



Carbon Leakage List 2015-2019

EU Emissions Trading Scheme

*Presentation on behalf of the Alliance of Energy
Intensive Industries (AEII)*

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Vianney Schyns, Utility Support Group

www.ificEurope.org

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1. Some introductory remarks

- **This presentation contains initial comments of the Alliance of Energy Intensive Industries**
- **We trust that we can later comment on the approaches intended to be used by the Commission**
- **While competitiveness is – rightfully (crisis, energy and feedstock prices) – high on the agenda, the Carbon Leakage List assessment creates uncertainty for doing business in Europe and for the so much needed future investments to create jobs and welfare**
- **How “certain” are various study / literature statements and observations about the risk of carbon leakage?**
 - **We feel there are many uncertainties, and often assumed limited impacts are not based on a forward looking investor’s point of view**

2. Discussion in the Council

- **The Commission shall bring the Carbon Leakage List Assessment to the European Council for discussion (Directive Art. 10a(13)), before the assessment takes place**
- **During this discussion, COM and MSs can consider**
 - **Political boundaries, in the light of the present crisis and the forthcoming Structural Review of the EU ETS Directive**
 - **A possible postponement until after 2015?**
 - **Before a new Global Climate Agreement nothing is fundamentally changed**
 - **A new Global Climate Agreement is now scheduled by end 2015 (Directive Art. 28, adjustment of allocation to a global level playing field)**

3. Carbon leakage definition – inconsistency

- **Art. 10a(14): “... without significant loss of market share to less carbon efficient installations outside the Community”**
- **This is an often unnoticed inconsistency in the Directive, conflict with definition of UNFCCC (IEA, etc.); recitals 24/25 are correct.**
- **Carbon leakage is displacement of emissions as a result of asymmetric climate policy (e.g. IEA (2008))**
 - **Displacement of e.g. 100 Mton CO₂ to uncapped installations with same carbon efficiency = leakage of 100 Mton CO₂ (≠ carbon neutral)**
 - **TNO (2009) report contains this error**
 - **What about the new Ecofys / Öko-Institut study? Good definition, consequences taken into account?**

4. Trade intensity

- **Trade intensity criteria: > 30% or > 10% and \geq 5% GVA impact**
 - **No adjustment of included or linked ETS schemes like Norway, Iceland, Croatia, Lichtenstein ... Switzerland, Australia ... South Korea, etc. for:**
 - Reason of legality and logic
 - Art. 10a (18): *“extent to which third countries, representing a decisive share of global production of products in sectors or subsectors deemed to be at risk of carbon leakage, firmly commit to reducing greenhouse gas emissions ...”* (we are far from a decisive share)
 - Extra reason of logic
 - **Specific circumstances**: the favourable e.g. Australian ETS allocation cannot be a reason to put EU ETS sectors on the path to auctioning
 - **General problem anyway: historical TI data are not forward looking**

5. Carbon cost impact on GVA (1)

- **GVA impact criteria: $\geq 30\%$ or $\geq 5\%$ and $> 10\%$ Trade Intensity**
- **Consistent numerator & denominator data required, \neq easy**
 - Heat allocation from electricity generators to ETS (1)/non-ETS installations
 - Allocation for waste gases emitted by electricity generators (2)
 - (factors 1 and 2 also important for the cross-sectoral correction factor)
 - How reliable are statistics, how representative are the recent crisis years?
 - Exposed subsectors can be hidden between non-exposed subsectors (even on Prodcom 8 level)
 - GVA impact data should not (only) be based on sector Weighted Averages (as 50% of population is by definition below Weighted Average)
 - GVA impact calculations of the past are not forward looking

5. Carbon cost impact on GVA (2)

- **The appropriate CO₂ factor for indirect emissions**
 - First assessment 2009: average power plant, 0.465 ton CO₂/MWh, which is an underestimation
 - AEI gave ample evidence (2009, 2010) that the marginal power plant determines the cost impact and the environmental impact (for savings and extensions)
 - Marginal power plant acknowledged by the Commission: state aid guidelines for the financial compensation of 22 may 2012
 - Weighted Average CO₂ factors of state aid guidelines multiplied with gross electricity production Eurostat 2011 (2008 data) give EU Weighted Average of 0.723 ton CO₂/MWh (= 55% higher impact)

5. Carbon cost impact on GVA (3)

- **The carbon price to be used**
 - Legal: € 30/EUA, Directive, according to the Impact Assessment
 - Logic: EU ETS should be carbon leakage resistant to at least this price level
- **Forward looking approach**
 - Production carbon leakage (by ex-ante allocation, until 49%, partially ceased operations rules) takes place at the actual carbon price
 - However, investments (for market growth or for replacing older less efficient installations) are evaluated against expected carbon prices in the time frame of e.g. 2020-2035/40
 - E.g. Commission Energy Roadmap: € 52/EUA in 2030, € 95/EUA in 2040
 - Investment carbon leakage likely to be caused by barriers and risks for growth, a.o. the too stringent top 10% x LRF (as from 2014)

6. Qualitative assessments (1)

- **A qualitative assessment may be appropriate for (sub)sectors**
 - In function of carbon costs, trade intensity and profit margins as potential indicator for investment or relocation decisions (Art. 10a(17))
 - Account should also be taken of
 - Market situation of the (sub)sectors with product prices determined on global trade exchanges such as LME. These (sub)sectors can not pass on the locally imposed costs to their customers
 - The prices of electricity, natural gas, petcoke and feedstock in Europe vs. competing regions such as Middle East, USA (ref. shale gas), etc.
 - The US shale gas consequences (e.g. spurring new investments) is a great worry, it deserves an Annex in the CBL Assessment
 - Possible exposed subsectors hidden in NACE-4 or deeper data

6. Qualitative assessments (2)

- **A qualitative assessment may be appropriate for (sub)sectors**
 - A qualitative assessment should be **forward looking**
 - Extrapolation of trade intensity data (as done in first assessment)
 - Effect investment by end of decade (planned after the crisis): evaluation period is then 2020-2035/40
 - 100% auctioning, with sensitivity of 70% auctioning (Art. 10a(11) – 2027)
 - Carbon price € 30/EUA, with sensitivity to e.g. € 6075/EUA
 - New build efficiency: rule of thumb 0.95 x top 10% or state-of-the-art technology for “fallback” products, **without** CCS and (new) biomass

7. References

Cefic-IFIEC (2012), *“A reality check of the EU Emissions Trading Scheme; Does it allow growth – the major objective of the EU industry policy?”*, Vianney Schyns, Els Brouwers, Lieven Stalmans, detailed study of CIMs & Guidance Documents: major barriers & risks for growth, see e.g. website www.usgbv.com, 20 June 2012

The Alliance of Energy Intensive Industries consists of:

Cefic (European Chemical Industry Council), CEMBUREAU (The European Cement Association), CEPI (Confederation of European Paper Industries), Cerame-Unie (The European Ceramic Industry Association), CPIV (Standing Committee of the European Glass Industries), EuLA (European Lime Association), Euro Alliages (Comité des Liasons des Industries de Ferro-Alliages), Euro Chlor (European chlor-alkali industry), Eurofer (European Confederation of Iron and Steel Industries), Eurometaux (European Association of Metals), Europia (European Petroleum Industry Association), EXCA (European Expanded Clay Association) and IFIEC Europe (International Federation of Industrial Energy Consumers Europe)