Impact on trade exposed emissions intensive industries

Paper delivered at 3rd Annual CEEM Conference

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Sources of emissions

- Direct combustion of fuels, e.g. natural gas, diesel
- Fugitive and process emissions, e.g. venting from acid gas stripping
  (both Greenhouse Gas Protocol Scope 1)
- Indirect emissions attributable to generation of electricity supplied (Greenhouse Gas Protocol Scope 2)

Coverage of the AETS

- Likely to extend to fugitive and industrial process emissions
- Hence it is emissions intensive, not just energy intensive industries that will be affected
- Direct effect will be an increase in operating cost attributable to the cost of permits to cover direct emissions
- Plus expected pass-through in prices of electricity generators' permit costs
- All industries will also be affected by changes in costs across the economy, with emissions intensive inputs of all kinds becoming relatively more expensive

What are trade exposed industries?

- Industries supplying the domestic market which face competition from imports from non-Annex 1 countries: possibly steel, cement, oil refining
- Industries that are primarily export oriented and compete in export markets with exports form non-Annex 1 countries
  possibly non-ferrous metals (alumina, aluminium, copper, nickel, zinc, lead), steel, LNG
- Total Scope 1 + Scope 2 emissions from these are about 80 Mt CO_2-e (about 20% of expected AETS covered emissions), of which the exported componets is about 60 Mt (15%)

Developing a policy within the AETS design

- Design a test for determining emissions intensity
- Specify criteria for determining trade exposure
- The policy response should be:
  – administratively simple
  – administratively transparent and unambiguous
  – have pre-defined procedures for determining the timing of phaseout

Emissions intensive

- NETS proposed energy costs > 3.5% of total operating costs, endorsed by the Prime Ministerial Task Group as "a possible starting point for any threshold design"
- Inappropriate because:
  – Energy costs are not a good proxy for emissions,
  – Non-energy emissions are likely to be included in the AETS
- A better test would be the ratio of covered emissions to operating costs (t/$thousand)
- Threshold?

Factors to consider when determining trade exposure

- Existing production is at a small number of plants, most representing investments of $1 billion +. Are these "footloose" investments?
- At present, there is little spare supply capacity worldwide
- So is the policy about existing capacity, or the location of new capacity?
- What is the relevant parameter for defining Australia's place in the world situation?
  – share of world or ratio to non-Annex 1?
  – production or exports?

Factors, *cont*.

- The non-ferrous metal industries in particular are highly concentrated globally, and becoming more concentrated (as we sit here?)
- So is concern about the risk of carbon leakage really about the corporate strategies of a few global companies?
- What are the implications of the very large recent increases in realised export prices for non-ferrous metals – alumina 52%, aluminium 54%, copper 238%, nickel 164%, zinc 193%, 2003 to 2007 (ABARE)?
- Measure intensity by t/$ value added?

Factors, *cont*.

- By contrast, steel and LNG are less concentrated, and much of world production is by state-owned businesses
- Realised export price increases have been much smaller: steel 27%, LNG 3%
- Note that the Australian steel industry exports but also faces import competition in the domestic market

Administratively simple, transparent and unambiguous

- Proposals in the Task Group report do not seem to meet these criteria
  – protection should only apply to the exported part of total output
  – energy intensity is not a relevant benchmarking parameter for emissions, e.g. coal fired vs. hydro electricity for aluminium smelting
  – It is not appropriate to compensate for price increases in economy-wide (Scope 3) indirect emissions

A coordinated international approach?

- European Parliament resolution 2005/2049 called for "border adjustment measures to be imposed on such imports, but action has been blocked by the Commission, because of concerns about exacerbating trade disputes with the USA. (Brewer, 2007)
- In the US Senate two bills this month have made analogous proposal, but proposing to require importers to purchase "international reserve allowances" (presumably meaning CERs) rather than use of tariffs as in European proposal. (Brewer, 2007)

- Most non-ferrous metal companies are domiciled in Europe, North America or Australia
- Should Australia be initiating international discussions on industry competitiveness and carbon leakage?