The Impact of EU Emission Trading Scheme (ETS) on Power Prices: Remedial action urgently needed 10 months after start of ETS

The Emission Trading Scheme (ETS) established in Europe at the start of 2005 further to Directive 2003/87/EC is a new and complex instrument aiming to reduce CO$_2$ emissions in a cost effective manner which interacts with an electricity market that is just emerging from the liberalisation carried out in the late 1990’s, a market that is not yet functioning properly. The initial result is alarming: all over the EU, electricity prices have risen well beyond all expectations. The main reason for this is that power producers are able to charge the value of their CO$_2$ allowances, which they largely receive for free, as an ‘opportunity cost’ into the power price. This leads to massive additional revenues – windfall profits - for power producers at the expense of all power consumers, without any environmental benefit.

As a consequence, the competitiveness of European energy intensive industries is seriously undermined and the EU manufacturing industry is paying the price of a hastily designed scheme. Policy makers should take their responsibility and urgently solve this problem by reforming ETS. Until electricity markets function properly, Member States should take urgent, transitional measures to ensure that the competitiveness of the European industry is not damaged by the “wealth transfer” resulting from the ETS.

What was supposed to happen?
ETS costs were supposed to be limited to compliance costs (the purchase of required allowances shown as green boxes) and an expected modest increase of electricity prices related to the actual compliance costs incurred by electricity producers as a result of ETS (shown as blue boxes).

What is happening?
All energy consumers and especially EU energy intensive industries are paying for an unintended effect (shown as red boxes) of the ETS. An immense transfer of wealth is taking place as in reality the power industry passes on to all consumers the value of all allowances, including the vast majority they (>90%) received for free (opportunity cost).
This fact is acknowledged by the European Commission: “There are a number of causes for these [...electricity prices...] increases including: rather dry weather over the previous winter, concerns about possible reduced availability of plant, particularly nuclear, high gas prices, and most importantly, the impact of CO₂ emission prices which have risen very sharply. Prices have settled in the range € 35-45/ MWh for the last six months.” (emphasis added), DG TREN Issue 4: July 2005 Quarterly Review of European Electricity and Gas Prices.

Electricity prices have risen significantly in many EU electricity markets showing a strong correlation with the price of CO₂ allowances. The huge power price rise since the start of the ETS has led to additional revenues – windfall profits - for electricity companies with no relation to the cost they actually incur as a result of the ETS.

**What happened?**

High correlation between costs of ETS allowances and power prices

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**Estimated impact on energy intensive industries**

The energy intensive industries in the EU are operating and marketing their products in a worldwide market. Prices are not set based on the regional cost framework, but by worldwide competition. Therefore, they have no possibility to pass the costs on to their customers. The impact on the energy intensive industries as a result of the opportunity cost practice in the power industry could amount to as much as € 5 billion per year, based on a EU allowance price of € 20 /tonne CO₂.

**What kind of solutions should policy makers come up with?**

Solutions should be found in order to ensure that only the direct costs actually incurred by electricity producers as a result of ETS is borne by energy intensive industries and other consumers. Various stakeholders (including, most notably, IEA and CEPS) have come up with tracks for solutions and decision makers should consider seriously inter alia:

- Separating CO₂ prices from power prices
- Performance based allowance allocation with ex-post adjustment in the NAPs
- Temporary regulatory measures
- Allowances allocation to energy intensive industries for direct and indirect emissions
- Cap on European CO₂ price

**What needs to be done? Policy makers need to take urgent action!**

Time is running out to correct the failures of the current scheme. The seriousness of these effects (red boxes), as seen at present, clearly calls for immediate measures. The political decision makers of the EU should immediately take appropriate steps to improve the ETS. The intervening period before the next emissions trading period (2008-2012) must be used to resolve these fundamental problems and to eliminate unjustified distributional effects. It is time to act!

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