Power Intensive Industries call upon EU and national decisions makers to pay attention to the impact of higher electricity prices on their competitiveness.

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Power Intensive Industries wish to draw the attention of European and national Decision-Makers to the potentially very negative impact of higher power prices in particular as an indirect effect of the Emissions Trading Scheme (ETS). Besides, they point out to the current disfunctioning of the electricity market. They point out to the serious risk of de-industrialisation and call for measures in order to ensure that their industries may continue to operate and grow in Europe.

What do the Power Intensive Industries expect from European Decision-Makers?

Decision-makers should address the following:

• Business Impact Assessment called by the Competitiveness Council: Power Intensive Industries see today two major threats arising from the introduction of the EU emission trading scheme: reduced growth potential and higher electricity prices. If the innovation and growth commitments under the EU Lisbon strategy are to be achieved, it is essential that the economic and social implications be analysed together with the environmental aspects.

• Secure cost effectiveness of ETS as a Market Based Instrument (MBI) offering economic operators the choice to reduce CO2 emissions at the lowest cost, taking into account both direct and indirect costs.

• Environmental benefit: the ETS is Europe’s key solution to combat Climate Change. If it is not part of a global scheme and linked to the efforts in other parts of the world, it will only have the effect of transferring activities to other regions with no overall improvement of CO2 emissions.

• When and how will monitoring lead to action: The European Commission is to monitor electricity prices. At this stage however, no monitoring mechanism has been clearly defined. Once monitoring is effective a process should be put in place to ensure that proper action are undertaken if justified.
**Emissions Trading will lead to higher electricity prices**

Deregulation has not brought true electricity market opening. EU-ETS may therefore serve as a pretext to further increases of electricity prices. In the absence of real competition in the European power market, power companies will seek to charge the cost of allowances within the European Emissions Trading Scheme (EU-ETS) whether or not they have to acquire extra allowances in order to meet power demand and regardless of the production source of the electricity.

The opportunity cost calculation implies that the cost of allowances – the opportunity cost - will become part of the variable costs of electricity, irrespective of the amount of allowances allocated to the power plant. The price of all allowances will be added to the marginal electricity cost.

**Call for Action Towards Solutions**

In March 2004, the Competitiveness Council has recognised the problem and has called for an extended impact assessment with a specific focus on the effect of the EU-ETS on the competitiveness of European Industry having regard inter alia to possible effects on electricity prices.

Allowances allocation principles may also have to be revised for the 2nd trading period 2008-2012 during the 2005-2006 Review.

The European Commission will monitor electricity prices at appropriate regional, national and European levels to understand the factors which are influencing power prices. The way in which the monitoring will be carried out has still to be defined and mechanisms should be put in place to ensure that monitoring is turned into actions if necessary.

Power Intensive Industries are convinced that all European stakeholders share a common interest in ensuring the reduction of CO₂ emissions whilst maintaining an industrial base in Europe.

The Alliance of Power Intensive Industries is calling for a dialogue between all stakeholders under the aegis of the European Commission. If no sustainable solutions materialise in the very near future, Member States would have to consider measures while waiting for EU legislation completing the full liberalisation of the electricity market.

**The Alliance in Numbers**

The alloys, cement, ceramics, chlor-alkali, glass, iron & steel, lime, non-ferrous metals and paper industries represent a total turnover of about 295 billion Euro, and provide employment to 1.4 million people in Europe.

In the absence of a solution, the impact on the above Power Intensive Industries as a result of the opportunity cost calculation could amount to € 2.5 billion per year.
WHAT IS THE LIKELY IMPACT OF EMISSIONS TRADING UPON THE COMPETITIVENESS OF THE UNDERSIGNED IF NO CORRECTIVE MEASURES ARE TAKEN?

Energy represents an important and increasing part of the total production cost in Power Intensive Industries. Consequently these industries have already applied energy efficiency measures to a large extent. They are subject to harsh international competition, the prices of their products are generally set in the global market place and they are characterised by a relatively high level of CO₂ per unit of sales.

As a result, these industries will:

- Generally not be able to pass on to their 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 €25 as currently envisaged by analysts (at such price production cost would substantially increase);
- Not be able to afford the cost of electricity if electricity producers add the cost of carbon dioxide trading, as the existing marginal pricing mechanism allow them to do.

The combination of those two factors would have a negative impact on Power Intensive Industries in the following ways:

- It would seriously undermine the industries’ profitability and lead to possible reduction of production, especially for some products and segments;
- It would generate changes in trade flows as imports into the EU from countries with no carbon constraints would naturally increase and exports decrease, especially for products with little elasticity in demand. 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, Power Intensive Industries 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 Power Intensive Industries react to these threats?

- Invest in more energy efficient plants. This is, however, not always possible as Power Intensive Industries have 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 as, for example, cogeneration.
- 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.

Relocate production outside the EU and import their products, which are indispensable to the EU’s economy, at a higher global environmental cost.
Trade Flows

A study carried out by J. Pöyry for the European paper industry shows that:

Newsprint prices are truly global and even relatively small cost increases have the potential to change trade flows between continents. Declining competitiveness results in increased imports to the EU as well as a decrease of the EU exports to other markets, hence a lower production in Europe.

Available cement/clinker and lime capacities in countries with no carbon constraint ready for export to enlarged EU

<table>
<thead>
<tr>
<th>Capacity available for export to EU</th>
<th>Cement/clinker</th>
<th>Lime</th>
</tr>
</thead>
<tbody>
<tr>
<td>(&lt; 2 Mt)</td>
<td>&lt; 0.5 Mt</td>
<td></td>
</tr>
<tr>
<td>(2 → 10 Mt)</td>
<td>0.5 → 1 Mt</td>
<td></td>
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<tr>
<td>(≥ 10 Mt)</td>
<td>≥ 1 Mt</td>
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75% of worldwide primary Aluminium production is located in non-Kyoto countries

New capacity will be located in non-Kyoto countries facing less emission and energy costs. Main drivers are availability of low cost energy and no costs/uncertainty on greenhouse gases.

The World Steel Production 2003

- 39% (incl Russia) of which EU25 19%
- 61%

Steel production in Kyoto countries Steel production in other countries

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Plant Rationalisation

Some characteristics of the European non-ferrous metals industry’s competitiveness situation:

- The global and energy intensive industry is dealing with commodity products, produced in all parts of the world and subject to intense and increasing international competition. It employs directly 400,000 people and contribute to about €60 billion of value to the European economy.

- Non-ferrous metals are commodities where prices are set internationally in the global market place so that increases in the local costs of production cannot be passed on to customers.

- Compared to its competitors, the European non-ferrous metals industry has to face higher environmental costs, higher energy costs, higher labour costs and higher taxes, which is seriously harming its competitiveness.

- Lack of primary raw material in its ground and high energy cost have led the European non-ferrous metals industry to develop secondary production based on scrap and other secondary raw materials recycling, which results in both environmental (including energy saving) and economic benefits.

- Trade distortions with key competitor areas are further causing the current disappearance of scrap, which in turn is severely affecting the recycling sector, with both economic and environmentally negative consequences.
Current EU Emission Trading Directive will affect the competitiveness of EU industry compared to competitors situated in “non Kyoto” areas:

- For obvious economic and environmental reasons, the European non-ferrous metals industry has substantially invested throughout its history in energy efficiency programmes making it today the most energy efficient performer in the world and reaching a close to technical feasibility performance

**ALUMINUM SMELTING POWER CONSUMPTION**

Energy consumption and subsequent emissions per tonne of production have fallen by 70% over the past hundred years. Technology limit now reached.

- EU and national energy and climate related measures, especially the emissions trading directive, will especially hit energy intensive industries, that will on the one hand, face increased production costs to reduce their emissions and/or buy allowances on the market and/or pay taxes...and, on the other hand, face increased prices of energy as emissions trading will lead to an increase in the marginal cost of producing energy. This indirect impact is in fact likely to be very substantial and be significantly detrimental to the industry’s competitiveness;

- The EU non-ferrous metals industry is not included in the “trading sectors” for the 2005-2007 trial period, but is likely to be included in the first commitment period. This will affect the distribution of allowances versus other sectors and make recognition of credits for early action more uncertain;

- Exclusion of other GH Gases penalises the industry, as increases in CO2 emissions have been more than compensated by reductions in PFCs;

- Too strict interpretation of Annex I of ETD could have the impact of including certain units of the industry while excluding the sector as a whole.

All available studies clearly show that the competitive disadvantage of operations located in the EU compared to those in the so-called “non-Kyoto countries” will continue to grow with the likely following trends/implications:

- Additional deterioration in the exports/imports flows;
- Freeze of European investments for enlarging and renovating the existing capacity;
- Progressive impact on the production level and hence on EU’s wealth, growth and employment
- Loss of competitive advantage compared to non-renewable products.

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DEREGULATION HAS NOT BROUGHT TRUE ELECTRICITY MARKET OPENING.

EU-ETS may therefore serve as a pretext to further increases of electricity prices. In the absence of real competition in the European power market, power companies will seek to charge the cost of allowances within the European Emissions Trading Scheme (EU-ETS) whether or not they have to acquire extra allowances in order to meet power demand and regardless of the production source of the electricity.

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If this is to happen, Power Intensive Industries – whether or not covered by the Emissions Trading Directive (ETD) - will see their competitiveness seriously impaired. Those industries are subjected to harsh international competition as the prices of their products are generally set in the global market.

This scenario is now understood and recognised by European institutions and all stakeholders. This indirect impact of the EU-ETS will be much more important and damaging to the competitiveness of Power Intensive Industries than the direct impact at least in the first period.

In the absence of solutions, the impact on the Power Intensive Industries as a result of the opportunity cost calculation in the power industry could in the worst case scenario amount to € 2.5 billion per year based on an EU allowance price of 10 €/tonne CO₂.

CALL FOR ACTION TOWARDS SOLUTIONS

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EX ANTE

If a power producer decides not to produce, he has the opportunity to sell all allowances including those received for free.

OPPORTUNITY COST CALCULATION

Free of charge Allocation 90 pct as an example

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