to profit by selling surplus allowances is a market distortion. Borderline profitable plants could be closed unnecessarily - and they might not be the least efficient installations. Surplus allowances should be allocated back to the new entrant reserve. However, we can see a case for transferring allowances from a closing facility to another installation within the same company - this could usefully encourage rationalisation of inefficient plant.

Treatment of new entrants and closures should be strongly linked and balanced. Therefore, if new entrants receive for free, than closures should return. However, defining closures is difficult. Therefore, in practice closures could possibly hold onto their allowances. If new entrants (incl. new capacity additions) receive for free, than transfer of allowances can severely complicate the process. Could possibly lead to double counting. Especially across borders. Therefore, exclude such an option to keep things practical.

Remark on the formulation of the question related to the transfer across borders between EU MSs: the closing facilities cannot keep something when they do not exist anymore! Only the company to which the new asset belongs can keep the allowances!

Additional comments:

- 1) New entrants should be really new ones: mechanism should prohibit a company to keep allowances from closure in one MS and get allowances free of charge when operating a new plant in another MS. In other words an intra European relocation should not receive an allocation twice for the same market.
- 2) Efficient plants should be able to grow using allowances from closure of less efficient ones
- 3) Site rationalisation should be permitted across Member States.

Closing facilities should be allowed to keep their allowances provided they are transfereed to another / new asset belonging to the same company

The governments should only be allowed to intervene punctually in the CO₂ market and only for the purpose of refilling the new entrant reserve.

My organisation is of the opinion that existing assets, new entrants and increased capacity should be treated equally. A reserve for new entrants should be provided for free but not on the detriment of existing assets.

Changes of installations due to legislative requirements which result in an increase of CO, have to be treated differently. In line with the Directive, the allocation of allowances has to take into account this unavoidable CO₂ increase.

A transfer of allowances to new assets should, however, only be impossible, if new entrants are provided with allowances non-discriminatorily and free-of-charge.

New Entrants and Closures

Harmonised rules and guidelines for New Entrants and Closures should be applied. A New Entrant should be defined consistently as either a new installation or an existing installation that has become covered by the ETS Directive due to changes in its production or production process. New Entrants should receive all the allowances needed if the best available technology is applied and similar investments in old installations across Europe should receive similar amounts of allowances. If the reserve of allowances is not large enough, Member States shall use Kyoto mechanisms to fill the gap.

The closure of an installation should be defined in the same way across European countries. The installation could not be considered as an operating installation, if it does not have an IPPC-permit (if needed). At least the allowances, which are already transferred into the installation's accounts (in the registry) should be entitled to the installation and should not immediately have to be returned after closure. The transfer of allowances during the rationalisation of production facilities, by closing inefficient plants and transferring production to a second facility either within the same, or different, Member State must be addressed.

Use of opt-in

Use of the opt-in within the ETS must not lead to a competitive advantage for companies within a specific sector.

Opt-out for smaller installations

The inclusion of many small and medium sized companies within the EU ETS places on them unnecessary reporting and administration burdens whilst their GHG emissions are negligible. It is recommended that an emission threshold be set (for example, at least 25,000 tonnes CO, eq. This corresponds to 55 percent of the installations included today, but only 2.5 percent of the total EU CO₂-emission (CEPS Task Force report, July 2005)). Below this threshold a company would be opted-out from the EU ETS unless it chooses to be voluntarily included. In any period, once this threshold is exceeded in any single year, the company remains within the ETS for that period.

It is vital that such an opt-out is in place (either formally or informally) for the period 2008-12.

Member States shall maintain a register of those companies "opted-out" and require a specified level of emissions monitoring and reporting. To avoid disproportionate burdens on small installations or governments, there should be a possibility for a voluntary opt-out, provided that installations are subject to equivalent action.

2.12 Additional reasons to buy credits from JI/CDM projects apart from "compliance issues" or "trading"

2.12.1 Aluminium

Allow for expansion of existing capacity

2.12.2 Cement

Risk management

2.12.3 Chemicals

To gain experience with JI/CDM projects

To shift some safety margin from the 1st to the 2nd trading period

We intend to gain credits from CDM/JI projects to sustain our countries Kyoto commitments

2.12.4 Others

banking into Phase 2

for PR purposes

2.12.5 Pulp and Paper

CDM projects will be executed by mill-sites of our organisation. Therefore we will have real carbon emission reductions. This is part of our SD-strategy.

Cost advantage

2.12.6 Power

banking for Phase 2

manage the transition between Phase I and Phase II of the scheme

We intend to gain credits from CDM/JI projects to sustain our country's Kyoto commitments

2.12.7 Refineries

banking into Phase 2

We intend to gain credits from CDM/JI projects to sustain the Kyoto commitments

2.12.8 Steel

Study the mechanism

2.13 Other reasons for setting limits on certified emission reductions (CERS) and emission reduction units (ERUS) within the EU ETS apart from "internal CO2 reduction setting a positive example" and "creating more certainty on supply"

2.13.1 Power

The need to comply with the supplementarity principle

2.13.2 Associations

Yes, because national reduction aims shall be reach via national Reduction

2.14 Other reasons for not setting limits on certified emission reductions (CERS) and emission reduction units (ERUS) within the eu ets apart from "emissions being a global problem," "helping developing countries," "dampening effect on CO2 price volatility," and "CERS/ERUS linking global CO2 markets"

2.14.1 NGOs and Market Intermediaries

CDM projects are a stepping stone to a global emissions trading system

In reality it does not matter but adds extra costs and complication

JI provides a cost-effective mechanism within industrialized

Because most emission growth occurs in developing countries

I am concerned about the robustness of the commodity

2.15 Additional comments on JI/CDM

2.15.1 Aluminium

The current CDM approval mechanism is burdensome and inefficient. Europe needs to develop clear rules for JI projects

2.15.2 Cement

The UN CDM EB's current interpretation of additionality - especially the consolidated tools for demonstration of additionality (Cotoda) - are unrealistic in capital intensive industries. Also the functioning of the EB needs significant improvement

With current red tape and inefficiency of the EB, there is very little, if any, future for CDM.

The problems have already been discussed many times at many occasions, without success. Maybe the EU could consider to install its own CDM Executive Board.

Those mechanisms do not work, mostly because the application made of the concept of additionality is too restrictive.

Limiting the use of CERs makes absolutely no environmental sense and is contradictory with Kyoto's spirit: Global warming is a GLOBAL problem. Such a limitation would moreover be another blow to the competitiveness of the European industry, would constitute a barrier to trade in a commodity market (the CO2 market) and adversely affect the cost-effectiveness of the JI/CDM instruments.

We are opposed to any cap that would limit the conversion of credits from projects into allowances. Since these credits may reduce the economic burden of emission reductions, no quantitative restriction should be placed on their use. A limitation, including limitations on the ability of companies to use such credits to meet emissions reduction targets...

- will be yet another blow to the competitiveness of European industry
- makes no environmental sense
- is inconsistent with the spirit and the letter of international agreements
- will adversely affect the cost-effectiveness of the JI/CDM instruments and furthermore, creating a deterrent for parties envisaging such projects.

The practice and option of JI/CDM is far too complex for the companies, especially for small companies.

2.15.3 Chemicals

The industry opposes any limit on the conversion of credits from projects into EU- allowances. Since these credits may reduce the economic burden of emission reductions, no quantitative restriction should be placed on their use. A limitation, including limitations on the ability of companies to use such credits to meet emissions reductions targets

- will be another blow to the competitiveness of European industry
- makes no environmental sense
- is inconsistent with international agreements
- will adversely affect the cost-effectiveness of the JI/CDM instruments and furthermore, creating a deterrent for parties envisaging such projects.

The submission/Validation procedures must be simplified for CDM. The environmental additionality should be the unique requirement (Artcicle 12 of the Kyoto Protocol), without any undue addition.

2.15.4 Other

Given that some countries have opted to purchase CDM/JI at a national level and reduce the obligations of their traded sector, it does not seem right that all countries' traded sector should have the same restrictions. Any limit on CDM/JI should be set at country level, based on supplementarity requirements and a traded sector limit derived based on national purchases.

No national limits should be set on the extent to which credits generated through the Kyoto mechanisms can be used to meet EU ETS targets. A limit on use of these credits would artificially influence the market and negatively impact performance of the EU ETS. Compliance cost would likely rise as a result of artificially induced scarcity of credits.

The practice and option of JI/CDM is far too complex for SMEs and makes only sense to

reach the target of a member state.

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2.15.5 Power

We note that some countries have decided to purchase JI/CDM credits, thus increasing the allowances which can be allocated within EU ETS. Therefore it is inappropriate to apply the same limit in countries which have decided not to purchase credits.

During this transitional period, setting tight quantitative limits or new qualitative limits which restrict use of JI and CDM credits by operators would force them to purchase EU allowances that are more expensive than JI and CDM credits hence increase the cost of compliance. This would divert resources from the necessary longer term investments and jeopardize market liquidity.

The modalities of the CDM and JI Mechanisms have been agreed at UN level and should be respected. Otherwise ghg markets are distorted and EU competitiveness is damaged

It is vital that companies have full and flexible access to the credits generated by the Kyoto mechanisms Joint Implementation (JI) and Clean Development Mechanism (CDM). The setting of quantitative and qualitative restrictive "caps" on the use of such credits will undermine the potential cost-efficiencies of the emissions trading scheme and will act to reduce the number of possible projects proposed by electricity companies.

We think that there should be no limits on CERs and ERUs both quantitatively and qualitatively, the latter meaning that the EU-ETS should impose no restrictions on the types of JI/CDM projects.

The submission/Validation procedures must be simplified for CDM. The environmental additionality should be the unique requirement (Article 12 of the Kyoto Protocol), without any undue addition.

A limit to the use of these credits in the EU ETS should be established, so that a stable framework for the development and investment in low carbon technologies is created. If no limit is present, there will be both a reduction of investments in low carbon technologies in Europe, and also a slow down in the development of new low carbon technologies. Moreover, this limit is also necessary to comply with the supplementary principle agreed in the Kyoto Protocol and in the Marrakech agreements.

Regarding buying of credits from JI/CDM projects, my company intends to get them through carbon funds in order to minimize risks related to these credits.

Avoid bureaucracy but safeguard trustworthiness.

2.15.6 Refineries

It is unreasonable to harmonise limits in the traded sectors when some countries have reduced the efforts required by that sector by purchasing credits at a country level. Limits on the traded sector should be set taking into account the individual country targets and JI/CDM amounts already purchased at government level

The submission/Validation procedures must be simplified for CDM. The environmental additionality should be the unique requirement (Artcicle 12 of the Kyoto Protocol), without any undue addition.

CDM EB approval process must be significantly streamlined to reduce transaction costs and

encourage project development.

2.15.7 Steel

Preference is to generate CDM credits in own overseas investments. Easy way to avoid forced production decrease when there is a lack of credits in the market.

It is vital that EU Business has full and flexible access to the credits generated from the Kyoto mechanisms. The setting of restrictive "caps" on the use of such credits from JI/CDM will undermine the potential cost-efficiencies of the ETS and will act to reduce the number of possible projects proposed by business.

In the future decision it should be noticed that some participants has already invested significant amount of money for JI/CDM as by the current legistlation those are to be used in EU ETS.

It is vital that EU businesses have full and flexible access to the credits generated from the Kyoto mechanisms. The setting of restrictive "caps" on the use of such credits from JI/CDM will undermine the potential cost-efficiencies of the ETS and will act to reduce the number of possible projects proposed by business.

2.15.8 Governmental Bodies

It is premature for the the country to commit to a position on issues relating to the future of JI/ CDM. These are under consideration as part of our review of our Climate Change Programme and our work on the future framework for international action on climate change.

2.15.9 NGOs and Market Intermediaries

CDM are useful instruments in a world where developing countries do not have an absolute cap. However, the future goal should be an international trading system - essentially similar to the EU ETS - under which all countries had absolute national emissions caps, rather than credits being generated from relative reductions from individual projects against a growing overall baseline of emissions. (Such a scheme would place a falling cap on total global emissions, with this being achieved by falling caps in developed countries and rising caps in developing countries.) Any decisions relating to the treatment of CDM credits now should therefore not impede the transition to a broader international trading scheme in future.

Project mechanisms should not only include JI and CDM but also "domestic offset projets" The setting-up of such a scheme is of uttermost importance, as it allows:

- 1) Three points of microeconomic interest
 - Extend the field of economic instruments for action against climate change: a domestic offset projects system would provide the opportunity for voluntary players to obtain value from their emission reductions in sectors not covered by the directive;
 - Take synergies into account through an approach considering the whole production line: the project approach takes into account sector interactions, for example by obtaining value from the upstream reduction in a factory's emission achieved by acting on the supply chain and through concerted action with suppliers;
 - Rectify or lessen distortions: under the Kyoto project-based mechanism, an investor can for example obtain credits for emission reductions achieved by manure management in Chile.
- 2) Two points of macroeconomic interest
 - Extend the possibility for States to reduce physical emissions in their territory. Being linked to the ETS, a domestic offset projects mechanism would have no public cost. If it were

- correctly implemented it would carry no risk of "carbon inflation" as each carbon credit issued will have had its counterpart in the form of an emission reduction.
- Lighten the constraints on players covered by the ETS: the carbon credits allocated to promoters of domestic offset projects must be tradable on the market and eligible for use by players in the ETS for the purpose of complying with their obligations. For a given allowance, this would lighten the constraints for players if the market shows that there is greater interest in reducing emissions through innovation outside the scope of the ETS.

The use and evaluation of external credits qualitative criteria shall be improved. Gold Standard projects shall be promoted and sustainability and suplementarity of JI/CDM shall be checked carefully.

For environmental, economical, and political reasons, we consider it crucial to extend the EU ETS to credits generated by land use, land use change and forestry (LULUCF) projects:

For the global and local environment:

- 1) More than 20% of global emissions stem from the forestry sector. Addressing sequestration and loss of carbon into the atmosphere is therefore a crucial component of each climate regime.
- 2) Sequestration projects have the greatest positive impact on sustainable development from all CDM/JI project. They are often community driven and allow to address issues of local environmental degradation such as water loss, soil degradation and desertification. CDM/JI offer important incentive structures to restore and maintain important ecosystems.
- 3) The problems of CDM/JI sequestration projects (commercial plantations, loss of biodiversity) are managable and do not justify the exclusions of such a important project classe.

For economical reasons:

- 1) Inclusion of credits generated by carbon sinks will significantly lower the compliance costs under the EU ETS. Sequestration credits can be relatively fast generated (compared with credits coming from energy CDM/JI projects).
- 2) The risk of losses can be managed through insurance and security schemes.

For political reasons:

- 1) Given the highly desirable local impact of LULUCF projects, most developping countries have expressed their strong support in favor of the inclusion of LULUCF credits in the EU ETS and any other emission trading scheme which allows international credits to be used for compliance.
- 2) Stimmulating demand for LULUCF projects and the respective credits is therefore important to secure the support of developing countries in the negotiation process for a post-Kyoto climate regime.
- 3) The inclusion of LULUCF credits would support the EU's support for Africa a continent that risks to be left out by energy related CDM projects.

Operators should be allowed to use LULUCF project related credits in the EU ETS. Afforestation and reforestation credits are permitted under Kyoto and there is no justification for the EU to disallow their use. Furthermore, out of all the types of carbon projects, those related to sinks have the potential to deliver some of the most impressive benefits for local communities and biodiversity.

In addition, Africa is a major focus of the EU, and land-based projects represent the only real means for much of that continent to access the carbon market (as the low energy intensity in that region typically precludes the development of cost-effective carbon projects in the energy sector); Allowing sinks credits would promote fair trade and assist Africa's poor become more self sufficient by moving from aid to trade. This applies equally to much of the world's poor, given their limited opportunities for revenue generation other than those related to the forest resources they manage.

If the EU continues to shut out the world's poorest people from the international carbon

market this will reflect very poorly on these rich countries. As a growing number of African voices are pointing out, the exclusion of sinks credits is nothing less than a non-tariff trade barrier for one of the few products these poor regions can cost-effectively export.

For EU operators, including member companies, allowing afforestation/reforestation (A/R) credits in the ETS will help address the current CER shortage, increase market liquidity (which will reduce market volatility and uncertainty), and lower compliance costs.

In order to ensure that only the highest quality projects are encouraged (which will meet the sustainable development objectives of the CDM and Linking Directive), the European Commission could establish quality standards. Finally, there are a number of straightforward ways to deal with temporary credits in the EU ETS. For example, the ETS could be amended to allow for direct trading of such credits alongside EUAs, or member states could be allowed to swap them for CERs or EUAs.

The effect of CERs on price volatility is rather unclear

ETS should develop a very easy framework for offering CERs for ETS (easier than the linking directive)

The use and evaluation of external credits qualitative criteria shall be improved. Gold Standard projects shall be promoted and sustainability and suplementarity of JI/CDM shall be checked carefully.

While very desirable to extend the trading system outside the ETS, without certainty on the overall total quantity of JI and CDM available within a period (i.e. so long as there is no cap on both) there will always be too much opacity in the market and therefore too little certainty and hence too little liquidity. There should therefore be a cap on the quantity of JI/CDM available for trading internally.

The inclusion of credits from forestry projects is as very important, especially due to the political signal this sends to many least developing countries.

The inclusion of domestic offsets, to the extent that no double counting occurs, should be contemplated.

Due to the problems in the certification of CERs and the rather lengthy process, there will probably be only limited use of CDM/JI in the next years anyway. Limits are thus not necessary and may hinder the infant market from growing.

Currently I am not convinced that CERs represent the same commodity as will be traded through the EU ETS. Equally as many of the projects are subjjective I do not believe that they can be measured with the same accuracy.

The use and evaluation of external credits qualitative criteria shall be improved. Gold Standard projects shall be promoted and sustainability and suplementarity of JI/CDM shall be checked carefully.

2.15.10 Associations

A solution should be found at COP11 in order to solve the CDM Committee budget problems. This should enhance CDMs and bring liquidity to the market.

The industry opposes any limit on the conversion of credits from projects into EU allowances. Since these credits may reduce the economic burden of emission reductions, no quantitative restriction should be placed on their use. A limitation, including limitations on the ability of

companies to use such credits to meet emissions reductions targets

- will be another blow to the competitiveness of European industry
- makes no environmental sense
- is inconsistent with international agreements
- will adversely affect the cost-effectiveness of the JI/CDM instruments and furthermore create an obstacle for parties envisaging such projects.

Especially the CDM should be made more operational (less bureaucracy, more pragmatism, more efficiency).

My organisation is opposed to any cap that would limit the conversion of credits from projects into allowances as we support the lowest cost emissions reduction. Since these credits may reduce the economic burden of emission reductions, no quantitative restriction should be placed on their use. A limitation, including limitations on the ability of companies to use such credits to meet emissions reduction targets:

- will be yet another blow to the competitiveness of European industry
- makes no environmental sense
- is inconsistent with the spirit and the letter of international agreements
- will adversely affect the cost-effectiveness of the JI/CDM instruments and, furthermore, creating a deterrent for parties envisaging such projects.
- would constitute a barrier to trade in a commodity market, ie, the CO₂ market.

Furthermore, the decision on UNFCCC level (eg. by the CDM Executive Board) should be accepted by Member State governments without any further bureaucratic hindrances (no double or multiple checking).

The cost of access to JI and CDM projects is likely to make them mainly applicable to governments, very large multinationals and generators. As tools for balancing they are likely to be out of reach for most if not all glass manufacturers. Access to credits should be the same at member state level as should any quantitative or qualitative restrictions.

We are opposed to any cap that would limit the conversion of credits from projects into allowances. Since these credits may reduce the economic burden of emission reductions, no quantitative restriction should be placed on their use. A limitation, including limitations on the ability of companies to use such credits to meet emissions reduction targets:

- will be yet another blow to the competitiveness of European industry
- makes no environmental sense
- is inconsistent with the spirit and the letter of international agreements
- will adversely affect the cost-effectiveness of the JI/CDM instruments and, furthermore, creating a deterrent for parties envisaging such projects
- would constitute a barrier to trade in a commodity market, ie, the CO₂ market.

Furthermore, the decision on UNFCCC level (eg. by the CDM Executive Board) should be accepted by Member State governments without any further bureaucratic hindrances (no double or multiple checking).

The four previous arguments underline the reason to open the door to JI/CDM reductions into ETS.

In addition, some activities or installations have no technical margin to further reduce their emissions and their only alternative would be either to buy allowances or, if the market is not liquid enough, to leave unoccupied part of their installed capacity. In such a situation, the intended cost-efficiency of ETS will not be achieved.

It is vital that EU Business has full and flexible access to the credits generated from the Kyoto mechanisms. The setting of restrictive "caps" on the use of such credits from Joint Implementation and the CDM will undermine the potential cost-efficiencies of the ETS and will act to reduce the number of possible projects proposed by business.

Consideration must be given to the link between the EU ETS and the developing international framework, particularly in the period post-2012. The need for a comprehensive global framework that includes all regions and countries is paramount to the efficient functioning of the EU ETS. It is vital to take into account the protection of the international competitiveness of EU businesses in particular from the potential increases in the price of energy resulting in increased imports and decreased exports of energy-intensive products. Only a wellfunctioning market - including JI/CDM credits, can ensure that the EU ETS meets its aims in promoting emissions reductions at a least cost for EU business.

However, JI CDM mechanism is not functioning. It is uncertain and speculative. The administrative burden is huge mainly due to inefficient administrative structures.

It is important that the CDM Executive Board (EB) operates a proper degree of scrutiny in approving new projects but that, at the same time, it does so on an efficient basis. The CDM EB should therefore be provided with increased resources to fund more full time EB members and a stronger secretariat. At the same time its processes should be streamlined with more technical work delegated to the secretariat. The EB should concentrate on principles and guidance and should seek to increase the transparency of its processes, and interaction with project developers, to improve certainty.

It is of crucial importance to ensure that the JI/CDM market is fully operational. The fact that this is not the case today means that Kyoto cannot be implemented cost-effectively. Thereby the insufficient political effort is resulting in a much higher cost to the enterprises in the EU-

The EU must focus on the efficiency of the approval process of JI and CDM-projects, including the efficiency of the Executive Board in the UNFCCC.

The most efficient means through climate change targets can be met is maximising the level of flexibility incorporated into the scheme. Increases in sink capacity provide an equivalent environmental benefit as reductions in direct emissions. Both of these options for meeting climate change targets should be given equal weight under the ETS, and incentives should be introduced which allow credits to be traded in recognition for carbon advantage.

It is vital that EU Business has full and flexible access to the credits generated from the Kyoto mechanisms. The setting of restrictive "caps" on the use of such credits from JI/CDM will undermine the potential cost-efficiencies of the ETS and will act to reduce the number of possible projects proposed by business.

 The practice and option of JI.CDM is far too complex especially for SMEs. The practice and option of JI.CDM is far too complex for SMEs and makes only sense to reach target of a Member State

JI and CDM, because of their costs and administrative burdens, are tools only available for governments or very big economic players. This is generally not the case for our companies, even multinationals. The same rules should apply to all countries.

My organisation is opposed to any cap that would limit the conversion of credits from projects into allowances. Since these credits may reduce the economic burden of emission reductions, no quantitative restriction should be placed on their use. A limitation, including limitations on the ability of companies to use such credits to meet emissions reduction targets:

- will be yet another blow to the competitiveness of European industry.
- · makes no environmental sense,
- is inconsistent with the spirit and the letter of international agreements
- will adversely affect the cost-effectiveness of the JI/CDM instruments and furthermore, will create a deterrent for parties envisaging such projects.

CDM and JI need to be made more effective by reducing the bureaucratic burden.

Much more political initiative is required to make CDM and JI work.

Full access to JI and CDM credits

It is vital that EU Business has full and flexible access to the credits generated from the Kyoto mechanisms. The setting of restrictive "caps" on the use of such credits from JI and CDM will undermine the potential cost-efficiencies of the ETS and will act to reduce the number of possible projects proposed by business, thereby reducing technology transfer.

It is vital for business and industry in Europe that the protection of the international competitiveness, in particular from the emerging increases in the price of energy and raw materials, including oil, which will result in severe impacts on energy-intensive industries and their supply chain, is taken into account. Only a well-functioning emission trading market, including unlimited access to Joint Implementation (JI) and Clean Development Mechanism (CDM) credits, and a solution to the impact of increasing energy prices, can ensure that the EU ETS meets its aims in promoting emissions reductions at a least cost for EU business. The European institutions should focus on making the CDM/JI projects approval process and

the UNFCCC Executive Board more efficient.

2.16 Additional comments on pooling; reasons for or against pooling

2.16.1 Cement

We would like to pool to reduce the need to trade on the market AS WELL AS to reduce administrative burden. Pooling is a flexibility, not a major issue.

We don't want to make pooling, we want only to centralise the management.

2.16.2 Chemicals

Some of our companies tried to receive their free allowances as one sum for all ETS sites of the concern. This would help to minimize the administration costs. Natural pooling should be more encouraged (the financial and taxation rules prevent companies to pool allowances from different installations even within a single MS).

Therefore we support a kind of "pooling" that companies can receive their free allowances and monitor / report the emissions as a company (that runs facility x, y, ...).

Pooling would only an advantage if several installations could be registered on one single account and new entrants could also be added to the pool. Otherwise pooling in EU-ETS has no advantages.

Centralised management with the support and the engagement of our BU and ET installations, strengthen our ability to comply with and go beyond our target.

We have separated the functions which are site-specific (accounting, certification, GHG reduction measures) from administrative management of the allowances. A corporate team for GHG management oversees and promotes all the measures required for ET compliance.

2.16.3 Others

Pooling is not available in all countries

Pooling is already effective between affiliates.

The reasons are: reduce administrative burden, reduce the need to trade allowances in the market and other (concentrated expertise/cost effectiveness)

Transnational pooling should be made possible within the EU. A retrospective analysis should be made at EU level in order to assess accountability and tax treatments in the case of pooling according to article 28 of the directive, throughout the 25 member States.

Pooling not allowed in some countries

Pooling is a way to reduce the risk of unfairness and uncertainty in the allocation process. Unfortunately, pooling has been made totally unpractical: it is not allowed between different sectors, and it is not welcome between competitors from an antitrust point of view.

My company owns many small companies in the EU and they simply do not have the resources to be able to understand and cost effectivley manage and understand emissions trading. Centralising the requirments to allow focused knowledge to develop within one area of the business would allow economies of scale and would reduce administrative burdens. We have centralized many other aspects of our organisation and this would be a continuation of this development.

2.16.4 Pulp and Paper

Article 28 of Directive 2003/87 is not clear relating to the possibility of pooling for installations belonging to the same group but located in different EU countries. We are interested in our company only by this kind of poling in order to reduce the administrative cost and to avoid to buy allowance in the market

2.16.5 Power

Centralising the management of allowances enables to optimalise the generating merit order of the plants.

Pooling is not available in all countries.

We do not consider internal transfers (at market value) as constituting Pooling.

At the present time and for the first commitment period (2005-2007), pooling in the electricity sector has been forbidden in the NAP.

Centralised management with the support and the engagement of our BU and ET installations, strengthen our ability to comply with and go beyond our target.

We have separated the functions which are site-specific (accounting, certification, GHG reduction measures) from administrative management of the allowances. A corporate team for GHG management oversees and promotes all the measures required for ET compliance.

First of all, the ET Directive establishes the possibility of pooling of installations. However, a company that centralises internally the management of their allowances does not need to pool their installations as described in the Directive.

Big companies do not need pooling. Moreover, it could be detrimental to the efficiency of the EU ETS, in case that the pooling is based on sharing emission costs. If costs are socialized among pooling operators, the incentives to reduce emissions will be jeopardized and the EU ETS won't achieve its objective of minimizing costs.

For small companies, pooling is a good conceptual idea to reduce administrative costs to participate in the market, but only if responsibility for the costs of emissions are kept linked to their respective installation's owners (emissions costs should never be shared among agents). However, implementation of this kind of pools seems a very difficult task, due mainly to the complicated and risky contractual agreements that are required.

In conclusion, it seems that there is no reason to maintain the pool of installations in the ET Directive, and in the case that it is maintained, it should be clear that sharing of emission allowances costs among different operators should be forbidden.

Finally, the reasons to centralize the management of allowances internally is mainly because it allows my company to centralize the risk position of the company, through the management of a unique portfolio

Management of the allowances are concentrated on the national business units. But any formal pooling is not necessary.

2.16.6 Refineries

Pooling is not available in all countries

Centralised management with the support and the engagement of our BU and ET installations, strengthen our ability to comply with and go beyond our target.

We have separated the functions which are site-specific (accounting, certification, GHG reduction measures) from administrative management of the allowances. A corporate team for GHG management oversees and promotes all the measures required for ET compliance.

2.16.7 Steel

Optimise overall production with the existing allocation. Natural pooling should be more encouraged (the financial and taxation rules prevent companies to pool allowances from different installations even within a single MS).

Pooling only makes sense if the ownership and responsibility are given to the managing entities.

Again, allowances have not been assigned yet, and also national regulations is not yet defined and clear. Consequently, the view is opened to pooling, but decision is doing or not cannot be made yet.

reduce administrative burden and reduce the need to trade allowances in the market and to optimise overall production with the existing allocation.

The taxation and financial (legislation) burden to have natural pooling should be dealt in a way the ETS could be handled with most effective way.

Natural pooling should be more encouraged, because today the financial and taxation rules prevent companies to pool allowances from different installations even within a single MS. Pooling allows to optimise overall production, and therefore minimise the emission of CO₂,

with the existing allocation.

2.16.8 Governmental Bodies

The implementing regulations in the my country allowed operators to apply to pool their installations at least 6 months prior to the start of the Phase 1. However, there appeared to be little interest in pooling at that time and no applications were received within the timeframe.

The revised regulations allow operators to apply to pool installations for Phase II of the scheme. The application must be made at least 6 months before the start of the Phase, which would be by the end of June 2007 and must be approved by the Commission.

Several groups have come forward seeking more information about pooling and how it can be carried out. Some installations are already forming groups through which to trade allowances without having to be in a more formal 'pool' as given in the Regulations. There is growing interest in pooling, particularly amongst operators of smaller installations looking to reduce administration costs.

Before actively promoting pooling, we are interested to know whether it will reduce administration costs, particularly for small operators, and if so, how. For example, on the following issues:

- would verification requirements differ;
- what kind of contractual arrangements would the installations enter into, and
- what criteria will the Commission use to determine whether or not to approve an application for pooling.

Additional Guidance from the Commission, including how they will determine applicants, would therefore be useful in deciding whether to actively promote pooling.

Use of pooling is not required.

2.16.9 Associations

Transnational pooling should be made possible within the EU. A retrospective analysis should be made at EU level in order to assess accountability and tax treatments in the case of pooling according to article 28 of the directive, throughout the 25 Member States.

Some of our companies tried to receive their free allowances all in one for all ETS sites of the group. This would help to minimize administration costs. Natural pooling should be more encouraged (the financial and taxation rules prevent companies to pool allowances from different installations even within a single MS).

Therefore we support a kind of "pooling" that companies can receive their free allowances and monitor/report the emissions as a company (that runs facility x, y, ...).

Pooling should also be allowed crossing activities (for example pulp and paper, paper and power)

No acceptable solution has yet been found to the accounting treatment of allowances ("emission rights"). The IFRIC interpretation of Rule 38 has been withdrawn for good reasons but this is adding to the uncertainty for companies, especially listed companies

The situation has been made highly, highly complex by the existence the climate change agreements. Currently there are effectively installation definitions based on 1) IPPC, 2) the Climate Change Levy and associated Agreements and 3) the EUETS. These do not align.

Within the Climate Change Agreements there is both group pooling and individual balancing within the same sector. With the start of EUETS in the agreements we now have those in EUETS, those "opted Out" and those not eligible for EUETS. Administration is very, very complicated. This makes the possibility of EUETS pooling extremely unlikely. The government is generally against EUETS pooling. The industry would prefer to retain the option of pooling if only between installations within the same company. This should ideally be across the EU but at the very least nationally.

In order to improve the flexilibility of the EU ETS, it should be possible to "pool" installations between activities.

Difficult to answer for our association

National and natural (where two installations belonging to the same company operate side by side) pooling should be more encouraged (the financial and taxation rules prevent companies to pool allowances from different installations even within a single MS). Pooling only makes sense if the ownership and responsibility are given to the managing entities.

Optimising overall production within the existing allocation should be encouraged.

- Clarification are needed taking into account variations applying at member States level. This point and its impacts have been by far underestimated.
- It is national specific but can lead to MS conflicts.
- VAT system seems understood.
- "non bis inidem" fiscal rule should apply to avoid double burden.

Pooling facilitates the handling of allowances within /between different plants af a company. Also the possibilities for globally operating companies to pool the allowances on a cross national basis should be enabled/simplified.

In order to improve the flexibility of the EU ETS, it should be possible to create "pools" of installations between activities and across national borders, without facing transfer pricing rules.

2.17 Comments on accounting and taxation

2.17.1 Cement

Accounting rules are still unclear.

2.17.2 Chemicals

FAS etc rules are in flux

Taxation: energy intensive industries should not be subject to double burden (ET and taxation on energy products in any circumstances).

CO2 allowances should not be subject to VAT.

It is important to remove uncertainties on these matters.

2.17.3 Others

International accounting rules need more work and the withdrawal of IFRIC3 was particularly unhelpful. There are also concerns when US GAAP treatment, which seems sensible, is so very different from that proposed for international standards.

For companies subject to consolidated accounts, legal certainty on the accounting treatment of transactions and of allowances kept in inventory is a matter of urgency.

Corporate tax issues are related to accounting rules, which increases the need for definitive solutions.

As for VAT, we understand that all parties involved agree on the solution, but that it has not been made official nor enforced yet. There again, legal certainty is urgently needed.

International Accounting and Taxation organizations should publish recommended guidance for accounting and tax treatment of allowances and trades under the EU ETS.

This issue was handled efficiently by for example the French administration

We ask the commission and the IASB to increase cooperation on accounting rules in consolidated accounts for stock-quotes companies!

2.17.4 Pulp and Paper

The situation varies greatly between the Member States harmonisation is needed!

The companies must naturally obey the national laws. However, the situation varies greatly between the Member States. Clarification and harmonisation is needed!

2.17.5 Power

There is still no allowances received from the ministry.

Clear and undisputed IFRS rules still missing

The International accounting rules need further work. US rules i.e. are completely different.

The accounting rules are still uncertain and there are potential differences between countries.

Accounting and taxation rules could limit liquidity. In the absence of standardised accounting rules for the treatment of allowances could create artificial barriers to trading allowances.

Withdrawal of IFRIC 3 has added to the confusion with regard to how to account publicly for allowances. Appropriate Guidelines need to be developed urgently.

The answers above, in particular the first one, mean that we have made decisions based on available information. Nevertheless there is a need for clear guidelines both at international and national level.

It is important to remove uncertainties on these matters.

Yes, but knowing that the rules will likely change in the nearest future.

VAT exception at EU level is very important for the liquidity of the EU emissions market and for the existence of a true pan-European market without barriers.

The basic principles of accounting is quite clear, but VAT and other taxes rules need more clarification.

Accounting and taxtion rules need to be more harmonised within EU

2.17.6 Refineries

The international accounting rules need more work, the withdrawal of IFRIC3 was unhelpful. There are added difficulties when the approach under US GAAP is fundamentally different.

It is important to remove uncertainties on these matters.

2.17.7 Steel

The accounting rules proposed by IFRIC are totally unacceptable. The allocation cannot be seen as a subsidy and the volatility of the credits value (which is meaningless since the final balance will be zero or negative) distorts the balances in an undue way.

National regulations as to the matter still lack.

The CE should issue accounting and fiscal rules common to all MS to avoid discriminations above all for what concerns the deductibility of economic penalties.

Situation is still changing thus unsure. This is one evidence of the bad planning and implementation of the EU ETS.

- 1) The accounting rules proposed earlier by IFRIC are totally unacceptable. The allocation cannot be seen as a subsidy and the volatility of the credits value (which is meaningless since the final balance will be zero or negative) distorts the balances in an undue way
- 2) Taxation: energy intensive industries must not be subject to double burden (ET and taxation on energy products) in any circumstances.

2.17.8 Governmental Bodies

The Government is disappointed that the International Accounting Standards Board has not yet finalised its interpretation of the appropriate accounting treatment for emission allowances. The withdrawal of IFRIC 3 in June 2005 has left operators with uncertainty regarding how to properly account for emission allowances. The Government does not share the IASB's views that this issue is not urgent and we urge the EU to exert pressure on the IASB to resolve this issue urgently (e.g. through the Accounting Regulatory Committee and any other appropriate EU bodies).

The Government considers it important that VAT treatment for EU allowances is harmonised across the EU and applauds efforts by Member States to agree on consistent place of supply rules regarding VAT treatment for allowances.

2.17.9 Associations

An international framework is needed for accountancy of consolidated accounts (IFRIC 3 has just been rejected).

A retrospective analysis should be made at EU level in order to assess accountability and tax treatments in the case of pooling according to article 28 of the directive, throughout the 25 Member States.

Taxation: energy intensive industries should not be subject to double burden (ET and taxation

on energy products) in any circumstances.

CO₂ allowances should not be subject to VAT. The VAT directives should be amended accordingly.

Different acc. & taxation treatment in different Member States leads to great problems.

These need to be:

- a) clear and fixed as soon as possible
- b)long term
- c) simple, pragmatic and transparent
- d)Remember that overall objective to reduce CO₂ not employ administrators
- e) Mechanism in place to ensure that there is sufficient confidence in the verified tonnes of CO, from each member state that there is no question of them having different values i.e. harmony of verification

No acceptable solution has yet been found to the accounting treatment of allowances ("emission rights"). The IFRIC interpretation of Rule 38 has been withdrawn for good reasons but this is adding to the uncertainty for companies, especially listed companies.

European guidelines on accounting and taxation would be useful, but as taxation is not harmonised at the EU level, it could be difficult to have a harmonised interpretation.

There needs to be an accounting standard.

Inconsistent interpretation of rules for tax/accounting will result in irregularities throughout the EU, in particular for multi-national companies, which operate in many countries. Therefore harmonised rules for tax and accounting should be applied throughout the EU.

Aspect has been largely ignored by Commission, but should have been addressed. Steps for harmonisation between MS have been set. But late & slow & not to extent possible.

The accounting rules proposed earlier by IFRIC are totally unacceptable. The allocation cannot be seen as a subsidy and the volatility of the credits value (which is meaningless since the final balance will be zero or negative) distorts the balances in an undue way. Taxation: energy intensive industries should not be subject to double burden (ET and taxation on energy products in any circumstances).

The lack of clear accounting or financial rules regarding allowances is extremely detrimental to companies. These rules should be developed very quickly and remain simple and pragmatic: the goal of EU-ETS is to achieve CO2 emissions reductions and not to give jobs to accountants.

There should be harmonised rules for the verification process.

The treatment of emission allowances for tax purposes (especially value added tax) and within company accounts are subject to inconsistent interpretations throughout the EU. This is a particular issue for multi-national companies. Where possible, harmonised rules for tax and accounting for emission allowances should be applied throughout the EU.

2.18 Additional comments on definition of combustion installation

2.18.1 Aluminium

The current confusion is unacceptable. All combustion installations belonging to a sector that is not included in ETS should be excluded.

2.18.2 Chemicals

Other environmental issues need to be taken into account e.g. by capping hydrogen plants used for clean fuel production this retared and makes more expensive EU air quality goals

The definition in the ET-directive for the combustion installation is not useful.

We support the recommendation, that IPPC and ET legislation should be matched. There is no reason, why the installed capacity is set at 20 MW. A huge number of problems during the implementation of ETS lead to a totally different interpretation in the Member States. We therefore claim the alignment of the ET-directive by setting the capacity up to 50 MW. The definition should be harmonized EU-wide.

Every branch not named expressly in the Annex I of the ET-directive should be clearly exempted from the scope. So "Chemical Industry", "Machinery Industry", "Food Industry", ... are out of scope. We think, that the ET-directive meant only Energy industry in the meaning "industry which is selling electricity, steam of heat as their core business".

We strongly recommend a legal binding clarification for the member states, because a large number of installations are covered in our ETS, while the competitors within the EU are excluded.

The less-broad (often referred to as middle definition) does not comply with the Directive (definition of "installation"). The efficiency of for example chemical plants has the greatest influence on emissions from the utility system. This influence is an order of magnitude higher than the small efficiency differences between boilers (only a few percent).

The middle definition leads to the following perverse effect: energy savings of chemical plants are taken away automatically in the subsequent trading period. The efficiency of the chemical plants is ignored and utilities are producing now less steam with basically the same efficiency. The definition of installation is of prime importance for the chemical industry.

Emission Trading can concentrate on the major CO, sources.

UK "medium" definition seems a good compromise

2.18.3 Other

The broad definition would likely include flaring. We would like flaring to continue to be excluded as a) it is already covered by a flaring consent scheme which has ensured that flaring is reduced to its effecitve minimum, so inclusion would be unlikely to lead to any reductions b) flaring is mainly undertaken for safety reasons and so we do not think a trading scheme is appropriate c) we believe monitoring and reporting within the EU guidelines will be difficult and expensive - and not cost effective since we do not expect the inclusion to lead to reductions.

The difference between these two definitions is only part of the issue. As a company operating in several countries, we can note that similar (fairly simple combustion) sites are or are not subject to the scheme. The definition for combustion installations should be the same across

Europe (which firstly implies the definition of an installation to be the same).

The questionnaire focuses only on combustion emissions.

The impact of process emission appears to be completely ignored, this is particularly detrimental to our industry having unfortunately the highest ration of process emission per tonne of final product compared to all the sectors included in the ETS.

2.18.4 Pulp and Paper

We need a clear definition of combustion installation without any possibility for the MS to interpretate the definition (harmonisation is important)

Harmonization is the key here!

2.18.5 Power

Emitters not covered by the scheme should be regulated with equal impact.

We think that the smallest installations should be excluded due to the high cost of compliance and the unlikelihood of their contributing to liquidity.

This also requires a de-minimis cut-off to prevent very minor emitters being included.

Emission Trading can concentrate on the major CO, sources.

Not very relevant for us. Be it broader or narrower interpretation the main thing is that the same definition is used amongst the EU ETS participants.

Regarding this issue, the important point is that all companies that compete against each other are subject to the same type of constraints, in order not to distort the markets. Some policies must be taken so that competition among companies subject to the EU ETS and those that are not take place in even conditions.

Avoid voluntary participation by unclear rules or option rules.

If the de minimis rule is introduced small installations must get equivalent burden.

2.18.6 Refineries

We prefer less broad definition to

a) allow offshore flaring to continue to be excluded from EU ETS when it is already regulated by a flaring consent scheme and

b)so as not to include even more small installations.

Emission Trading can concentrate on the major CO₂ sources.

2.18.7 Steel

Only important emitters should be included.

Great uncertainty have been for a long period concerning pre-heating furnaces for rolling mill process. Interpretation of directive suggest us the final decisions about less-broad definition of combustion installations is finally correct.

The interpretation of combustion installation should be limited to the burning of fuel in an appliance designed for the production of energy for use by or in another appliance but does not include the burning of fuels where the products of combustion are used directly as an integrated part of a production process. Thus furnaces, kilns or reactors are excluded. This interpretation is consistent with the IPPC Directive and with the listing of other activities in Annex1 to the ET Directive.

It does not make sense to enlarge the scope to internal burners of industrial processes, because then to many small emitters will be part of EUETS and the abatement costs and measures are very different from the energy sector

The interpretation of combustion installation should be limited to the burning of fuel in an appliance designed for the production of energy for use by or in another appliance but MUST NOT include the burning of fuels where the products of combustion are used directly as an integrated part of a production process. Thus furnaces, kilns or reactors are excluded. This interpretation is consistent with the IPPC Directive and with the listing of other activities in Annex1 to the ET Directive.

2.18.8 Governmental Bodies

We believe that the solution to achieving greater consistency is not in a move to a broad definition of combustion installation, partly because this would increase the number of small installations covered by the Scheme. The scope of the Directive needs to be considered holistically in order to achieve harmonised coverage. The best approach would be one which captures major sources of emissions across the EU (from activities not currently covered by the Scheme) and excludes a large number of small installations (which face a disproportionate administrative burden and contribute a small low percentage of emissions). We are currently in discussion with the Commission and other Member States to determine the best was to address this issue for Phase II. The result for Phase II should have valuable lessons for future phases.

2.18.9 NGOS and Market Intermediaries

Broad definition is needed to cover as wide-range of sources as possible. Every sources included shall ensure proper monitoring and control of CO₂ emissions.

Leave the word energy activities out of the definition; enough to have combustion installation

We recommend not to use a capacity threshold, but an actual emissions treshold, as this is closer to reality.

2.18.10 Associations

A broad definition excluding the case where energy is used as a raw material, could be used together with a second criterion to simplify the reporting and verification provisions for small emitters (<25.000 teC02/for 3 years to be chosen; this criterion is given as a simple example but may be adapted). This simplification would considerably lower the costs of monitoring and verification required by the Commission guidelines.

Preferation for a very narrow definition, which means only installations with the purpose of electricity and steam production without process integrated energy production.

The definition in the ET directive for the combustion installation is not useful.

We support the recommendation, that IPPC and ET legislation should be matched. There is no reason, why the installed capacity is set at 20 MW. A huge number of problems during the implementation of ETS lead to a totally different interpretation in the Member States. We therefore claim the alignment of the ET directive by setting the capacity up to 50 MW. The definition should be harmonized EU wide.

Any sector not named explicitly in the Annex 1 of the ET directive should be clearly exempted from the scope. So "Chemical Industry", "Machinery Industry", "Food Industry", ... are out of scope. We think, that the ET directive's intention is to cover Energy industry only in the meaning "industry which is selling electricity, steam of heat as their core business".

We strongly recommend a legal binding clarification for the Member States, because a large number of our installations is covered by the ETS, while competitors within the EU are excluded.

At last we urge, that small installations (having emissions lower than 50.000 tonnes p.a.) should be excluded from the ETS.

A de minimis threshold is urgently called for.

The current interpretation of the definition of activities and installations has lead to the bizarre situation where combustion plant in an installation defined as "combustion" are eligible but combustion plant in an installation defined as, for instance, "glass" are not eligible and MUST be excluded. This incurs excessive metering and monitoring and reporting and verification penalties out of proportion to the environmental benefit. Pragmatism and materiality is needed now.

Harmonisation of the combustion definition installation shall form a part of a general harmonisation, and not to be afforded or established as an isolated or autonomous topic. Anyway, harmonisation on the basis of the broad definition shall not have effects for the 2008-2012 period, since it would change the playing rules with no time enough to reorientate the strategy of the NAPs and of the affected installations.

There are inconsistencies between Member States in the interpretation of the installations that are covered under the EU ETS Directive. These inconsistencies could lead to competitive disadvantages for the affected EU. Therefore industry see it important that the scope of the directive and the interpretation of definitions such as "combustion installations" should be harmonised throughout the EU.

It is very important that the same definition is applied across EU borders, no matter whether this is a broader or less broad definition.

Deviations between MS on definition lead to a distortion of level playing field. Not clear why definition should NOT be anything else than 'broad'. Unclear definitions lead to biases in system and may also provide incentive to tamper with data.

Current situation is strange, illogic and unfair: large CO, installations are not in the system in parts of the EU, while many small companies with small installations are obliged to participate.

It is very important that the same definition is applied in all EU countries

We propose that the interpretation of combustion installation is limited to the burning of fuel in an appliance designed for the production of energy for use by or in another appliance but does not include the burning of fuels where the products of combustion are used directly as an integrated part of a production process. Thus furnaces, kilns or reactors are excluded. This interpretation is consistent with the IPPC Directive and with the listing of other activities in

Annex1 to the ET Directive.

Neither alternative is acceptable to a sector that is not included in the current ETS. All combustion installations that are process related shopuld be excluded.

- We support a narrower definition of combustion installation.
- The all questionnaire focuses only on combustion emissions.
- The impact of process emission appears to be completely ignored, this is particularly detrimental to our European industry having unfortunately the highest ratio of process emission per tonne of final product. In addition the price for one tonne is in addition the lowest compared to one tonne of paper, of steel, of glass, of ceramic, etc. As a consequence the impact of ETS is high.
- · The questionnaire does not take into account captive production which means that the amount being produced by other industries for their own use does not necessarily fall within the ETS which opens competition distortion.
- Definition of process emission: "Process emission is a CO, emission which is emitted from a process in which carbon is bounded in the raw material" For example, CaCO3 processed to CaO.

There is a balance between members who prefer a broad definition and those who prefer a less broad definition. We therefore leave the answer to this question blank.

It causes a lot of organisational effort to control a large number of combustion installations with only small individual emissions

The interpretation of the combustion installation should not be used with the effect of bringing in sectors, which are currently outside the scope. Furthermore, the interpretation should be in line with the one followed for IPPC purposes.

Whatever definition will be chosen, it should be harmonized across Europe.

2.19 Comments on impact of EU ETS on shifting production volumes between different technologies of a company's existing assets

2.19.1 Aluminium

Shifts will not occur between technologies, but between geographic areas

2.19.2 Cement

No impact at the moment, but soon a major impact on exports. Most likely will lead to plant closures.

2/3 of the CO₂ are process-emission which can not influenced (only by reducing production). Our kiln is still energy-efficient and fuel-switches can be made only in a small range. It'2 impossible to heat our kiln with natural gas because of the high energy consumption of the clinker burning process.

2.19.3 Chemicals

My company has production facilities in different geographical regions. Cap & trade means anyway buying allowances when winning market share and bring unpredictability and legal uncertainty for bigger expansions. As CO₂-prices are expected to rise, production and

debottlenecking investments are shifted to other areas if possible (China, USA).

Power generation will be largely produced from natural gas (fuel oil phase-out)

2.19.4 Others

We are considering consolidating some of our production through one gathering station. EU ETS is one influence on the decision.

Because our business is energy activity, we have taken early actions and our specific emissions have been cut by one third compared to the 1990 reference. It is too early for further actions directly linked with the EU ETS to be in place yet.

We will only be able to use technology from 2008 and 2012 when new product types are avialable to reduce the amount of CO, produced.

So its not possible to change the fuel.

2.19.5 Pulp and Paper

The impact is low at the moment for the period 2005-2007 but we will be strongly impacted when the volume of allowances given for free will be reduced in the future. We are now working on the strategy we will have to follow to avoid as much as possible the price of our final product (paper). Nothing of our operational cost increase might be passed on to our customer, because we compete with companies which are not operated under the ET scheme.

EU based production is loosing its competitiveness due to higher cost, therefore more of the yearly investments are directed to mills outside EU. The investments are representing the continuous technology shift towards more resource and energy efficient technology. This is a slow process that gradually lower the importance of EU for the company. The investments made elsewhere is money away from replacement investment in EU. The mills in EU that does not get investments will be run for cash and within 5 years this long term non-competitive capacity is facing shut down in EU.

2.19.6 Power

We are BAT. We don't have a chance to improve.

Fuel switching but this is also affected by the dynamics of the coal and gas markets.

Switch between fuels happens continuously dependent on relative fuel and CO, prices

EU ETS has a large impact in the generation portfolio of my company. Coal power plants could become uncompetitive depending on the price of CO₂. This situation is based in two facts:

- a) for prices beyond 20 /tonne and usual coal and brent prices, coal power plants become costlier against CCGT.
- b)it is highly probable a situation of overcapacity caused by the installation of ~20.000 MW new CCGTs. This overcapacity would result on coal not having the opportunity of functioning, even in peak periods.

The impact is a consequence of the CO₂ price, of our company marginal abatement cost curve and of our company allocation. Today, given the present value of this three variables, the impact of ETS on existing assets is negligible.

Power generation will be produced from natural gas (fuel oil phase-out)

Coal, oil and peat usage has gone down somewhat

The main impact is that generation from coal is being replaced by generation from CCGT's

Position in the merit order at the power exchange depends on allowance cost – optimization at the market lead to shifted production.

2.19.7 Steel

In the basic oxygen route we need carbon as reduction agent. There is are no economic feasible alternative techniques for the production of hot metal and only very limited space for the further reduction of the carbon input.

2.20 Comments on impact of eu ets on retrofit actions in a company

2.20.1 Cement

We do less retrofits because of the counterproductive rules of the current NAPs.

The ETD is not the problem. The principles used in the NAP are the cause of the problems.

The technology of existing plants being up to date, the impact will be (mid or long term) an adoption of capture-sequestration technology.

It's hard to reduce energy consumption. Our kiln has been modified ten years ago and is still the best available technique.

2.20.2 Chemicals

If N2O is also included in the ETS --> investment in HNO3 plants

My company has numerous significant retrofits and debottleneckings under study. These projects can increase energy efficiency and they are vital for maintaining the competitive position if costs per unit of product are lowered. If in addition to investments allowances have to be bought (at an uncertain price) for expansion of production project swill be reconsidered and expansions will be partly shifted to outside Europe. ETS adds to the reasons to be reserved with expansions in Europe.

Strong impact on power generation, but switching has also other strategic drivers.

2.20.3 Others

Because our business is energy activity, we have taken early actions and our specific emissions have been cut by one third compared to the 1990 reference. It is too early for further actions directly linked with the EU ETS to be in place yet.

Decisions on investment in energy saving

Implementing energy saving capital expenditure on existing units has a very long pay-back

(typically 8 to 10 years at today's energy costs). ETS will increase the energy cost and reduce this pay-back, such Cap Ex will be favored

Some retrofit measures ca be taken but these have been justified via high oil prices rather than by the EU ETS.

Its not possible to reduce energy and therefore CO₂. So there is no impact on retrofit

2.20.4 Pulp and Paper

Replacement of coal boiler by gas boiler

EU ETS is hampering the speed of retrofits, the indirect effects on power prices are hurting the competitiveness to the extent that most of the possible retrofit become unprofitable. We will further increase the onsite CHP capacity in order to minimize the reliance on externally purchased electricity for some of our high quality assets. Medium and low quality assets are loosing out.

2.20.5 Power

Retrofit projects involve primary energy utilization efficiency increase.

Time to retrofit implementation is 4-5 years so no project has impacted yet.

working on project to supply gas to nearby power plant to reduce emissions from burning gas at terminal

EU ETS has a large impact on retrofit actions that must be taken to adequate coal plants to EU's GIC Directive. My Company must make strong investments to adequate ~4.800 MW coal capacity to this EU's Directive. EU ETS may erode the competitive position of coal against CCGT, raising the uncertainty associated to the recovery of these investments. As a result, the realization of these investments is endangered, as well as the future of mentioned coal power generation capacity.

Almost all the retrofit actions had already been taken on our generation fleet before the introduction of EU ETS.

Strong impact on power generation, but switching has also other strategic drivers.

So far small impacts, mostly biomass-based retrofits and hydro plant renovations in anticipation of climate restrictions

EU ETS impact on retrofit investments is medium. However, this impact is shown not only in increasing retrofit actions, but in stopping them. Some retrofit actions in old coal plants have been mimimized because high carbon intensive technologies will be less competitive in the future.

The main impacts are on retrofitting hydroelectric plants (improving their efficiency and increasing power) and investments in nuclear plants in order to extent their operating life.

The reason of little impact is primarily that our fossil fuelled power plants relatively are new.

2.20.6 Steel

Uncertainty tends to delay investment decisions.

There is very little to do due the efficiency in our reduction material consumption where the most of the CO₂ is coming from.

Less retrofits are undertaken due to the EU-ETS.

2.21 Comments on impact of eu ets on technology decisions regarding expansions or replacements in a production portfolio

2.21.1 Cement

The counterproductive NAP rules and the unpredictability for 2008 - 12 and beyond 2012 has a negative impact on investment decisions.

The technology of existing plants being up to date, the impact will be (mid or long term) an adoption of capture-sequestration technology.

Expansion is nearly impossible, if we get no free allocation for the additional production.

2.21.2 Chemicals

The impact is highly debated because more efficient designs leads simply to fewer allowances. No stimulation. We strongly believe that this is in violation with the requirements of the Directive (recital 20, article 1). We had a significant case example and expect to have cases again in the 2nd trading period.

At present the impact is on power generation. Climate change, more than EU ETS, could have also an impact on.

2.21.3 Others

Because our business is energy activity, we have taken early actions and our specific emissions have been cut by one third compared to the 1990 reference. It is too early for further actions directly linked with the EU ETS to be in place yet.

It is a factor in some decisions but not enough is known about the inclusion of our sector into the scheme to allow it to be factored in as a factor in technological decisions.

Expansion within the EU is nearly impossible. New kins can only be built or bought outside the EU.

2.21.4 Pulp and Paper

Especially for some paper grades the energy cost is decisive, this means that investment in such production in EU has become unlikely since the effects of ETS - both CO₂ price and impact on electricity price has outstripped the forecasts from policy makers.

2.21.5 Power

We need to expand (new investment, new unit) based on our customer's expansion.

We produce one product only so the decision is whether to operate the plant or not.

Working on various energy efficient potential projects, CHPs, gasification etc.

Broader climate change policies and climate issues are taken into account when discussing and deciding a new project, however the present status of the ETS implementation is not fully appropriate for such decisions.

EU ETS introduces a high level of uncertainty in the competitive position of coal vs. CCGT. High prices (beyond 20 /tonne) of CO₂ would result in closing coal plants and building CCGT capacity to substitute coal and meet growing demand, while moderated prices of CO, would result in maintaining or slightly increasing the current coal capacity and expanding CCGT capacity only to meet growing demand.

EU ETS is the first example of a cap and trade mechanism on GHG set up at European level. Depending on the impact of EU ETS on energy prices, dispatching strategies and merit orders, the role of the different technologies could change dramatically. Investment decisions of course have to take into account all these elements.

At present the impact is on power generation. Climate change, more than EU ETS, could have also an impact on.

CO, aspect has been integrated in our investment/divestment/acquisition procedures and is part of our investment manual, with monetary valuation of CO₂.

In anticipation of climate regulations (incl. the possibility of ETS) the share of our CO, free production has increased from year's 1995 to the present.

Investments in new capacity are based on low carbon intensive technologies, focusing on CCGT's and renewables. We have installed new CCGT capacity in our country from 2002 to 2004, and more is planned for 2007. Its renewable installed capacity has grown during this period (mainly in wind power). The investment effort is going to continue in the next years.

Another point is the generation mix in the long term, when carbon cosntraints get more stringent. This will lead to a more intensive develoment of the least carbon intensive technologies. That's why actual public and political debate is focusing on different alternatives such a more intensive development of renewables, carbon sequestration linked with thermal plants and the future use of nuclear power. The result of this debate will guide future expansion strategies of electricity companies.

Expected cost for the purchase of allowances and expected influence of ETS on the merit order of power plants are major inputs in our investment decisions (major influence on fuel choice).

2.21.6 Refineries

Future position for new equipment at refineries could impact refinery value by up to 500 million euros. The choice of location may be influenced by EU ETS costs.

Climate change, more than EU ETS, could have also an impact on.

2.21.7 Steel

We have no means to impact the emissions. Decisions in overseas expansions are strongly impacted.

Not so much impact for products mix, but quite strong for geografical re-allocation of production portfolio.

Companies have no means to impact the emissions. In particular Steelworks have a plant enigineering structure with a high economic value for the Country. So it is difficult to modify production or to move it to other countries. Therefore the EU ETS should not expose to such a risk the company's production because it might cause an economic crisis of the companies afterwards too that is of all the Country.

Unclear EU ETS allocations and frame conditions help to close otherwise not so good installations and to move production elsewhere

Seems the overall EU ETS creates pressure for carbon leakages.

We are producer of high quality carbon and stainless steel flat products. Since all this products are made from slabs (and the production of slabs is mainly influenced by the EU ETS) the main decision is to make or not to make slabs.

Companies have no chance to influence their emissions at local plants within the EU.

Decisions for expansion are strongly impacted towards sites outside the EU.

2.22 Comments on impact of EU ETS on decisions to develop innovative technologies in a company

2.22.1 Cement

Opposite to the objective of the ETD, the NAP rules do not stimulate innovation. NAP is the problem, not ETD.

We work on concrete formulation, capture and more generally construction adaptation to sustainable development.

Switch to biomass, if possible and available.

2.22.2 Chemicals

Sequestration technology - except not included in EU ETS

If N2O is included in the ETS --> new technology is needed to reduce N2O emissions

Same remark as above, current rules provide zero incentive for innovation. New plants and expansions by retrofits get in all Member States a low as possible amount of allowances.

More emphasis on natural gas; new process for very deep conversion of heavy residues; geological sequestration of CO₂.

We are currently installation high efficiency membrane cell rooms to make chlorine in place of

less efficient mercury ones.

2.22.3 Others

WE are involved in various initiatives on carbon capture

We can only buy from a couple of suppliers and although they are developing new technologies the impact on them will not be as great.

We do already have fuel reductions programs and clean programs but major savings will come from new technologies.

Increased research activities to (partly) replace fossil fuels due to increasing share of energy costs (direct and indirect)

With more than 80% our kiln-type is the most efficient kiln in the whole industry, so it's not foreseeable that there will be a new innovative technology for burning limestone.

2.22.4 Pulp and Paper

In the future impact will be stronger

No disclosure

Development initiatives on modified and new processes that require less energy have been intensified during the recent years - the effects are seen when the results are applied when investments in new production facilities are carried out - BUT - remember that they are likely to take place outside EU!

2.22.5 Power

More efficient technology is supported by ETS.

Energy efficiency tends to provide bigger incentives than EU ETS

The research in some new technologies, for example the biofuels, has been enhanced by the **EU-ETS**

Also in this case (see previous answer) the impact may increase in the near future.

More emphasis on natural gas; new process for very deep conversion of heavy residues; geological sequestration of CO₂.

NOTE! We are technology users, not developers

Regarding decisions to develop new technologies, We are involved in investments in less developped technologies, such as wave and solar energy. My Company is also studying the possibility of co-combustion of coal and biomass in order to reduce the net emissions of its coal plants.

Decision about erection of a pilot power plant with CO₂ capture as part of an extensive R&D programme.

2.22.6 Refineries

More emphasis on natural gas; new process for very deep conversion of heavy residues; geological sequestration of CO₂.

2.22.7 Steel

ULCOS initiative

Energy Saving Investment

Priority to innovations in the "chemical energy input saving" projects.

ULCOS-Ultra Low CO₂ Steelmaking programme: international technology platform, with European Commission partnership, that has set up to obtain a blastfurnace 50% CO₂ reduction by 2050 through efficient processes and breakthrough technology.

Technology development has been and is very important in the company. Difficult to say, if EU ETS has enhanced it.

See more information about the ULCOS (Ultra Low CO₂ Steelmaking program) project on EU level.

Our main producer of carbon steel flat is partner of the multinational R&D project "ULCOS" which is also co-financed by the EU.

ULCOS would be a possibility to reduce the CO₂ emissions by maintaining the competitiveness of the EU iron and steel industry. However, it still takes a lot of time, funding and stable general conditions (predictable legislative and economic development) to gain some profits from it.

2.23 Key factors in the EU ETS that create the uncertainties

2.23.1 Aluminium

Impact of ETS on electricity prices

Impact on power prices

2.23.2 Cement

The NAP rules create most uncertainty:

grandfathering or benchmarking equal or unequal treatment of incumbents and new entrants post 2012 regime volume of allowances for 2008-12 and beyond

Main source: lack of visibility on intensity of reduction required in next periods. Then instability of rules. Last but not least, post 2012: uncertainty on the Kyoto Protocol (US, China, India... positions?)

The key factors are the uncertainty of the allocated credits for the period 2008-2012.

price development and amount of free CO2-certificates

- 1) Price of CO₂
- 2) Different burden sharing inside the EU
- 3) Allocation for the next period
- 4) Allowance of growth within the allocation
- 5) Availability of certificates

2.23.3 Chemicals

Broadening the ETS on Chemical industry and N2O

Future cost and burden due to the future NAPs.

The cap as a principle; uncertainty about cap in later periods; thresholds to qualify for new entrants' reserve; the amount of allowances that is granted for a project if the reserve is still sufficient, and the threat that the reserve is empty when needed.

Allocation method; future CO, price.

Uncertainty re allocation methodology for CHP plants in Phase 2 and what will happen after the end of Phase 2

% reduction in subsequent trading periods

2.23.4 Others

The lack of some long term information on allocation intentions. It would be helpful for the range of possibilities to be reduced.

Short allocation periods, allocation methodology, no transference of allcoation from one period to another,

ETS looks basically like the "tickets de rationnements" system established during WW2 for food, even if it looks more sophisticated and if there is no "black market" but an official market. I do not think that mothers were really sure that their children would eat sufficiently with that system during WW2. Therefore the system is basically uncertain.

Moreover,

- 1) Allocations are not a transparent process and are subject to changes at short notice (eg allocations for 2008-2012 are not yet known and we don't even know if new gases will be included!). We are today deciding investments that will start up in 2008 and hopefully run for more than 20 years!
- 2) risk of competitive distortion because allocation processes are not the same across borders

How allocations will be managed, the cost of carbon on the market and through CDMs, how the administrative burden can be reduced. The scope of the scheme. THe definition of new entrants.

lack of harmonisation

- Future allocation method
- · development of prices
- 1) price of CO₂
- 2) number of allocation for the next period
- 3) different burden sharing inside the EU
- 4) Allowance of growth within the allocation

5) Availability of certificates

2.23.5 Pulp and Paper

The volume of allowance for free we will have in the future for the current activity

The growth of our production without any additional ET cost

Decrease of our competitiveness comparing to non EU countries due to strong increase in energy cost

Allowances for the next periods.

Future compliance cost; allowance price and its impact on power prices. Future reduction targets, which obviously affect on the compliance cost, are totally unknown.

2.23.6 Power

How and on what price will the new capacities and capacity utilisations get the allowances they need?

Unreliability of cash flow predictions for any option studied, their results significantly different.

First the severity of constraints adds uncertainty, also we do not know how soon and whether other countries will also be subject to constraints.

Uncertainty surrounding post 2012

If the Power Generation Sector is to invest to make significant carbon reductions, long term investment signals are required. It is difficult to make long term investments in low carbon technology when the magnitude of abatement required in the long term is unknown. Our current view is that the EU ETS, as presently constituted, is not capable of sending the signals required to underpin investment in low/zero carbon technologies. Political decisions in the EU & Internationally have the potential to significantly affect the demand for CO₂ abatement, creating risks for investors that limit the viability of long term investment decisions.

It is essential that Phase II of the EU ETS forms part of a wider integrated policy framework that is capable of delivering this investment and in our view, this requires the Government to set specific long term targets for domestic abatement. The EU ETS is a tool designed to deliver an EU target for greenhouse gas abatement and it must be recognised that it is not designed specifically to deliver energy policy objectives. The Government must support the EU ETS with a broad and robust policy framework to create a low carbon economy and to deliver energy policy objectives.

Allowance price development post 2008 due to design of scheme due in particular to: Uncertainty with respect to sector quantum and allocation methodology

Lack of a market management mechanism

Unsatisfactory operation of CDM Executive Board (in part due to lack of funding)

As before mentioned, the price of the allowances affects at the relative competitiveness of coal vs. CCGT, raising high uncertainties about future production mix and the recovery in new technologies' investments or in retrofitting investments

The key factor of the uncertainties raised by EU ETS is the price of the allowance and the liquidity of the market: it is unclear if the market will provide enough allowances at moderated prices. The main factors behind this uncertainty are:

- a) The unclear balance at offer side, caused by the inexistence of a clear provider of allowances inside the EU ETS.
 - Power companies should face difficulties to reduce emissions at require pace due to technological constrains and the necessity of meeting demand without being available of importing substantial amount of energy from third countries.
 - Industrial companies would need the granted allowances to maintain their usual production level, so they should not be sellers but the move production to third countries.
 - As a result, the only substantial source of allowances should come from the flow of allowances of CDM/JI projects in 2008-2012 period, whose magnitude is still unclear.
- b)By the demand side, power companies would also introduce high volatility on allowance prices. Their demand of allowances is highly inelastic at short term and can be highly influenced by raining schemes and droughts (for example, in Spain, Italy, Portugal and Nordpool), as they can reduce hydroelectric production.

Short time horizon of the existing NAPs, possible revision of allocation criteria, number of permits given for free, flexible mechanisms (CDM, JI) contribution, level of hot air included in the system, strategic behaviour of other players, post-2012 evolution, role of USA, China and India.

Allocation method; future CO, price.

- 1) Clear number one: Long-term (post 2012) global climate policies !!!!
- 2) Allocation rules in the long-run
- 3) Price of carbon (indirectly a consequence of the two former)

The key factor introduced is CO₂ allowance price. Therefor, parameters that affect this factor are the main causes of uncertainty: total amount of allowances allocated (that are related to future CO₂ emissions reduction), amount of credits from Kyoto flexible mechanisms (JI, CDM and in the future the possibility of linking with the international emissions trading) Another important factor that creates uncertainty is the allocation method that will be used in the future. As an economic compensation, it can be used, for example, to support investments in low carbon intensive technologies.

For us, the EU ETS is seen as an opportunity. There are strong signals given by the EU and national administrations that the world is heading for a carbon constrained future in order to fight climate change. Accordingly with these signals, we are heavily investing in low carbon intensive technologies. Therefore, our main risk is that emissions reduction effort is drastrically slowed down in the future.

In our country electricity production in CHP is strongly afected by weather conditions and electricity production in hydro plants.

Lack of knowledge of future regulations and allocated quantities.

Price, allocation, level playing field in EU

Allowances for the next periods

Unknown allocation mechanisms for future trading periods

Unknown future scope of the system

Unknown reduction goals

2.23.7 Refineries

Refinery investments are long term and the uncertainty of the allowance position long term is unhelpful

Allocation method; future CO₂ price.

2.23.8 Steel

Allocations for next periods in the EU will be uncertain whereas developing countries will face much less uncertainty.

Duration and quantity of Future allocations

long term prices of allowances

Assigned allowances!

Allocation method

Pooling strategies rules

Future allocations

Allocation for irreducible emissions, allocation method, duration or periods, future allocations, participation challenge outside the EU

Price of energy, electricity in particular

No benefits from efficient production due the national cap-and-trade system, EU riding approach with the systems that other countries in global steel markets doesn't seem to follow.

No existing long term goal for GHG reduction, a the time being no technology available for great CO₂ reduction

Allocation for irreducible emissions, allocation method, duration or periods, uncertainty about future allocations, participation and competitiveness challenge outside the EU.

2.24 Examples on how uncertainty is managed regarding production technology

2.24.1 Cement

The problem is not so much to explore new technologies: we have explored a portfolio of product ideas and launched priority studied and we are willing to participate to capture sequestration development.

The main difficulty is the uncertainty on the schemes that will prevail in the future (cap and trade or others?) and the economic pressure that will be applied. Also will the rules be even worldwide or create competitive distortions?

2.24.2 Chemicals

N2O - decomposition in HNO3 plant installed

Uncertainty is a key factor in long-term decision making and might push future investment outside Europe.

We undertake many efforts to go to many meetings, conferences and visit national and EU officials. Most often we learn that officials do not know how the scheme will further develop to eliminate shortcomings. From our perspective the problems of current allocation rules will continue or even worsen if cap & trade is not abandoned as soon as possible.

The EU wants to play a major role in climate change policies, and it is claimed that the EU-ETS is now the global benchmark. After careful study it will appear to become the example how it should not be done. This kind of uncertainties - a lottery - cannot be managed in real business life. The worst part of all was the totally inconsistent guidance note, as a first step a complete revision is needed. Before that, all meetings about the allocation of the 2nd period remain fuzzy and unfocussed.

Current debates are dominated by notions like "how can we limit the damage" or "how can we get as many allowances as possible". Damage control is for example the root cause of the choice for the middle definition of combustion installation. Debates are rarely about "how can we best invest to lower emissions" or "how can be co-operate in the field of technology". In the field of the academia and government (sponsored) institutions research is really going on. However, industrial companies must become engaged, they need to implement better technologies.

For new installations we choose low emitting technologies.

We are struggling!

Influence is small

2.24.3 Others

Energy efficiency, including cogeneration and waste energy recovery

Renewables

Developing a tool to predict future CO₂ emissions and tracking costs using a scenario tool which can use, auctioning, benchmarking or historic allocations and will allow the current price of carbon to be inputted to determine future costs.

Increased R&D activities in Engineering Department to reduce specific fossil energy consumption

Produce or not produce depending on the CO₂-price. Addition costs for buying 10% certificates with a price of 20 will be 37%. We emit 1 tonne CO₂ per one tonne of production. The market price of burnt lime is 50 /to. So its cheaper not to produce if you have not enough certificates.

2.24.4 Pulp and Paper

We developed a GHG strategy for the whole group that assesses the impact of the EU ETS on our business.

We have a continuous evaluation of the assets based on profitability, long term raw material,

energy and competence availability and costs. Based on these together with market analysis the decisions are made when and where technology is updated in order to be able to meet the demands from the customers of today and tomorrow.

2.24.5 Power

Organisational measures and risk strategies are taken.

We created the range of information related to CO₂ emission. We established CCGT technology in our every sites from middle of 1990 years.

Standard generic risk management reaction, no specific new activities developed.

EU ETS is integrated into:

- Existing risk strategies and coordinated with other risks,
- · prospective assessments,
- · long term scenarios,
- · use of appropriate modeling tools,
- integrated into cost models that determine dispatch decisions.

Strategy is to protect investments by ensuring a sufficient stream of allowances/CERs/ERUs available into the future (to 2012). This is being delivered currently through bilateral contracts and participation in a GHG fund and will possibly involve spot trading in the future (once the national Registry is established).

We run simulations with our market models assuming different GHG scenarios (in terms of expected allocation, CO_2 price scenarios, hot air contribution, flexible mechanisms contribution, players strategic behaviours). We also address the CO_2 issue in a centralized way trying to exploit all possible synergies in terms of dispatching strategies, allowances, CERs and ERUs sourcing, development of JI/CDM projects and investments in carbon funds.

For new installations we choose low emitting technologies.

A key element in managing the uncertainly is the availability of different tool to respond to the obligations:

- CO₂ aspect has been integrated in our investment/divestment/acquisition procedures and is part of our investment manual, with monetary valuation of CO₂ and sensitivity analyses
- In order to increase our know-how on the utilization of Kyoto mechanisms as a hedging tool we have invested in the Prototype Carbon Fund of the World Bank
- We also regularly update our database for the marginal CO₂ abatement costs at our own installations

Other include e.g.

• Every Business unit have their trading strategies and risk policies for the ETS (the trading itself + the production of short- and long-term market outlook has been centralised). Cross-business-unit information and coordination is ensured by networking.

Assessing risks for the EU ETS is made with similar tools as the ones used for assessing general risks in electricity markets

Replace coal with biomass in the rate of the missing allowances.

Having a large asset portfolio every answer is true for a portion of this portfolio. We use every opportunity.

Because of economical reasons it can not be expected that we shut down power plants before

the end of their lifetime. Reinvestments - connected to major emission reductions - will occur more or less in the normal investment cycle.

The choice of technology mainly depends on profitability expectation. This is valid especially for the fuel choice. In general all the new plants of my company are of the best available technology standard.

We push the development of low emission production technologies as part of our R/D activities (example: CO₂-free power plant).

2.24.6 Refineries

For new installations we choose low emitting technologies.

2.24.7 Steel

ULCOS.

Major focus in energy and material efficiency aimed projects, as it is the only sure way TODAY to get some CO2 reduction benefits, or at least the less cost increase as possible due to EU ETS.

ULCOS Project

- 1. General strive to energy efficiency for risk assessment and management
- 2. We are developing strategical models and tools

Search more information from ULCOS project.

ULCOS

2.25 Other sectors, which should be included in the eu ets apart from "aluminium," "transport other than aviation," "chemicals," "agriculture," and "food processing"

2.25.1 Cement

Waste incineration and landfilling

Incinerators in order to avoid distortion of competition as far as combustion emissions from waste are concerned

Incineration

2.25.2 Others

Energy use at home

Housing sector

Incinerators and captive lime productions

N2O from chemical industry

2.25.3 Pulp and Paper

Waste incineration plants

2.25.4 Steel

Waste incineration.

all

Waste incineration

Waste incineration

2.25.5 Governmental Bodies

In Phase II my country is considering expansion of the Scheme to cover additional sources in the following sectors: Glass, Gypsum, Rockwool, Foundries, Integrated steelworks, Offshore flaring, Petrochemicals

forestry

gypsum, glass, rock wool, integrated steelworks, foundries, offshore flaring, petrochemicals

2.25.6 NGOs and Market Intermediaries

any

Domestic and commercial primary fuel consumption

Construction

on/off shore gas and oil production; waste sector

All other relevant sectors

2.25.7 Associations

N2O emissions for the following processes: adipic acid production, glyoxilic acid production, nitric acid production. HFC and PFC emissions for the production of fluorinated chemicals

Waste incineration

Incinerators in order to avoid distortion of competition as far as combustion emissions from waste are concerned.

Waste incineration

Incinerators, captive lime production

Housing

Incinerators in order to avoid distortion of competition so that combustion-emissions from waste should be concerned.

2.26 Comments on other sectors to be included (from previous chapter)

2.26.1 Aluminium

We do not support the inclusion of any additional sector until the many uncertainties that still exist are resolved. Before including a sector great attention must be made to its cost of abatement and its capability of passing on to its customers the added costs of ETS

No other sectors should be included before a broader global participation in GHG reductions

2.26.2 Cement

Waste incinerators in order to avoid distortion of competition as far as combustion emissions from waste are concerned.

Waste incineration and land filling: important source of CO₂ and methane emissions, with a limited number of installations. Waste used as a fuel in industrial processes (so called coincineration) is covered by the directive. Exclusion of waste incineration from the directive is an undue favouring of certain industrial activities and a significant distortion of competition to the advantage of waste disposal rather than waste recovery.

Aviation and transport should not be included in the same ETS scheme, because the structure, CO₂ reduction opportunities and costs are too different from the industrial sector. Policy measures in so vastly different sectors are not fungible, and should thus not be merged.

This is not our main preoccupation. The main risk for us is to associate sectors that do not have the same consequences of CO₂ in their costs and the same capacity to transmit the consequences to their customers.

An even worldwide scheme for the cement industry (sectoral approach) with coherent objectives would be much more efficient.

There should be no difference by firing wastes in incineration plants or in co-incineration.

2.26.3 Chemicals

Fast growing source

We strongly recommend that the scope of the ETS should be redesigned as said before. The questions in this survey show that there is a great uncertainty in respect of the scope of the ET-directive. You ask if "Chemicals" should be brought into the ETS. Some questions above one can find the argumentation (concerning the 20 MW Combustion installations) that Chemical Industry is covered anyway.

The ETS should be implemented only for the core of the meant branches.

Only after enough time for the collection of experiences the next steps should be discussed. There is nearly no experience available until today, because the ETS did not start in all the (very important) details.

Chemicals should only be included, if other greenhousegases are also included (N2O)

We cannot see advantages from an inclusion of other sectors in the EU ETS.

If the principles of the scheme are not to change we propose to stop it as soon as possible to reduce the economic damage (shift of wealth and CO₂-emissions to outside Europe). We hesitate strongly, because of the lack of effectiveness and the competitive distortions induced by the scheme.

The inclusion of CO₂ emissions from combustion indirectly affects the energy intensive industrial sectors.

Many of the above sectors are not easy to include in the ETS. Other policy instruments can be used.

No expansion!

2.26.4 Others

Chemicals, currently not included, competes directly with other sectors that are included. We see that some measures are required to curb emissions growth in aviation and transport. If voluntary measures are ineffective emissions trading would be preferable to taxation.

In principle, the larger the scope the better. However, this can only be true if the inclusion of a new sector does not deeply distort the pricing mechanisms. In this respect, including aviation for instance should require much more forecast than available at the moment. Also, more attention should have been given and should still be given on the "side" effects on international competition. Otherwise (especially regarding post-Kyoto periods if strong commitments from non Kyoto bound countries cannot be obtained) the main result of the EU ETS would be industrial relocation instead of emissions reductions.

We would be in favour of keeping the scope of the EU ETS as it currently is (in terms of sectors and gases), to avoid further confusion and to allow the monitoring and reporting requirements to settle in. Rather than adding further complexity to an already extremely complex scheme, efforts should be made to streamline the EU ETS to reduce the complexity and the administrative burden. We would request a period of stability to assess the impact of these measures.

Instead of expanding the scope of the EU ETS, government should take a holistic approach to environmental regulation. The contradictory character of current regulations often cancels the effects of one another. For example, the EU Directive on the use of solvents leads to higher energy demand in our facilities, which in turn, leads to higher CO_2 emissions. This example emphasises the need for transparent impact assessments.

equity of treatment

Intra- European aviation is a significant CO₂ generator. Road Transport is growing and a huge source of NOx. Managing non-industrial CO₂ is not seen as governmental priority; it is much easier to target industry again, despite its huge steps forward, and general decline due, in some extent, to similar anti-competitive measures

Fairness between all markets.

All 3 sectors are known to be major emittents of CO₂, therefore it would only be too fair to

include them

There should be no difference by firing wastes in incineration plants or in co-incineration. The amount of lime being produced by other industries for their own use does not necessarily fall within the ETS which opens competition distortion.

Readily and correctly measured, strong support from all industry, CEPS and IETA.

2.26.5 Pulp and Paper

These sectors are competing against the ones already inside the scheme.

We should be careful not to load the burden of CO₂ reduction on the industries alone. So household, transport and smaller sectors should get an incentive to reduce emissions and should experience a similar financial load as our industry.

The products of the sectors indicated here are competing against the ones of those industries already inside the scheme. For example, paper and board packaging are competing against plastics and aluminium packaging, and incineration is the most common way of managing plastics waste.

In general, when inclusion of additional sectors is considered attention should be paid to two issues: if the abatement cost of new sectors is considerably higher and their ability to pass on costs to the prices very much different from the sectors already included, problems will certainly emerge.

2.26.6 Power

I think, we can achieve our object, if every sector connect to the EU ETS.

Other methods of regulation could fit better to the above mentioned industries(e.g. taxes, emission limits)

Some processes in chemicals whihc are not currently included are the same as those in refineries which are included.

Some action on Transport and aviation is required and if voluntary measures are unsuccessful we prefer emissions trading to taxation

All sectors should be considered for inclusion in the long term where practical and cost effective. However, in the short term the emphasis should be on consolidation around major CO, emitters

In principle, we support the extension of the scheme to non-CO, greenhouse gases and other sectors, subject to there being effective monitoring, reporting and verification of emissions. Further work is required on assessing the impact on the market, potential distortions, as well as work on developing monitoring, reporting and verification protocols to reduce the level of uncertainty in monitoring these other gases.

Two factors should be considered in extending the scheme to new sectors and/or gases. The first relates to the marginal cost of abatement. This should be broadly similar to (ideally less than) the current cost for the scheme. The second relates to growth prospects for the sector/gas coupled to the price:demand elasticity of the product. While the marginal cost for a particular sector could be below that of the scheme at present, a sector that shows strong growth and low demand elasticity could quickly wreck the ETS.

Our opinion is that the system should be expanded as much as possible. However, this should be done carefully, with the aim of capturing opportunities to lower costs of emission reductions and avoiding the risk of uncontrollable increases in CO₂ prices. Moreover, acceptable monitoring mechanisms should be put in place which guarantee a comparable level of accuracy for all sectors (possibly even reducing the requirements for the sectors presently involved). Specific choices should therefore be made accordingly.

The inclusion of CO, emissions from combustion indirectly affects the energy intensive industrial sectors. Many of the above sectors are not easy to include in the ETS. Other policy instruments can be used.

These are comparable to other sectors already included. Aviation perhaps as well.

We do not have enough information to answer this question. However, the inclusion of new sectors and gases should not be decided on the basis of the level of their reduction costs. If the reduction costs of new sectors and gases are high, emission trading will make sectors with lower reduction costs be the ones to actually reduce emissions, minimizing the total cost. That's the core of emissions trading, and that will give an opportunity to low cost abatement technologies to reduce more emissions.

The inclusion of new sectors and gases should be based on a cost-benefit analysis, taking into account the costs related to the implementation of EU ETS in such sectors and gases and the total cost reduction obtained from the inclusion of such sectors and gases in the EU ETS. Moreover, such a cost-benefit analysis should be compared with the application of other policies and measures (Taxes, command and control, etc...)

Transport is one of the other large growing fosil fuels consumer.

In general the larger the system is the better will it function in terms of cost effective abatement. The only reason to exclude gases or sectors should be to high administrative cost to measure and monitor the emissions.

Concerning potential inclusion of the transport sector: The transport sector must bear their burden. It would be a great advantage if the transport sector would be exposed to the market price of CO₂ as the other sectors are. The question either to include the transport sector in the system or not is more of pragmatic nature (possibility to measure the emissions, allocation of the emissions to an EU member state, influence on market price at time of inclusion).

2.26.7 Refineries

Some processes in chemicals which is excluded compete directly with refineries which are included.

Aviation and transport should be considered. We favour voluntary measures fro those sectors but if these are unsuccessful we prefer emissions trading to tax or other measures.

The inclusion of CO₂ emissions from combustion indirectly affects the energy intensive industrial sectors. Many of the above sectors are not easy to include in the ETS. Other policy instruments can be used

2.26.8 Steel

Organic materials escape with their feedstock CO₂ which distorts competition between materials. Also, non recuperated part of organic materials will decay to CO2 and should be included sometime.

For local markets such as transportation and agriculture there is a reasonable certainty on the possibility to pass on the cost of CO, to the consumer. It is impossible for producers on a global market to cope with a CO₂ price dictated by one local market.

In principle all sectors should contribute to the reduction, provided that the target is realistic for the specific sector, the cost for the community is in line with that associated to others sectors, and finally the loss of competitiveness vs unconstrained countries is reasonably low.

Due to interaction between different market categories, also indirect, it is important that also such sectors are involved in the ETS scheme.

Transport emissions are high

Aluminium has currently a competition benefit against steel

Chemicals industry has the same benefit, plastics

Agricultural emissions are high

Due material competition.

It must very good analysed what the impact on the system will be by include more sectors. The inclusion of aviation and transport in the current system would, due to the very high abatement costs in this sectors, lead to a significant encrease of the prize of CO₂ credits. This would harm us very much, because we are in a world wide market with competitors not under the restrictions of a cap and trade system.

Before considering the inclusion of any additional sector to the scheme two important criteria have to be borne in mind: the abatement costs and the facility to pass on those extra costs on the customers. A fair scheme should only encompass incumbents facing the same order of magnitude and having the same ability to pass on the costs, otherwise the system we observe now with sectors winning al lot by no reducing emissions will be pursued.

Any discussion must consider potential impacts on those companies that are already within the ETS, in particular on the price of allowances and the impacts on the international competitiveness, as well as the timing.

Organic materials escape with their feedstock CO₂ which distorts competition between materials. Also, non recuperated part of organic materials will delay to CO2 and should be included sometime (all the emissions related to the generation or the destruction of materials should be included).

For local markets such as transportation and agriculture there is a reasonable certainty on the possibility to pass on the cost of CO, to the consumer. It is impossible for producers on a global market to cope with a CO₂ price dictated by one local market.

2.26.9 Governmental Bodies

Aluminium -This sector is subject to international competition and work is needed to determine whether this would be suitable for an international emissions trading Scheme.

Transport (apart from aviation) - There are many advantages in including transport emissions in the Scheme and the inclusion of this sector should be seriously considered for Phase III and beyond, however there is a lot of work still to be done to assess the impact of expansion to these sectors and the inclusion of road transport would be a priority over rail or water-borne modes.

Aviation - Greenhouse gas emissions from transport (including aviation) are the fastest growing sector and at present, the externalities associated with this sector are not reflected within that sector's costs. The inclusion of aviation is our preferred way of tackling aviation emissions as emissions trading guarantees the desired environmental outcome in a way that other instruments such as taxes and charges do not. It does so in the most cost-effective manner possible.

Chemicals – We believe that there is good potential for the chemicals sector to be included in the EU ETS and are currently investigating the opportunities for Phase II expansion to the petrochemicals sector.

Agriculture - The many small emissions sources means that this sector would be difficult to include.

Food processing - We do not have a view on inclusion of this activity although we are not keen for a large number of small installations to be brought within the scope of the scheme.

In our situation, the above listed sectors may either be non existent or scales of operations in these sectors may make their involvement in an emissions trading scheme not viable. The transport and aviation sectors are of great importance to us however the extent of the administrative burden could make participation difficult.

Including agriculture might be useful for the farmers. That is very much depending on monitoring rules and baseline determination. All circumstances have to be determined before agriculture can be included. Maybe after the analysis it is better not to include agriculture.

2.26.10 NGOs and Market Intermediaries

Eventually, all GHG emissions should be included. The timing of the inclusion should take into account the practicability and costs of inclusion.

Emissions trading is a powerful instrument for reducing emissions at the least possible cost. The goal of Commission should therefore be to broaden the scheme to all sectors of the EU economy and to work towards an international trading scheme based on the cap-andtrade concept. Work should begin now to widen the scheme further to include all sources of emissions from transport, commercial and domestic fuel use etc.

The immediate barrier to expansion within Phase II of the EU ETS is the Directive's focus on emissions from installations defined as "stationary technical units" and consequently the threshold at which transaction costs of monitoring and verification on an installation-byinstallation basis become prohibitive. Going forward it will be necessary to re-examine the basis on which emissions are caught by the Directive to ensure that all sources are captured while mitigating the monitoring and verification costs. Specifically, for those emitters where it would clearly not be economic to monitor emissions directly, an indirect approach based on the volumes of fossil fuels supplied, eg, by gas suppliers, petrol retailers etc appears a relatively straightforward and attractive alternative (not least because they already know how much they supply). The extension of the scheme to fuel suppliers would also provide some valuable flexibility to streamline the compliance overhead for some of the smaller installations currently caught directly by the EU ETS (eg, if installations were able to opt for their emissions to be accounted for indirectly by their fuel supplier rather than directly).

Although there may be some skepticism about extending the scheme in this way because of the low perceived abatement potential from some of these emission sources, emissions from these sources should feed through directly into the EU ETS caps in any case since the NAPs have to be consistent with economy wide efforts to meet binding Kyoto targets from 2008. Hence, if a Member State's transport emissions are set to increase, then that increase should

translate into an increased reduction requirement in the EU ETS capped sectors whether or not transport is included in the EU ETS. The difference is that by including these sectors, consumers and suppliers at least have the opportunity to make the global economic trade offs required between their electricity use, energy efficiency investments, car engine sizes and efficiencies etc against the economic incentive provided by capturing the price of carbon dioxide within fuel prices.

Extending the EU ETS to other sectors and GHGs could be relevant for industrial sectors such as aluminium, chemicals and food processing. Still, alternatives such as domestic offset projects should also be considered. For all sectors with diffuse emissions (agriculture, transport apart from aviation, residential, etc.) domestic offset projects should be promoted.

To complete the industrial sector (assuming that food processing is energy-intensive).

The agriculture sector contributes significantly to overall EU greenhouse gas emissions. Also, it is important to engage a land based sector such as this in order to learn more about LULUCF GHG mitigation strategies.

The emissions of the transport sector represent roughly 25% of the total emissions in Europe and are continuously increasing. But the matter is not easy to tackle because:

- Most of the sources are mobile
- The economical agents are numerous
- The price (even with 25 /t) does not create sufficient incentive for a change in the behaviour of car users.
- The matter is politically sensitive

Therefore, we suggest a pragmatic approach through projects, either for passenger and freight transport, which should be eligible for allowances. In this view, we support the concept of domestic projects, in regard of the high transaction costs of Jls.

The more sectors included, the more fair stamp for the scheme - "level playing field" and boost the market to become truly liquid and functioning.

- Include process emissions into 20MWth group of installations
- On agriculture I prefer milk sector (upstream of downstream) and horticulture sector (greenhouses)
- On transportation I prefer upstream, at fuels market sector

Aluminium, chemicals industries can be large point sources of emissions. Care must be taken about competitiveness issues. These sectors may currently be very negatively affected by the higher electricity prices. Therefore, allowances to electricity companies should be auctioned and part of revenues recycled back to energy-intensive industries.

For Transport, the approach considered in the US (MCCain Lieberman) should be looked at. How does its effectiveness compare to other options such as road pricing? (road pricing may be viable only on highways, whereas CO₂ inclusion in the fuel prices by means of having refiners and fuel importers could cover all parts of the transport sector).

In general it would be optimal to include all GHG in the ETS. Nevertheless, there is also the question of transaction cost. It is thus more important to include sectors which are responsible for large shares of emissions, such as the transportation sector, than marginal sectors (to which probably the food processing sector belongs). To avoid transaction cost, it will be necessary in some sectors (such as transportation) to have an upstream system. Besides adding further sectors, it should also be tried to add further gases.

Broadly all chimneys should be included.

There are already substantial incentives on car producers to create more efficient cars

because of the taxes on fuel. If these were removed then I would support its inclusion. Agricultural emissions are subjective and will introduce unpredictable results.

Aviation should not be included but should be covered by a separate, dedicated ETS for the aviation sector only. Once both system are robust enough and many open questions are solved, a linking could be considered.

An ETS dedicated to the aviation sector triggers reduction measures in this sector while avoiding that Kyoto allowances, i.e. the allowances derived from a legal Kyoto implementation policy, are being mixed with allowances from a non-Kyoto sector such as aviation. If an aviation ETS would be fully linked with the existing EU ETS a 'leaking' of emissions credits from a non-Kyoto to a Kyoto trading regime would occur.

A trial phase from 2008 to 2012 could be used to generate experiences within a separate cap and trade system for the aviation sector with the view to link it to other sectors after 2012. Further, an ETS for aviation should not preclude the introduction of additional policies for the sector to cover the non-CO2 climate impacts of aviation. Such policies should include en-route charging and the introduction of a kerosene tax.

2.26.11 Associations

Transport and Aviation are the main sources for CO,

Serious measurement protocols for those gases and sectors are used within various EU Member States and their inclusion brings liquidity to the market.

For instance, at French level, for N2O, AFNOR - the French standardization body - has published 3 good practices: practices # bp x 30-330, bp x 30-331, bp x 30-332; the Environment Agency, which operates in England and Wales, has published a Technical Guide Note M2 (« Monitoring of stack emissions to air », June 2005)

In order to create a level playing field, it is necessary to introduce those gases into the scope for all Member States, at least for N2O, and possibly for HFC and PFC.

We strongly recommend that the scope of the ETS should be redesigned as said before.

The questions in this survey show that there is a great uncertainty in respect of the scope of the ET directive. You ask if "Chemicals" should be brought into the ETS. Some questions and answers above indicate (concerning the 20 MW combustion installations) that Chemical Industry is covered anyway.

The ETS should be implemented only for the core of the intended sectors.

Only after having collected sufficient experience in a reasonable period of time the next steps should be discussed. There is nearly no experience available until today, because the ETS has not yet started in all the (and this is very important!!!) details.

Equals conditions for the production of packaging materials and waste treatment

Inclusion of other sectors is viewed with great reservation.

Inclusion of transport would likely result in costs being passed on to customers thereby increasing costs to industry generally. The aviation sector, in particular, are likely to pass on costs directly to customers. The ability of the aviation sector to abate CO2 is questionable and it is likely that they would purchase from the market and short the market for manufacturing industry. This would result in a high CO₂ cost. Aluminium, chemicals and food processing are

similar industries to those already in the Scheme, their inclusion should assist in meeting CO, reduction targets

It is necessary to consider the impacts of other human activities with a view to GHG reduction.

It is necessary to ensure EUETS liquidity by increasing the eligibility base with similar participants.

Whilst it is environmentally necessary to account for other sectors, for instance, aviation, the inclusion of them into the EUETS under identical conditions must be, if not avoided, then very carefully orchestrated. It is necessary to explore the impacts upon the current system before introducing such different sectors.

Imports into the EU carrying a CO2 burden are currently unaccounted for in the scheme. How does the Commission intend to prevent leakage of CO₂ by export of traditional; production?

The consultation on "Reducing the Climate Change Impact of Aviation" rightly points out the need to reduce emissions in various sectors of human activity but, as expressed in this submission, one of the solutions - the extension of the existing E-ETS to CO₂ emissions from aviation is a source of concern to other industries already subject to Directive 2003/87/EC on Emission Trading (ETD).

The requirement of equity spelled out in the ETD demands the inclusion of sectors other than those currently covered by the ETD in efforts to mitigate climate change but the instruments to be used to achieve this have to be tailor-made: transport and agriculture, for example, cannot be treated exactly in the same way as the energy intensive industry.

It is understood and recognised that emissions trading in the EU-ETS is a key tool to achieve emissions reduction purportedly at the lowest cost. This may well be the case for the sectors currently covered by the ETD. Other tools, however, need in an opinion to be developed in order to cope with CO₂ emissions from aviation.

It should be emphasised that a blind extension of the ETD to aviation might lead to distortions that could jeopardise the operation of the E-ETS altogether. If the E-ETS is a key tool, it is no panacea. Prima facie, it would appear to contribute to the more equitable sharing than at present of the burden imposed in order to meet the Kyoto commitments of the EU and, presumably, the total volume of allowances to be allocated would increase with the inclusion of new CO, sources

The problem is that, whilst purchasing allowances would represent a significant cost element for manufacturing industries in which the CO₂ emissions per unit sales (i.e., per Euro) are high buying allowances would represent a very small part of costs in aviation. For example, a full plane emits one tonne of CO₂ per passenger on a two-way flight from Paris to New York. On the assumption that this is an all economy class flight, at a CO₂ price of 10 per tonne, this would only add 10 to the cost even if all the allowances had to be purchased; 1 if only 10 percent needs to be bought in accordance with ETD. With this kind of cost structure, the aviation sector will have no trouble to pass on the cost to their customers and will be in a position to afford CO₂ prices far beyond the reach of the our industry. The risk for manufacturing industry to be priced out is real and the competitiveness of the cement industry and other manufacturing industries in the EU would further be undermined.

In any case, if the Emission Trading Directive were to be extended to aviation, allowances allocated to aviation should at least not be fungible with those issued to the industries currently covered by the E-ETS.

A comprehensive evaluation of the consequences in the market liquidity, the allowances price, and the impact on the whole EU industry competitiveness should be made.

Both the relatively small total energy use by our sector and the fact that it does not contain large CO, emitting installations are reasons to exempt the ceramics industry from this scheme.

The scheme should not be extended for the period 2008-2012. The widening of the scheme makes the implementation of the scheme even more complex than nowadays. The timetable for the implementation of the directive is that strict that it is not possible to implement even more complex scheme.

Any discussion must also consider potential impacts on those companies that are already within the scheme, in particular on the price of allowances and the impacts on the international competitiveness.

From a theoretical point of view inclusion of all sectors and GHg Gases seems attractive, e.g. the transport sector. However, inclusion of additional sectors in the EU-ETS should only happen if the inclusion improves the functioning of the EU ETS and supports further cost efficiency in the EU ETS. Therefore it is necessary to make the EU ETS work and ensure that the JI and CDM-credits have sufficient impact on the EU ETS. In the present EU ETS the inclusion of other sectors need to take into account, what are the abatement cost of the additional sectors to be included, if this is much higher than for existing sectors in the EU ETS, the situation for the sectors already in the EU ETS, will be worsened. Again the wellfunctioning of JI and CDMs is imperative.. Inclusion of additional sectors also needs to be seen in connection to inclusion of other gasses, the ability to transfer costs into prices, and the average size of the companies in a particular sector.

Sectors which compete in similar markets should all be subject to the provisions of EUETS. However, materiality has to be taken into account - low-emitting sectors should be excluded.

All significant producers of greenhouses gases should be included regardless their sector with a limit depending only on the production capacity

Before considering the inclusion of any additional sector to the scheme two important criteria have to be borne in mind: the abatement costs and the facility to pass on those extra costs on the customers. A fair scheme should only encompass incumbents facing the same order of magnitude and having the same ability to pass on the costs, otherwise the system we observe now with sectors winning allot by no reducing emissions will be pursued.

Any discussion must consider potential impacts on those companies that are already within the ETS, in particular on the price of allowances and the impacts on the international competitiveness, as well as the timing.

Organic materials escape with their feedstock CO₂ which distorts competition between materials. Also, non recuperated part of organic materials will delay to CO₂ and should be included sometime (all the emissions related to the generation or the destruction of materials should be included).

For local markets such as transportation and agriculture there is a reasonable certainty on the possibility to pass on the cost of CO2 to the consumer. It is impossible for producers on a global market to cope with a CO₂ price dictated by one local market.

NO sector should be included as long as:

- The ETS is causing the power prices the increase, via opportunity costs of the power producers, which are not linked to environmental benefits, but lead to huge windfall profits for producers and closures for power consumers.
- The CO₂ allowances market can be easily manipulated by buyers.

The inclusion of aviation will increase these power prices: the sector has high abatement costs

and can easily pass prices to the costumers: they will be buyers of allowances and this can skyrocket the prices.

DG Environment should start recognising this problem explicitely and take their rersponsability finally. As they did not know how the power market functions they have made this mistake (and are manipulated by the power sector, like was done on the power market liberalisation) and shopuld fix it. This is their responsability, they may not pass their mistake to DGTREN or others, or worse (as currently) deliberately ignore the problem.

- Competition upstream or competition downstream
- Before joining other sector to the one already in ETS, EU should think first the difference in abatement costs among sectors and second the possibility to pass on the cost to customers.

With more players, the market will become more liquid. But only the sectors that have the same cost structures should belong to the same EU-ETS scheme (thus: NOT the aviation sector).

Competitive disadvantages in different sectors (e.g. packaging, buildings...) should be avoided.

The European Commission should consider the introduction of a CO₂ allowances burden on imported manufactured goods from States which do not have a CO₂ constraint.

Fairness between all markets

In relation to the inclusion of other sectors, please see another's association's contribution to the EC Consultation on Reducing CC Impact of Aviation.

We generally support the extension of the EU ETS to include other GHGs and other industrial sectors.

The inclusion of other sectors should be decided on in close consultation with the sector on a case-by-case basis.

Other sectors

Consideration should be given to the inclusion of other sectors in the Directive for the period post-2012. Any discussion must consider potential impacts on those companies that are already within the ETS, in particular on the price of allowances and the impacts on the international competitiveness, as well as the timing. This should also be consistent with the paragraph below with respect to the exclusion of smaller installations.

Opt-out for smaller installations

The inclusion of many small and medium sized companies within the EU ETS places on them unnecessary reporting and administration burdens whilst their GHG emissions are negligible. It is recommended that an emission threshold be set (for example, at least 25,000 tonnes CO, eq. This corresponds to 55 percent of the installations included today, but only 2.5 percent of the total EU CO₂-emission (CEPS Task Force report, July 2005)). Below this threshold a company would be opted-out from the EU ETS unless it chooses to be voluntarily included. In any period, once this threshold is exceeded in any single year, the company remains within the ETS for that period.

It is vital that such an opt-out is in place (either formally or informally) for the period 2008-12.

Member States shall maintain a register of those companies "opted-out" and require a specified level of emissions monitoring and reporting. To avoid disproportionate burdens on small installations or governments, there should be a possibility for a voluntary opt-out, provided that installations are subject to equivalent action.

2.27 Additional overarching comments

2.27.1 Aluminium

Rather than thinking of expanding the ETS, all efforts should go to eliminating the distortions and uncertainties that plague the system

2.27.2 Cement

The ETD is in principle a promising policy measure. The highly counterproductive NAP rules however destroy the value of ETD completely and currently have the opposite effect of the intention.

The EU policy should also enable an engagement of the USA, and major emerging economies to allow any environmental effect. To enable this engagement, the ETD and NAP needs fundamental improvements, being it should be based on efficiency of production and consumption rather than on absolute targets.

- The form of the questionnaire (tick boxes) is often inadequate to provide a correct answer.
- Our company in Europe has modernized plants early and now has little margin to reduce energy consumption, and CO₂ emissions. This is not clearly recog.

We feel, that the ETS should be redesigned in several points:

- 1) Emissions trading, which is a tool to reduce CO₂ emissions, should not become the pretext for price hike in the electricity market we see right now!!! If the momentary situation were to proceed, the indirect impact of the EU-ETS would be much more important and damaging to the competitiveness of power intensive industries than the direct impact! Solutions must be found.
- 2) Urgently needed reduction of the administration costs (registries, Monitoring/Reporting)
- 3) Production growth and international competitiveness are central demands on the ETS. This includes especially the benchmarking system and the exclusion of small installations.

2.27.3 Chemicals

We feel, that the ETS should be redesigned in several points:

- The scope (20-->50 MW; only "energy industry"; small installations(<50,000 to. p. a.))
 should be redesigned.
- Urgently needed reduction of the administration costs (registries, Monitoring/Reporting)
- Production growth and international competitivness are the central demands on the ETS. This includes especially the benchmarking system and he xclusion of small installations.
- The future of the ETS must not be addressed in isolation it is crucial to address also other EU and national policies with similar, climate change or energy related targets, at the same time using overlapping instruments.
- Other gases than CO₂ and other installations should only be covered by the ETS, if the owner of the concerned installation demands this and is able to monitor the emissions. Therefore a voluntary Opt-In on for these installations should be possible.

Questionnaire is not fit for purpose, it is almost completely limited to options within the cap & trade theory.

The ETS implementation is proving more difficult than expected. It is important that best practices are showed among competent Authorities.

We reject the hypothesis in one of the earlier questions that only the true cost of allowances is being passed on. The fact is that although the electrcity generation sector has to pay for about 30% of the cost of carbon, is is passing on 50% of the cost and making windfall profits. The problem is even worse in other countries where they only have to pay for 10% of their allowance. We do not know how to counteract this, but we dont want full auctioning to be seen as the answer unless the costs are fully recycled to participants (and downstream participants their customers!)

2.27.4 Others

The treatment of an installation should by no means depend on who operates it. This means that outsourced combustion installations should be treated exactly in the same way than installations operated by their owners. This is far from being true today, because some rules depend on the sector the operator belongs to.

Some district heating are fed by waste to energy plants, which are not subject to the Emission Trading Scheme. These plants can be backed up by combustion units, which are in the scope of the ETS. The same applies to energies such as geothermal energy or biomass. The additional emissions from the back-up of energies or installations outside the ETS scope should be neutralized in the total emissions quantification.

The treatment of CHP should be specifically dealt with, taking into account the simultaneous generation of heat and electricity. Contrary to what is sometimes thought, this would not be an additional advantage granted to cogeneration, but a plain recognition of the way it works. In particular, replacing a conventional installation with a CHP plant increases emissions locally but reduces them globally. The allocation method and the rules for closures / transfers / new entrants must take this fact into account

ETS in the first phase (2005-2007) is not relevant for our sector. This is the reason that we don't have enough knowledge to fill in the questionnaire.

As was highlighted by the National Allocation Plans, our sectors' installations comprise more than 10% of the total number of installations covered by ETS, but emit less than 1% of total CO, emissions covered by the scheme. This not only confirms the low overall emission level of our industry, but also is an indication of the small size of firms producing ceramics. They have considerable problems in administrating ETS, and their participation in the ETS would have a very low impact in the reduction of CO, emissions as a whole. The competitive position of the industry, which has to cope with alternative products, does not allow for the additional expenses ETS requires.

- 1) The all guestionnaire focuses only on issues linked to the combustion emissions.
- 3) The impact of process emissions which are "irreducible" unless by reducing the production is ignored:
 - This is particularly detrimental to our industry having unfortunately the highest ratio of process emission per tonne of final product compared to all the sectors included in the Emission trading Scheme.
 - In addition the price for one tonne of our product is in addition the lowest compared to one tonne of paper, of steel, etc. As a consequence the impact of ETS is high.
- 4) The EU policy to promote the use of biomass or biofuels is totally ignored.
- 5) The questionnaire does not take into account captive production which means that the amount being produced by other industries for their own use or for the production of lime derived products leads to unfair competition distortion.
- 6) Competitor's chemical products not included in ETS annex I leads to unfair competition distortion.

- 7) Ignorance of IPPC-BAT framework.
- 8) Competition from non carbon constraints countries is not addressed.
- 9) Recarbonation of the burnt lime lime cycle.

2.27.5 Pulp and Paper

The EU ETS has not to be considered alone there are other policies in the EU dealing with similar claims.

The revision of the ETS should have one more objective: clarify and simplify as much as possible all these concepts and will should permit to avoid any interpretation within the MS

The EU ETS should not be assessed in isolation; there is a whole bunch of policies in the EU with similar aims. It is crucial to address them in a co-ordinated way when the revision of the EU ETS is considered.

Secondly, the timing of the review is very problematic: in 2006 there will be no idea about the potential international climate change policy framework within which the EU ETS must fit into. So probably there must be a possibility to revise the emissions trading directive still once before the period starting in 2013 after we know if there is going to be some kind of an international arrangement and if yes, then what kind of an arrangement.

2.27.6 Power

My company implements a co-generated thermal and electric power generation , which is qualified as a "clear technology".

Its production units as "early action" - is commissioned in June 2001.

By commissioning of two gas turbines and thermal energy recovery in 2001 it substituted a coal-based thermal energy generation and at the same time it ensured a long-term steam supply and significant part of electrical energy supply for our customer.

The future of Power Plant, formerly supplying thermal energy for another company based on brown coal was uncertain. That company as one of our owner and cost bearer made investment of new power plant, because it already adopted the concept of decrease of emission during period from 1997 to 1999, which concept was just existed in the bud also on world scale.

Decrease of emission naturally was associated also with idea of application-efficiency energy generation, when decided co-generation method of thermal and electrical energy production, which has approximately efficiency of 85%. It can be stated, that the company was first in our country among non-public power plants implementing best available technique (BAT). As a result, a power plant considerably decreased it's production since steam-side substitution of production by an energy-saving and low emission technology.

This "early action" investment required millions of EURs, but it resulted in ca 900000t CO₂ emission reduction up to 2003 in comparison with the substituted coal-base power plant emission.

Decrease of emission owing to early action:

in 2001 it was 218,396 t $\rm CO_2$ in 2002 it was 340,649 t $\rm CO_2$ in 2001 it was 326,784 t $\rm CO_2$

Total: 885,829 t CO₂

(Emission value of reference period from 1998 to 2001 was calculated on the basis of CO, emission required for substituted coal-base production of thermal and electrical energy.)

In our opinion this is an unique example in our country and this fact we asked to take into consideration by decision makers in our government but neither early action nor cogeneration received any kind of recognition, for example in form of additional CO₂ quotas.

For additional steam demand required for the technological development our steam production shall be further increased between years 2005 to 2007 (capacity increase). This additional increase of CO, emission we have to demand from reserve of new producers but obtaining this is very doubtful.

Global climate, its development and causes of that development do not dicriminate politically (i.e. neither correctly nor otherwise).

My Company considers the threat of climate change to be real and significant. To face this challenge any response must be urgent, global and concerted. We believe that energy policies are of central importance to the development of low carbon technologies. My Company believes that market frameworks must be established and maintained that promote investment in clean and efficient technologies. My Company recognises that this will require substantial investment and that the transition to a low carbon economy must be carefully managed to balance the goals of energy policy.

We think that the review cannot ignore the direction which is being taken by the debate on the post-2012 period. According to recent Council decision, the EU is not any more willing to pursue its unilateral approach and is putting a lot of effort in trying to recover the global dimension of climate change, in both geographic and sectoral terms. We therefore call for setting ambitious targets for the EU ETS review, aiming at implementing as soon as possible (from 2008) a new method to tackle climate change. The new method should reward those who are already emission-efficient and give appropriate incentives to those whose activities are emission-intensive. At the same time the new method should not prevent economic growth, by escaping from top-down approaches that impose absolute caps and extending as much as possible flexible features to maximise efficiency.

The ETS implementation is proving more difficult than expected. It is important that best practices are showed among competent Authorities.

Additional comment to "Impact of EU ETS on competitiveness" :What is the estimated total 2002 production for the main production processes of your company that fall within the EU ETS and that have been assigned allowances for the 2005-07 period?

Comment:

In our case at lignite old this means peat, which is a "very young lignite"

At nuclear old = only the safety diesel engine emissions (a few hundred tonnes per annum from the testing of diesels) inside the scope of the ETS.

In question: What are the estimated total 2002 fossil CO₂ emissions for the main production processes of your company that fall within the EU ETS and that have been assigned allowances for the 2005-07 period?

In our case at lignite old this means peat, which is a "very young lignite"

Nuclear old = only the safety diesel engine emissions (a few hundred tonnes per annum from the testing of diesels) inside the scope of the ETS.

In question:; By how much do you expect your operational costs to increase by 2010, as a consequence of the EU ETS, with an assumed CO, price of EUR 20 per tonne CO, and 90% free allowances?

In our case at lignite old this means peat, which is a "very young lignite"

Nuclear old = only the safety diesel engine emissions (a few hundred tonnes per annum from the testing of diesels) inside the scope of the ETS.

In question: How much of your operational cost increase do you believe you can pass on to your customers by 2010?

Electricity producers sell to a market, at market price. Cost of ET will be included and in that respect the cost can be passed on. On the other hand it is possible, or probable, that the amount of high-CO₂-based production will decrease.

However, the heat market-price is based on the customers alternative heat production cost and is in most cases, mainly small customers, not affected by the ET price and the cost of ET can for that reason not be passed on to customers.

Our main concerns about the review of the ET Directive deal with the operation of the market and the allocation method.

Regarding the operation of the Emission Trading market, my company supports that the best way of achieving reductions al least cost is to let the market works. This means that any mechanism that jeopardizes the internalization of the costs of CO, should be avoided, allowing the market to show the true value of low carbon intensive technologies.

Regarding the allocation process, it should support the investments in low carbon technologies and sectors subject to non-CO, constraint global competition. Any rule of allocation that distorts the competitive situation among companies (either incumbent or new entrants) should be avoided. Supporting investments in low carbon technologies gives the right signal for this type of investments, reinforcing the signals of the market and achieving enough emission reduction capacity for the coming periods in which objectives of reduction will be more stringent.

Finally, we have a comment on the chapter of this survey entitled 'Impact of the EU ETS on competitiveness'. From our point of view, the question included in this chapter are not well suited to address this issue:

- First, production and emissions for 2002 are not good references for companies such as my company, because we are investing in new low carbon emitting technologies that will replace production from other more emitting production units. Therefore, although my company's emissions could slightly increase in the future, total emissions will be reduced.
- Second, operational costs increases depend on CO, allowances price. They are independent of the number of allowances allocated (that is just an economic compensation) as there is an opportunity cost that makes emissions trading work properly and achieve its objective of mimimizing the costs of compliance.
- Third, in liberalized power markets (as in any other market), companies will internalize CO, cost and, unless agents sell their energy below their operational costs (making carbon and electricity markets inefficient), they will always recover their full operational costs plus the difference with the marginal operator, independently of the technology. Allocation is just an economic compensation that will not in principle affect the markets, and in case it does it (as it happens with the updating allocating method), it will make both emissions and electricity markets inefficient. This is a good reason for a more stringent allocation for the electricity sector, because it has no global competition that could jeopardize its viability, as power companies can recover fully their operational costs through the market.

2.27.7 Refineries

Some of the data requested here is commercially sensitive and some unclear.

The ETS implementation is proving more difficult than expected. It is important that best practices are shown among competent Authorities.

2.27.8 Steel

The question about the cost increase in average production is meaningless. The decision will be made on marginal production. The tendency will be to try and replace the least profitable products with imports.

We decided not to answer to the section "Impact of EU-ETS on competitiveness", since we prefer not to disclose these info: we apologize for that.

NOT ONLY allocation method and rules MUST be homogenized, but also timelines for the implementation in the different countries MUST be the same in order not to create disadvantages to companies in countries who "must follow" rules.

An important issue, again more felt in our country than in other EUs, is the importance to control the reactions of Electrical Energy sector and monitor pricing evolution due to ETS. There's the bed feeling to reach, due to power af Energy sector in managing to turn its costs on provided companies, an uncontrolled/uncontrollable price increase in electrical energy (and then consequently gas, and then everything from the providers onwards). This must be monitored, kept cool and harmonized across EU.

Again, two MUSTS are here reminded: need for homogeneization across EU, need for extension to countries outside EU.

More deep in technical matters, need for different tratment of non reducible emissions (if not by decrease of production, which carry to market/company competitiveness distrortions), and for emissions actually reducible (or marketable, by choice).

At the moment, it is impossible for us to provide a reliable forecast, since there is no homogeneous regulation among Member States. Moreover, in one country there are some uncertainties about the following variables which should be considered for the calculation:

- Allocation to plants for 2005 to 2007 period
- Exact definition of combustion plants falling within the ET directive application field
- Annual inspection procedure of CO₂ emissions monitoring and reporting methods
- CO₂ emissions deriving from recovery gases (blast furnace gas, coke oven gas, BOF gas) given to outside parties for electricity production.

Moreover, it is difficult to estimate the effects coming from:

- Possible emissions reduction targets for 2008 to 2012 period
- Energy prices rise
- Reduction of European industrial competitiveness at a global level, due to the fact that the US, China, India do not have any reduction targets.

Additional comments

We would like to raise the following concerns:

 In terms of consequences on business, we have to face the nature of the impact: a) direct are depending on the allocation method (especially for the process related emissions) b)indirect (electricity prices) are depending on the ability to pass on the costs on customers (opportunity costs leading to huge windfall profit)

It is essential that the direct and indirect impacts and the functioning of the scheme are assessed thoroughly and regularly by the Commission in close cooperation with the Member States.

- Participation challenge: Global warming is global challenge. From this reason installing the EU ETS in isolation will impose disadvantages to the EU economies which in turn could weaken the EU position in the global market. In other words EU needs to review its climate change policy if the other Parties are not ready to adopt further actions. The European steel industry oppose continue with EU ETS although other Parties are not ready for the further actions on global climate policy. Should EU keep going on with unilateral actions such as EU ETS, shift of production to other regions will happen. This will not lower the global CO₂ emission situation (carbon leakage).
- The problem of rising electricity prices (and gas prices as a consequence) must also be adequately and urgently addressed by EU and national decision makers even if the "solution" is to be found outside the scope of the current ET directive itself.

The question about the cost increase in average production is meaningless. We could not answer at all as there is no real estimations of the raw material, energy and labour cost just to mention couple issues for example on 2010. Any how the decision are made on marginal production and tendency will be to try and replace the least profitable products with imports.

Participation challenge: Global w arming is global challenge. From this reason installing the EU ETS in isolation will impose disadvantages to the EU economies which in turn could weaken the EU position in the global market.

Shift of production to other regions will most likely happen. However this will most likely higher the global CO₂ emission situation (carbon leakage).

A very complex ETS-system like the European has in our mind no future to be implemented worldwide.

2.27.9 Governmental Bodies

Long-term vision for EU ETS and emissions trading

My Government believes that emissions trading has a central role to play in reducing greenhouse gas emissions by allowing industry to take rational decisions about whether to meet emissions reduction targets through abatement measures themselves or by buying allowances from others. In an efficiently functioning trading scheme, the full cost of carbon will be taken into account by business in making investment and production decisions and operators will be aware of their own abatement costs relative to the price of greenhouse gas allowances in the market.

By setting a price for greenhouse gases, the market will encourage those who can abate their emissions themselves for less to do so. As greenhouse gas emissions are a global problem with a global impact, the location of emissions or emissions reductions is irrelevant and the market will encourage the most abatement of emissions at the lowest cost available. The extent to which the market will deliver least cost options for industry is crucial to the sustainability of the scheme's future, as it is the costs of the EU ETS to the EU's competitiveness that will determine it's ability to be used as the central instrument to deliver emission reductions in the longer term. We believe that emissions trading is the most efficient instrument for achieving reductions from sources of large greenhouse gas sources across the world.

The key aim of the review should therefore be to consider what amendments are necessary in order to ensure that the EU ETS achieves these objectives. We are aware that there are concerns within industry and the investment community that there is insufficient certainty

about long term carbon prices within the EU ETS to trigger the necessary investments in lowcarbon technology. The review should be aimed at consideration of how such certainty might be achieved.

The government considers that further consideration of the following issues in particular should be prioritized as part of that process:

 greater use of auctioning as a mechanism for distributing allowances in the future, the length of future allocation periods and the timing of decisions on allocations; clearer and more rigorous guidance and enforcement of the Annex III criteria for setting the total allocation level and State Aid implications of the use of government purchase of JI-CDM to reduce reduction burdens on EU ETS industry

Aviation

My country has made taking forward the work programme on the inclusion of aviation in the EU ETS from 2008 or as soon as possible thereafter

This development of this area should draw from the lessons of EU ETS Phase I and seek to be as compatible as possible with the existing principles, rules and regulations.

The recently published CE Delft report (Giving Wings to Emissions Trading) identifies many of the key issues when considering the inclusion of aviation into the EU ETS. These and other issues will be challenging to resolve and we are keen to ensure that they are fully considered. My country would welcome an early legislative proposal on the inclusion of aviation as part of the EU ETS review.

As already indicated in previous sections, it is important to take into consideration differences in country situations and also differences between installations especially where the extent of emissions is concerned.

In my opinion it is absolutely necessary to have a minimum limit for all sectors (e.g. 10.000 t/a CO₂). We now have really small installations that have to take part in the EU Emissions Trading. For those small installations the monitoring and verification is much more expensive than for the big installations. In fact it is disproportional for the smaller ones. Otherwise there should be a chance for all companies to take part if they really want to.

2.27.10 NGOs and Market Intermediaries

Setting up a domestic offset projects mechanism would:

- Boost the supply of supplementary credits on the CO₂ market, thus contributing to the depth of the market. Assuming there are no changes in global restrictions, this provides flexibility to players subject to quotas and decreases the cost of actions to reduce emissions.
- Provide information on costs, prompting the implementation of more efficient projects that will be a source of emission reductions.

Important point that is absent from the survey is the need to improve transparency and public consultation, a standard format for the NAPs with all important data easily accessible, underlying figures and data need to be available for public scrutiny etc.

The EU should amend the Linking Directive to allow the use of allow high-quality LULUCFrelated credits to be held in ETS accounts. LULUCF projects can deliver substantial and unique benefits to local communities and biodiversity, and help achieve broader sustainable development goals. In addition, the inclusion of such credits would be very positive for the ETS market, by increasing liquidity and lowering compliance costs for operators.

The whole framework is too bureaucratic, less complexity, more market trust

It is crucial that Gov'ts are co-operative in creating the technical interface between the national registires and exchanges/ trading platforms. otherwise the market will not function and be a huge administrative burden for companies involved who wont get their allowances delivered and risk facing penalites. We strongly encourage the EC to include this topic in the working group with the member states. Thanks.

Questionnaire does not estimate the need to increase transparency and public participation. Also transparency and availability of data should be increased.

We find it of great concern that the question on auctioning vs. free allocation was "across the board", and therefore very difficult to answer. This is a concern, especially in light of the recent discussion on windfall benefits in the electricity industry, and resulting high electricity prices. Auctioning of allowances to these companies, and continued free allocation to industry, should be a serious option. Therefore, the question should have been posed separately for electricity producers and for industry.

Also it is critical to address the issue of temporary credits, as the Linking Directive mandates the EC, in its review of the EU ETs in 2006, to "consider technical provisions relating to the temporary nature of credits and the limit of 1 % for eligibility for land use, land-use change and forestry project activities as established in Decision 17/CP7, and also provisions relating to the outcome of the evaluation of potential risks associated with the use of genetically modified organisms and potentially invasive alien species in afforestation and reforestation

project activities, to allow operators to use CERs and ERUs resulting from land use, land use change and forestry project activities in the Community scheme from 2008, in accordance with the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol."

Lastly, why was there no question on non-CO₂ gases inclusion in the EU ETS?

I hope it works. If it does I would be delighted to provide the market-place.

All in all, in the first round (2005-2007) Member States have wasted the opportunity to introduce change in the power sector and in energy-intensive industries, as well as a costeffective reduction in the respective emissions. Member State governments will now have either to overburden the residential and transport sectors or factor in the purchase of emission certificates in their national budgets.

More ambitious caps, a stronger incentive structure in the NAPs and a more transparent procedure are absolutely essential for the period 2008-2012.

Harmonisation where it particularly relates to caps and allocation could improve the environmental integrity of the scheme, remove perverse incentives where they exist and ensure that all Member States apply the Directive in a consistent manner.

Aside from various elements already commented on above, we are advocating the following recommendations for increasing the environmental effectiveness of the sechme in Phase 2: Setting the cap for CO₂ emissions

Implementing an effective climate policy requires that an absolute cap for CO, emissions is defined and continually reduced. This would be in line with the EU's absolute reduction target under the Kyoto Protocol as well as medium-long term targets, and would ensure the functioning of the trading market.

National Allocation Plans should be drawn up reflecting greenhouse gas reduction policies in the other sectors, such as housing and transport. Member States need to demonstrate a

consistent target achievement strategy across all sectors to justify allocation amounts for industry as defined in the respective NAPs.

The level of national allocation of emission allowances is crucial in defining the environmental effectiveness of the ETS. NAPs must guarantee that they create a scarcity of allowances to offer incentives for investments in low carbon technologies, and deliver domestic and intra-EU CO, reductions. The allocation of allowances should guarantee that an absolute downward trend in CO₂ emissions of the respective sector is achieved.

The targets also need to support medium term reduction targets, such as the 15-30% reduction range until 2020 endorsed by the European Heads of States Council in March 2005.

We believe that grandfathering allocations does not support the "polluter pays"-principle and can create uncertainties due to potential state aid issues. Further, from an economic point of view auctioning of allowances is a fairer process than the negotiation approach which is inherent to the grandfathering system.

Member States should therefore auction the maximum possible allowances of 10% in Phase 2. The allocation of the other 90% of allowances should be based on a benchmarking system. It should be a product oriented benchmarking system wherever possible, in order to give incentives for low-carbon technologies.

Allocation of European Allowances (EUAs) must not be directly based on emissions projections. Projections are wrought with uncertainties, very sensitive to the input assumptions used and, as seen, can be largely politically influenced. It is also inconsistent with the basis upon which overarching national, EU and international targets are set (including Kyoto for which the EU ETS was established). It is critical that a percentile reduction on an absolute agreed historical baseline must be introduced, with the same baseline be used by all Member States.

2.27.11 Associations

An exempting penalty should be set at a reasonable level for 2008-2012 period. domestic projects should be made possible for this period. Monitoring should be simplified for low emitters (<25.000 teC02/year) in order to reduce the costs for monitoring, reporting and verification.Domestic projects should also be enhanced right from 2008-2012 period.

For these reasons, it is absolutely necessary to prepare a legislative modification of the current directive at the beginning of year 2006 so that it could be adopted in first reading before 2008 (at least for the question of the exempting penalty).

We feel that the ETS should be redesigned in several points:

- The scope (shift from 20 to 50 MW; only "energy industry"; small installations (< 50.000 tonnes p.a.) are to be exempted) should be redesigned.
- The threshold value for the ceramic industry should also be redesigned: Installations with a capacity of > 75 t/d should be covered by the ETS, but not installations with a with a kiln capacity exceeding 4 m3 and with a setting density per kiln exceeding 300 kg/m3. In other words, the second criterion for ceramic products in Annex 1 point 2 should be eliminated.
- · Production growth and international competitiveness are the core requirements on the ETS. This includes especially the benchmarking system and the exclusion of small installations.
- The future of the ETS must not be addressed in isolation it is crucial to address also other EU and national policies with similar climate change or energy related targets, at the same time using overlapping instruments.
- Other gases than CO₂ and other installations should only be covered by the ETS, if the owner of the concerned installation wishes to be included and is able to monitor the emis-

sions. Therefore a voluntary opt-in for these installations should be possible.

Much more consideration needs to be given to emissions that cannot be reduced because they are integrally connected with the chemical reaction underlying the production process (process emissions).

Much more consideration should also be given to the effect the ETS has on power prices. The effect that opportunity costs have on the increasing power prices needs to be carefully examined.

Much more consideration should furthermore be given to competitive distortions arising from capped emissions of installations in EU-MS and uncapped emissions of comparable installations in countries that have no CO₂ constraints at all!

The use of alternative fuels (not only bio mass fuels) that replace fossil fuels should be given zero CO_2 rating (as for bio mass fuels). This encourages investment in technology and supply chains to deliver and use these wastes. The wastes if disposed of by other means such as incineration or to landfill without energy recovery contribute to increased CO_2 emissions. Their use in industries such as cement leading to replacement of fossil fuels contributes to CO_2 reduction

- 1) Within the our organisations sectors it is necessary to restore competivity
- 2) Energy saving products must be recognised and their production encouraged by the use of credits.
- 3) There should be recognition for the reduction of electricity usage by manufacturers to prevent windfalls to the generators under the emissions trading scheme.
- 4) The drive and principles should at all times be focused on reducing carbon; providing most environmental benefit at least cost. Extra administration ultimately detracts from the efficiency of the process and drains resources from those obligated to make reductions. We are in danger of producing an inverted pyramid with administration on top contributing nothing to actual reductions. This can only result in leakage.

The Alliance is currently engaged in a dialogue with the European Commission at Commissioner's level on competitiveness.

In my industy's manufacturing process more than half of the emitted CO₂ emissions are from process. As energy represents an important and increasing part of the total production cost, a considerable improvement of energy efficiency has been achieved over the last 40 year in Europe.

A study commissioned by the European Commission in 1993 concluded that the margin for further improvement was limited to 2.2 % ("EnergyTechnology in the Cement Industrial Sector" Final Report for Directorate-General for Energy (XVII) Contract NO XVII/4.1000/E/91-6). Given progress made since that study, the margin for improvement through technical investment is now about 2%.

In order to contribute to reduce global CO₂, the cement industry will have to resort to all available means: improve technical efficiency, develop the use of waste – including urban and agricultural waste – as fuels and reduce the clinker ratio. New technologies are to be developed and should be encouraged.

As a result, the cement industry will:

- Generally not be able to pass on to its customers the extra cost linked to meeting their ETS target (purchase of allowances or energy efficiency investments), especially if these allowances reach a price of up to 30 as it is currently the case (at such price production cost substantially increases);
- Not be able to afford the cost of electricity if electricity producers add the cost of carbon dioxide trading

The combination of those two factors would have a negative impact on the cement industry in the following ways:

- It would seriously undermine the industries' profitability and lead to possible reduction of production;
- It would generate changes in trade flows as imports into the EU from countries with no carbon constraints would naturally increase and exports decrease. This situation would worsen if the fight against climate change is not extended to the worldwide scene, as EU industry would be the only one to have to comply with carbon dioxide emissions mitigation measures.
- It would slow down investments in Europe.

The risk of de-industrialisation would in turn lead to a deterioration of the EU's competitiveness and global wealth. Furthermore, the cement industry would not be allowed to grow if emissions were allowed to increase at their expense outside the sectors covered by the ETD or in other industries within the trading sector (this is in total contradiction to the express policy to bring about a competitive manufacturing industry in the EU)

How can the cement industry react to these threats?

- Invest in more energy efficient plants. This is, however, not always possible as the cement industry has over the years maintained a high level of investment and achieved a high degree of energy efficiency. What can be gained by further investment is therefore limited at the narrow end of an asymptote. Furthermore, new technologies are not always available and are sometimes penalised by the ETS.
- Buy allowances provided that those are available at an economically acceptable price... Hence the insistence on being allowed to convert credits from CDM and JI projects allowances with no cap.
- Reduce their production with the clear negative impact on Europe's wealth, employment and competitiveness.

The European industry is willing to intensify its actions on the reduction of energy use in order to meet internationally agreed targets. In doing so it does not want to be hampered by rigid systems imposed on the industry which do not take account of the specific characteristics of the ceramics industry.

Kyoto ends in 2012, the EU system should not be continued unless a global system has been agreed for the time after 2012. Whatever the climate change instruments adopted, there is still a need to put more effort into developing the technological solutions needed for fundamental step-change improvements in the longer term. There should be more coordination on an international basis with industry sectors capable of developing relevant technologies and more direct support for such work.

In the nearer term, the first phase of the EU Emissions Trading Scheme has been described as a "learning by doing" phase. It is vital that the lessons learned are taken into account for the second phase (2008-12) as well as for future periods. The 2006 Review must build steadily on the 1st period and deal with issues that require changing before the start of the 2nd period. Changes must maintain continuity, not be abrupt or ill-conceived and must maintain coherence with other policies.

Comparison between NAPs – methodologies, common format - it is vital that stakeholders are able to compare NAPs both within Member States, within sectors and across Member States in order to be able to understand potential impacts on competitiveness. Methodologies adopted by Member States should be clearly defined and use consistent economic and industrial data (that is, EU and sector growth etc.) for a comparable period. Consideration should be given to the use of benchmarking where appropriate and available. NAPs should be submitted in a common format to enable comparison.

Timing of submission of plans

In order to facilitate comparison, Member States must submit NAPs at the same time. To assist this process, a date could be agreed informally between Heads of State for the submission of a "draft" plan for pre-discussion, thereby demonstrating that the national processes are on track.

Other gases -The scope of the ETS could be broadened to be consistent with the Kyoto Protocol for the period 2008-12 where monitoring techniques permit sufficient accuracy of measurement and where protocols exist.

The questionnare is formulated in a very difficult way. All those questions where one is asked to choose preferensis by giving points are very difficult.

Although the questionnare is dealing with only the EU ETS and not the EU's climate policy as a whole, it is essential to put EU ETS into holisctic climate policy framework. It is self evident that EU cannot solve the challenge of climate change on its own. Thus the need for a comprehensive global framework that includes all regions and countries is essential. The global framework shall create the level playing field and encourage the efficient measures and innovations. Thus the global performance standards need to be considered. If the other Parties are not ready to adopt further actions, the EU needs to review its climate change policy. That deals also with the EU ETS.

The first phase of the EU ETS has been described to be a learning by doing phase. It is therefore vital that the lessons learned are taken into account already for the second phase (2008-2012).

Direct and indirect impacts and the functioning of the scheme shall be extensively and regularly assessed by the commission together with Member States. At least the impacts to the distortion of the competition (within the MS and between companies in and outside of European Union) and to the price of electricity, raw material and fuels as well as overlapping of the scheme with other measures (for example taxation, RES-e-directive) and role of EUwide scheme when decreasing global emissions and the risk of carbon leakage need to be analysed and the harmful impacts shall be avoided.

In order to facilitate comparison, MS must submit NAPs at the same time.

The impact of process emission, which cannot be reduced unless reducing the production has not been addressed in the survey. However, it is essential to understand that there is hardly any possibilities to reduce process emissions in a way that safeguards the competitiveness of companies.

The inclusion of many small and medium sized companies within the EU ETS places on them unnecessary reporting and administration burdens whilst their GHG emissions are negligible. Smaller companies shall be opt-out from the scheme.

It is importanat to ensure that the use of opt-in does not lead to a competitive advantages or disadvantages for companies.

EU ETS shall be linkage only with those emissions trading scheme that have same main principles.

Small installations.

Small installations with only minor emissions should be left out of the ETS since the administrative burden to be part of the system is to high compared to the emissions involved. Base year The pick of base year needs to be harmonized since differences will influence the

incentive to reduce emissions and thereby disturb competition.

The use of rolling base year should be avoided since this will lead to strategic behaviour of the players, i.e. producing more in some years in order to receive more allowances in the following period.

Transparency

The national allocation plans should be more informative on the method and outcome of the allocation. Furthermore all the 25 plans should be based on a uniform format to ensure that it is possible to compare the allocation in the different sectors across the EU and other informations such as the chosen BAU-scenario.

Agreements between member states

Time is running short and a number of issues need to be addressed before the final drafting of the 2008-2012 allocation plans to avoid unintended disturbance of competition. The Commission should therefore encourage member states to address the issues of harmonisation on a voluntary basis.

One of the problems with the current scheme is that it catches large numbers of small emitters who, in total, do not contribute significantly to overall EU CO2 emissions. We support excluding individual facilities with low emissions (e.g 25,000 tonnes per year or less). Similarly, monitoring, reporting and verification requirements should be simplified for smaller emitters as the costs of these activities is a disproportionate burden on them compared with the costs for large installations.

Our industry has already made a significant contribution towards helping to meet its climate change targets. The sector as a whole reduced its emissions by 31% during the period 1990-2003. The industry also has the potential to make further contributions towards combating climate change through carbon management. Modern technologies provide a significant carbon advantage which should be incentivised and exploited as an efficient means of helping the EU to reach its ambitious CO₂ reduction targets.

In terms of consequences on business, we have to face two issues from now onwards until 2012: a) the time line: if no change, industry will suffer the same consequences for a longer period (8 years against 3) and b) the nature of the impacts: direct which are depending on the allocation method (especially for the process related emissions) and indirect (electricity prices) which are depending on the ability to pass on the costs on customers (opportunity costs leading to huge windfall profit).

The question about the cost increase in average production is meaningless. The decision will be made on marginal production. The tendency will be to try and replace the least profitable products with imports.

It is essential that the direct and indirect impacts and the functioning of the scheme are assessed thoroughly and regularly by the Commission in close cooperation with the Member States.

The 2006 review must minimise the impact on the competitiveness of European business, eliminate, as far as possible, inconsistencies, constraints and barriers, and bureaucracy in the ETS and not increase, through changes, the impact on those installations subject to the EU ETS phase I.

The problem of rising electricity prices (and gas prices as a consequence) must also be adequately and urgently addressed by EU and national decision makers even if the "solution" is to be found outside the scope of the current ET directive itself.

Post 2012: we do not want to keep going on with the ET ETS as it is set up now.

A right balance between all instruments should be maintained in any new regime. Industry initiative and market based instruments under fair conditions as well as regulatory measures should be envisaged and discussed beforehand with industry.

Emissions trading at installations level is not necessarily appropriate to every sector: any new scheme should result in an exemption for all irreducible industrial processes related emissions. The impact of the EU ETS on process emissions is not addressed adequately in this survey.

If trading at installations level is to be retained as a key tool for reducing CO, emissions in the post-Kyoto Era, my organisation considers that a) as long as a near full global coverage of a trading system cannot be guaranteed, energy producers who supply customers on a local market should not be in direct competition for CO, with material producers; b) all the emissions related to the production, the destruction (incineration, land filling or littering) and the recycling of any material should be adequately addressed by the system and c) if the responsibility of the covering the emissions with credits is given to the industry, so should the full and certain property of a specific amount of credits. If the system should lead to a more CO₂ efficient society, it must aim at this. Other variables like burden sharing compliance can only distort the system and lead to less optimal behavior. Therefore there must be no link between country and local commitments and the allocation rules.

A MBI compatible with the above mentioned conditions may be found in a certain performance based approach where similar installations receive comparable amounts of allowances creating de facto a level playing field. This implies that the ET scheme should be revised, abolishing any cap on the production and allowing ex-post adjustment.

DG Environment should start recognising and solving the problem they caused: Increasing the power prices by a wrong ETS design.

- This is now also reinforcing the link between the oil price and the power price, which is very dangerous.
- DG Environement envisaged some distributional effects linked to the direct ETS costs, (which for the society as a whole have rather neutral effects) but completely had not foreseen the indirect manipiultion of the allowances by the power producers. The distribuional effects are now unacceptable: power producers making abusive (windfal) profits figures, while power intensive industries are severely injured. For our industry this is extra burdensome as we cannot pass on the costs as our prices are set globally: closures ahve been announced and generally non new investments will take place in the EU, but instead outside the EU; even with current high product prices.

All these problems are totally unnecessary and were not the goal of the ETS, but caused by bad legislation of DG ENV. They should finally start recognising all this explicitely and take their rersponsability. As they did not know how the power market functions they have made this mistake (and are manipulated by the power sector, like was done on the power market liberalisation) and should fix it. This is their responsability, they may not pass their mistake to DGTREN or others, or worse (as currently) deliberately ignore the problem.

- 1) The all questionnaire focuses only on issues linked to the combustion emissions.
- 2) The impact of process emissions which are "irreducible" unless by reducing the production is ignored:
 - This is particularly detrimental to our European industry having unfortunately the highest ratio of process emission per tonne of final product compared to all the sectors included in the Emission trading Scheme.
 - In addition the price for one tonne of product is in addition the lowest compared to one tonne of paper, of steel, etc. As a consequence the impact of ETS is high.
 - Recarbonation is not addressed.
- The EU policy to promote the use of biomass or biofuels is totally ignored.

- 4) The questionnaire does not take into account captive production which means that the amount being produced by other industries for their own use or for the production of derived products leads to unfair competition distortion.
- 5) Competitor's chemical products not included in ETS annex I leads to unfair competition distortion.
- 6) Omission of IPPC-BAT framework.
- 7) The competition from non carbon constraints countries is not addressed.

The way questions are formulated is clearly not neutral (for us, the way benchmarking would be designed is an important issue, but we don't want benchmarking necessarily!)

The emission-reduction targets for 2008-12 period and further periods should be harmonised at world-level.

Rock wool and stone wool should be included in the EU ETS.

Giving allowances to industrial operators in place of power generators could resolve the problem of the windfall profits while providing incentives for operators to reduce their electricty consumption (what is not the case today).

A de minimis rule for small installations is vital.

The cost of compliance with the EU ETS for small installations (monitoring and reporting, subsistence costs paid to regulator, verification) can often be disproportionate to their CO, emissions. There needs to be a provision to allow small emitters (for example installations with emissions <25,000 tones per annum) to opt out of scheme, as has been done by the Netherlands in Phase I. Some combustion installations >20 MW have very low emissions (for example, some underground gas storage plants in exploration and production).

Exclusion of inorganic bonded abrasives production as the whole branch produces less CO, than the minimum amount for the participation in the ETC that is currently established in the Netherlands.

There is no adequate cost benefit relation for the extremly small CO₂ contribution of producers of inorganic bonded abrasives.

The way the questions are formulated not always give the possibility to give an appropriate input.

Impact on electricity price, which seems to be the major problem today, is not tackled in the questioner at all. The immense transfer of wealth from industry to the electricity generators as a consequence of the current system must be in the centre of the current review.

Predictability, legal certainty, system based on CO₂ efficiency and ex post adjustments against the forecast.

What is needed: a real and substantial review of the EU Directive, which responds to the existing problems.

We need a regular monitoring on the functioning of the market (liquidity, distortions, competitiveness).

The system must provide for a framework which does not mean a threat to industry's competitiveness.

The impact on power prices through the mechanism of opportunity costs has to be stopped immedeately, otherwise many electrointensive factories will have to close. At least 150.000 jobs could be lost in one country.

The result of windfall profits for power producers through this mechanism cannot be accepted.

The survey results should be made public!

Comparison between NAPs - methodologies, common format

It is vital that stakeholders are able to compare NAPs both within Member States, within sectors and across Member States in order to be able to understand potential impacts on competitiveness. Methodologies adopted by Member States should be clearly defined and use consistent economic and industrial data (that is, EU and sector growth etc.) for a comparable period. Consideration should be given to the use of bench-marking or performance standard where appropriate and available, although it is accepted that this is probably only applicable to the period after 2012 for specific sectors. NAPs should be submitted in a common format to enable comparison.

Transparency

The national allocation plans should be more informative on the method used and the outcome of the allocation. Furthermore all the 25 plans should be based on a uniform format to ensure that it is possible to compare the allocation in the different sectors across the EU and other information such as the chosen BAU-scenario.

Timing of submission of plans

In order to facilitate comparison, Member States must submit NAPs at the same time. To assist this process, a date could be agreed informally between Heads of State for the submission of a "draft" plan for pre-discussion, thereby demonstrating that the national processes are on track.

Agreements between Member States

A number of issues need to be addressed before the final drafting of the 2008-2012 allocation plans to avoid unintended negative effects on competition. The Commission should therefore encourage Member States to address the issues of harmonisation on a voluntary basis.

Other gases

The scope of the ETS should be broadened to be consistent with the Kyoto Protocol for the period 2008-12, where monitoring techniques permit sufficient accuracy of measurement and where protocols exist. The linkage between the inclusion of sectors and gases should be recognised and taken into account. An inclusion of additional greenhouse gases probably implies a concomitant inclusion of additional sectors, since the new gases are likely to be emitted from installations that are currently not covered under the scope of the ETS Directive.

Opt-out for smaller installations

The inclusion of many small and medium sized companies within the EU ETS places on them unnecessary reporting and administration burdens whilst their GHG emissions are negligible. It is recommended that an emission threshold be set (for example, at least 25,000 tonnes CO₂ eq. This corresponds to 55 percent of the installations included today, but only 2.5 percent of the total EU CO₂-emission (CEPSTask Force report, July 2005)). Below this threshold a company would be opted-out from the EU ETS unless it chooses to be voluntarily included. In any period, once this threshold is exceeded in any single year, the company remains within the ETS for that period.

It is vital that such an opt-out is in place (either formally or informally) for the period 2008-12.

Member States shall maintain a register of those companies "opted-out" and require a specified level of emissions monitoring and reporting. To avoid disproportionate burdens on small installations or governments, there should be a possibility for a voluntary opt-out, provided that installations are subject to equivalent action.

Process emission

The impact of process emission, which cannot be reduced unless reducing the production, is not addressed in the survey.

APPENDIX

Many of the 307 survey respondents have permitted us to mention their organisation's name and publish their full text answers in a sanitised form. DG Environment, McKinsey, and Ecofys would like to thank them and all other survey respondents for their contribution.

- Air Products
- Alcoa Europe
- AMI Agrolinz Melamine International
- ARCELOR
- Association française des entreprises privées
- Association of Electricity Producers
- Association of the Man-Made Fibres Industries in Germany and Austria
- Austrian Federal Economic Chamber ("Wirtschaftskammer Österreich" "WKÖ")
- AUSTROPAPIER, Vereinigung der Österreichischen Papierindustrie
- Baker & McKenzie
- Barclays Capital
- BASF Antwerpen N.V.
- BC-Eromu Kft.
- Böhler Edelstahl GmbH
- British Cement Association
- British Glass Manufacturers' Confederation
- Budapest Power Plant Ltd.
- Caisse des dépôts et consignations
- CEMBUREAU
- Centre for European Policy Studies (CEPS)
- Cérame-Unie
- CEZ, a.s.
- Chemical Industries Association
- Climate Action Network Europe
- Climate Focus
- Climate, Community & Biodiversity Alliance (CCBA)
- Confederatin of Finnish Industries, EK
- Confederation of Danish Industries
- Confederation of Paper Industries
- Connex
- Department of Environment, Food & Rural Affairs
- Dresdner Bank AG
- DSM
- DUFERCO GROUP
- E.ON UK
- E-Control GmbH
- EDF Energy
- Electricity Supply Board
- ELYO
- Endesa Group
- Enel Spa
- EnergieNed
- Eni S.p.A.
- ESA

- EURIMA
- EUROFER
- Eurometaux
- European Climate Exchange
- European Lime Association EULA
- Fédération de l'Industrie du Verre (FIV) Belgian Glass Industry Federation)
- Federation of Netherlands Industry VNO-NCW
- Feralpi Siderurgica Spa
- Focus Association for Sustainable Development
- Ford Motor Company
- Fortum Corporation
- French Federation of Clay blocks and Rooftiles producers (FFTB°
- · German brick and tile association
- Gmundner Zement Produktions- und Handels GmbH
- Gouvernement français (FRANCE)
- · Green Budget Germany e.V.
- GRIAN
- GRUPPO RIVA FIRE
- Holcim Ltd.
- Hungarian Cement Association
- IBERDROLA S.A.
- Igino Emmer
- IMERYSTC
- Ineos Chlor Limited
- International Association of Oil and Gas Producers
- JC Consulting
- JEFFERSON SMURFIT GROUP
- Joanneum Research
- JSC Latvenergo
- Kiel Institute for World Economics
- Lafarge
- Maastricht University, metro
- Malta Environment & Planning Authority
- Mátrai Erömü Rt.
- Ministry of Environment of Mecklenburg-Vorpommern
- N.V. EPZ
- Norsk Hydro ASA
- Outokumpu Oyj
- Portucel/Soporcel Group
- Powernext SA
- Quinn Glass Ltd
- Rautaruukki Oyi
- Rohm and Haas
- Sappi Europe SA
- Sasol Wax GmbH
- Scottish Environment Protection Agency
- SMMT
- Södar Cell AB
- TERREAL
- The Environment Exchange (www.t2e.co.uk)
- The Scotch Whisky Association
- ThyssenKrupp Steel AG
- Tui uk
- UNICE
- Vattenfall
- VAW-IMCO Guss und Recycling GmbH
- Verband der Automobilindustrie

- Verband Deutscher Schleifmittelwerke VDS
- VIK Verband der Industriellen Energie- und Kraftwirtschaft
- Voestalpine
- Wienerberger AG
- Wietersdorfer & Peggauer Zementwerke GmbH
- WirtschaftsVereinigung Metalle
- Wopfinger Baustoffindustrie GmbH
- WWF European Policy Office
- Yara International
- 3C climate change consulting GmbH

