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A successful EU Emissions Trading Scheme post 2012: Adequate compensation of power price impact is needed

Introduction

The impact of the EU Emissions Trading Scheme on electricity prices is significant and greatly influences the competitiveness of globally competing EU industries. In a conservative estimate, the additional costs to EU industry in terms of higher electricity prices amount to about 8.5 billion € annually¹. These costs from indirect emissions - like the costs from direct ones - need to be compensated to avoid carbon leakage as long as international competitors do not pay a similar carbon price.

The amended Emissions Trading Directive recognizes the possible harmful consequences of both cost effects² for globally competing EU industries. To protect the EU from the negative economic and ecological consequences of carbon leakage and to preserve competitiveness³ within the possibility of the total cap, the ETS Directive foresees two - structurally very different - instruments:

1. For costs from direct emissions the ETS Directive foresees free allocation of allowances based on an efficiency benchmark.
2. To compensate the ETS impact on power prices Member States may adopt financial compensation measures in accordance with EU state aid rules.

While the direct costs are addressed within the scheme through EU-wide rules, the indirect costs are dealt with outside the scheme. As a result, the rules on financial compensation for indirect costs will be decided according to a different logic than the compensation of direct costs, in a different decision-making process with other people responsible. Despite these structural differences, it is essential that indirect costs – like direct costs – are compensated non-discriminatorily and adequately because:

1. Carbon leakage can only be effectively avoided when both direct and indirect costs are compensated. The magnitude of the indirect costs illustrates the cost pressure on globally competing industries.

¹ The calculation is based on the industrial electricity consumption in EU-27 in 2007 of 1,150 TWh (source: Eurostat), the average EU CO₂ factor (0.465 t CO₂/MWh) and the current CO₂ price for 2013 (€16/t CO₂). This is a too low estimate. The actual additional costs are higher due to a higher CO₂ factor in virtually all electricity markets. In addition, the CO₂ price is expected to increase (EC calculates with a CO₂ price of €30).

² The Emissions Trading Scheme has two cost effects on industry. The installations included within the scheme face the additional costs of buying allowances for their process-related emissions. These costs are referred to as direct costs. In addition, all electricity consumers pay higher electricity prices because the electricity producers include the costs related to greenhouse gas emissions in the electricity price. These costs are called indirect costs.

³ Recital 24 (new) mentions free allocation of allowances to avoid carbon leakage and preserve competitiveness against "... third countries where industry would not be subject to comparable carbon constraints ("carbon leakage") and at the same time could put certain energy-intensive sectors and sub-sectors in the Community which are subject to international competition at an economic disadvantage".

2. Carbon leakage would not only have negative economic but also harmful ecological consequences. With the CO₂-emissions capped (nearly only) in the EU, any carbon leakage would lead to higher global emissions.
3. Competitive distortions between industrial processes using fuel and those using electricity must be avoided. Therefore, sectors at risk of carbon leakage must be compensated on the same level for the ETS-related direct and indirect costs.
4. An adequate implementation of the provisions on financial compensation is essential to avoid competitive disadvantages internationally when third countries adopt cap and trade systems with allocation for indirect emissions. The systems currently under discussion in other countries (e.g. US, Australia) do not foresee a separate instrument for indirect costs. Instead the allocation of allowances takes into account both, direct and indirect emissions. EU industry had advocated such an approach also for the EU. The EU, however, has decided not to allocate any allowances for indirect emissions. The provisions on financial compensation have been included instead.

In this paper IFIEC presents its views regarding the implementation of the provisions on financial compensation. These points are especially relevant for the revision of the EU State Aid Guidelines which define the general rules for financial compensation.

General principles

1. **IFIEC wishes to have compensation for real costs only and does not want any measures which may lead to over-compensation.**
2. **Financial compensation for real costs should be possible without undue restrictions and cuts.** Any restrictions on financial compensation would lead to competitive disadvantages when other economies implement cap and trade systems with allocation for indirect emissions as well as towards economies without a carbon price policy.
3. **Financial compensation should be possible as long as a significant risk of carbon leakage exists** to ensure that EU industry is able to operate in Europe and does not hesitate to undertake new investments in Europe. This may be for the whole third trading period and beyond.

IFIEC position

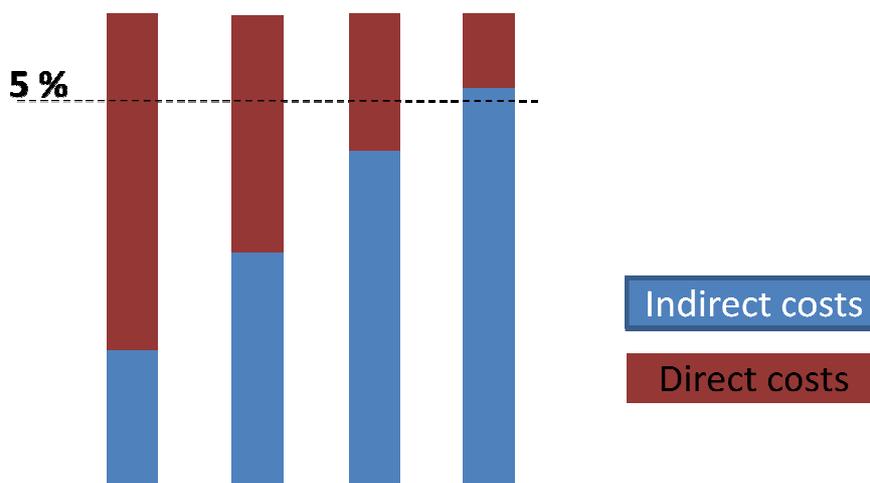
4. **Financial compensation should be given to all products that are at carbon leakage risk.** The carbon leakage list identifies those sectors exposed to a risk of carbon leakage based on the additional costs due to ETS (direct and indirect) and/or the (sub-)sectors' trade intensity⁴. All (sub-)sectors mentioned in the EU carbon leakage list should be

⁴ On 24 December 2009 the Commission adopted the so-called Carbon Leakage list (Commission Decision, 2010/2/EU). Sectors are considered to be at risk of carbon leakage if they fulfil one of the following three scenarios:

1. Additional costs due to ETS of at least 5 % and trade intensity with third countries above 10 %
2. Additional costs due to ETS of at least 30 %
3. Trade intensity with third countries above 30 %

eligible for financial compensation because their exposure to carbon leakage has been proven. This includes those products that are not within the ETS scope but are affected by the increase in electricity prices. IFIEC proposes to refrain from any additional criterion.

This approach will ensure that direct and indirect costs are treated equally. According to the ETS Directive, a sector will receive free allocation of allowances based on a benchmark for direct emissions when the additional costs due to ETS – direct and indirect – amount to at least 5 % of Gross Value Added⁵. In other words, as long as the total costs amount to more than 5 %, it is irrelevant what proportion direct costs alone amount to. Accordingly, all four sectors illustrated schematically in Graph 1 will receive free allocation for direct emissions - even though the proportion of direct costs varies greatly. The same principle should apply to the compensation of indirect costs: when the total ETS-related cost burden exceeds 5 %, indirect costs should be compensated. For that reason, the Carbon Leakage List is the adequate tool to determine those (sub-)sectors eligible for financial compensation.



Graph 1: Schematic representation of four sectors with the same total ETS cost burden but different shares of costs from direct and indirect emissions, all receiving 100 % free allocation for direct emissions (red part)

- The rules on financial compensation should create certainty for planning and investment.** The Carbon Leakage List - which identifies those sectors eligible for free allocation of allowances based on the benchmark - is updated every five years and in annual updates sectors can be added. This must also apply for the compensation schemes.

⁵ In addition, the sector must have a trade intensity above 10 %. This trade intensity criterion is taken into account in the establishment of the Carbon Leakage List. In the context of this discussion on the equal treatment of direct and indirect costs, it is assumed that the trade intensity criterion is fulfilled.

6. **Electricity supply contracts signed before the start of the first ETS trading period should not be excluded from compensation.** It is sometimes argued that installations with electricity supply contracts signed before the start of the first EU ETS trading period should not receive financial compensation as these installations do not pay the additional CO₂ cost introduced with the ETS in 2005. This assumption is not generally true but depends on the specifics of the electricity supply contracts. Electricity prices in these contracts are often based on an indexation to a market price or contain a provision for pass-through of future increases of all kind of applicable taxes or other cost burdens including CO₂. Manufacturing plants with such contracts pay the CO₂ cost even though the contracts were concluded before 2005. To avoid distortions of competition, contracts signed before the start of EU ETS should therefore not be excluded from financial compensation.

7. **The level of compensation shall cover the real ETS related cost burden of efficient electricity consumption.** To that aim it is important that the calculation of the compensation level is based on the following principles.
 - a. **A benchmark for efficient electricity consumption** which makes sure that compensation will only be given for efficiency and that costs have to be accepted for any excess consumption. Such a benchmark sets clear incentives to save as much electricity as possible.

For those activities without a sector specific electricity benchmark, 100 % of the actual electricity consumption should be used to calculate the compensation level. This avoids punishing those installations without an electricity benchmark which could be best in class. Operators should be able to propose a benchmark for manufacturing activities which do not have a benchmark yet.

When constructing the electricity benchmarks it is important to use the expertise and the data that has been produced during the development of the benchmarks for direct emissions. This will facilitate the process and ensure consistency.

For production processes with substitutability of steam or fuel with electricity, there will be a benchmark which is based on the direct plus the indirect (electricity) emissions per unit of product; the allocation of allowances will be related to the direct share (direct / direct + indirect) of the individual manufacturing plant multiplied with the benchmark. In these cases the financial compensation should be based on the complementary part, the indirect share (indirect / direct + indirect) of the individual manufacturing plant multiplied with the same benchmark. Furthermore, adjustment is necessary (lower or higher) to the regional CO₂ impact on the electricity price (in kg CO₂/kWh) as compared to the factor (kg CO₂/kWh) used in the benchmark.
 - b. **The actual or marginal CO₂ factor** which ensures that the real ETS electricity price impact is compensated. To ensure that an electricity consumer is always compensated for the actual CO₂ costs, two cases should be differentiated:

- for self-generation⁶ or when the CO₂ factor is explicitly or implicitly mentioned in the electricity supply contract the specific CO₂ factor should be used;
 - when the CO₂ factor is not mentioned in the electricity supply contract or electricity is purchased on the exchange or the forward market, the annual weighted average of the CO₂ factor of the marginal power production in the relevant electricity market should be used.
- c. **The relevant average traded EUA price** (the EUA price in the year before the aid is granted may be the most relevant)
- d. **The actual level of production** to prevent over-compensation
8. **The financial compensation should fully compensate the indirect costs of ETS.** A decreasing factor – limiting the compensation to a certain percentage of the indirect costs below the efficiency benchmark – should not be foreseen. The efficiency incentive is provided through the electricity benchmark. An incomplete compensation would not result in further efficiency incentives but in a cost disadvantage towards non-EU competitors and thus would be a source of carbon leakage risk. It is the aim of this instrument to avoid this risk and furthermore to preserve competitiveness. Also, an incomplete compensation would not be in line with the ETS Directive as partial compensation is not foreseen – neither for indirect nor for direct costs – beyond the application of benchmarks. Thus, an incomplete compensation of the indirect costs would also result in a clear discrimination of the indirect burdens as direct costs will be fully compensated.
9. **The compensation should be paid in the year in which the costs occur** to avoid huge cash flow requirements for the installations. Ideally, payments should be in line with the payment of the electricity bills. An ex-post payment adjustment mechanism should ensure that the payments throughout the year are in line with the actual level of production.
10. **There is no justification for repayment of financial compensation in case of closure of an installation** because the financial compensation is based on actual production levels.⁷
11. **The policy instrument of compensating the ETS-related indirect costs should not be used to pursue other policy aims.** Financial compensation has a clear and important policy purpose of preventing carbon leakage and preserving competitiveness

⁶ Financial compensation for indirect emissions will be subject to audit and verification. In the case of self-generation/bilateral contracts, this will include verification that the compensated electricity from self-generation/bilateral contracts has been used by the relevant installation and that self-generated electricity is not sold to the grid to benefit from higher financial compensation for electricity bought on the wholesale market.

⁷ Furthermore, such provision would not decrease but increase the risk of carbon leakage. E.g., if a manufacturing plant suffers from lower market demand (such as now in the financial crisis) it is difficult to assess whether profitability can be achieved again in future; if in the future demand is lower than expected or if competitors inside or outside the EU increase capacity more than expected, such a plant might still be closed after some years. A provision for repayment would interfere in business decisions as it would deter companies to maintain capacity in Europe during difficult market circumstances.

by compensating for a competitive disadvantage. There are other instruments to achieve other EU policies such as the EU climate goals. Combining, for example, the promotion of renewable energies with the manner of granting financial compensation would be counterproductive to the aims of the EU ETS Directive and will likely result in a lack of transparency and confusion.

12. **The EU Commission should not build obstacles to national compensation measures before 2013** as the impact of ETS on power prices today may make financial compensation before 2013 necessary. The increase of electricity prices due to ETS already in the first and second trading period has been confirmed in many studies.
13. Information concerning electricity consumption and contracts of individual installations are competition sensitive information and should therefore be treated **confidentially**. This information must under no circumstances become public.