



Issues for the Australian alumina and aluminium industries

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**NSW TEEI Summit
17 June 2008**



Aluminium in Australia

2007, Australia produced . . .

67 Mt bauxite

19 Mt alumina

1.96 Mt aluminium metal

both alumina and aluminium are

- **energy intensive**
- **greenhouse emissions intensive**
- **trade dependent . . . 80% of production exported.**



Australian alumina-aluminium industry

- ◆ **part of a globalised industry**
- ◆ **world price set by the London Metals Exchange (LME)**
- ◆ **competitors do not face greenhouse emission constraints or carbon imposts**
- ◆ **Australian alumina emissions footprint is world class**
- ◆ **direct emissions from Australian aluminium smelters also world class**
- ◆ **... but indirect emissions from electricity reflects Australia's dependence on coal-based generation, both our cost advantage and carbon dilemma .**



Aluminium in Australia

**Australia produced 1.96 Mt in 2007,
responsible for 34.6 Mt CO₂-e**

0.5 Mt CO₂-e PFC emissions

3.16 Mt CO₂-e carbon process emissions

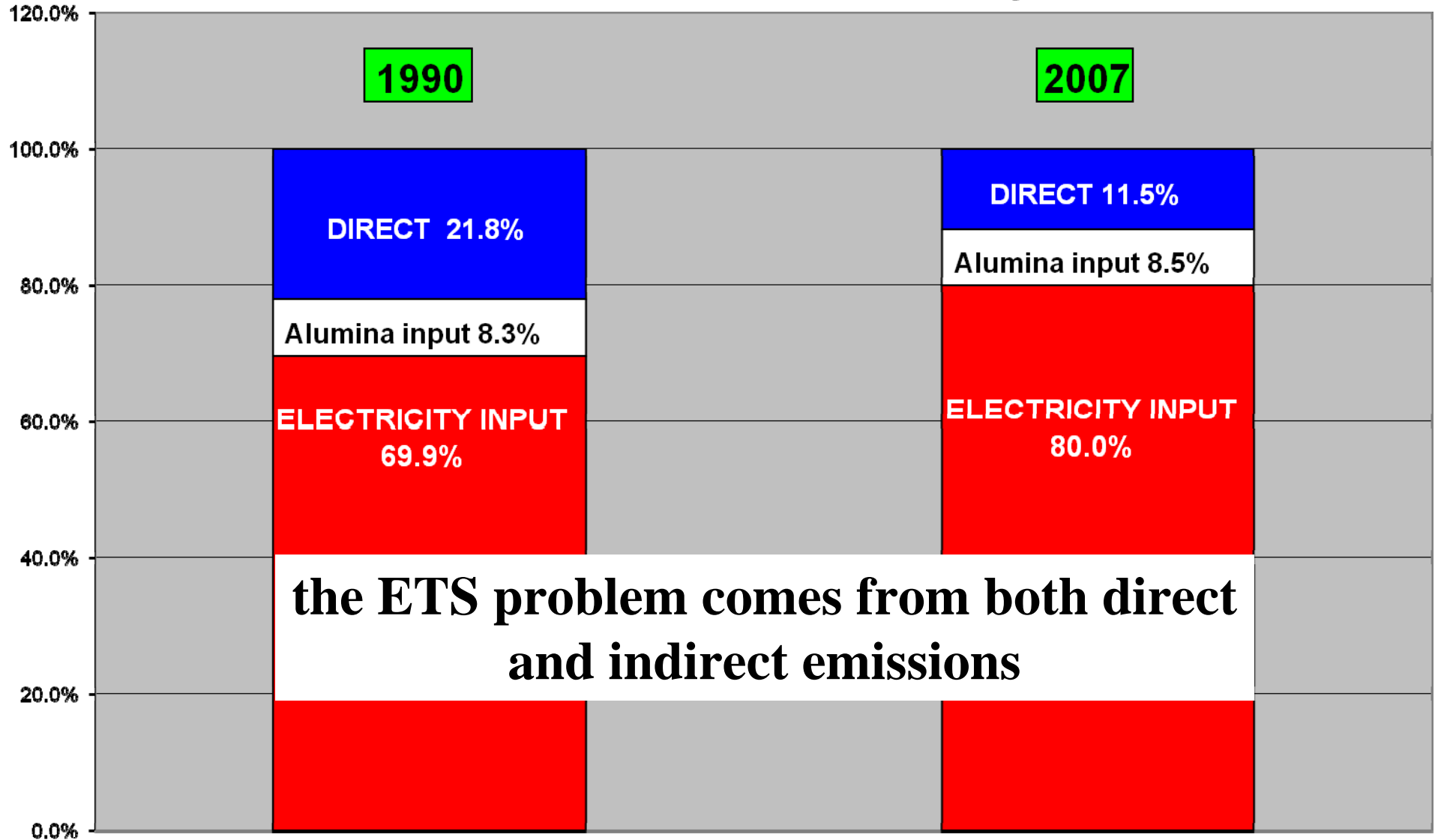
0.29 Mt CO₂-e other site-level emissions

3.0 Mt CO₂-e indirect emissions via alumina inputs

27.69 Mt CO₂-e indirect emissions via electricity inputs

**aluminium direct emissions intensity now 2.0 tonnes
CO₂-e per tonne aluminium cf. 5.0 tonnes CO₂-e in 1990.**

Direct & Indirect Emissions from Australian Aluminium Smelting



1. Australian Emissions Trading Scheme (ETS)

2. (Mandatory) Renewable Energy Target

- ◆ **two market-invasive schemes with profound impacts on Australian economy and competitiveness of industries.**
- ◆ **without special design conditions to address the impacts, some industries will be forced out of Australia**
- ◆ **for alumina, impact limited to effects caused by the ETS**
- ◆ **for aluminium, both schemes impose significant cost impacts and require adjustment to allow continued smelter ops beyond existing contract circumstances.**

The competitiveness imperative within a national (regional) emissions trading scheme

ALP: Labor's Plan for a Stronger Resources Sector (page 9)

A Rudd Labor Government will:

Ensure that Australia's international competitiveness is not compromised by Australia's response to climate change.

Ensure that Australian operations of emission intensive trade exposed firms are not disadvantaged by emissions trading .

ETS – key issues for alumina and aluminium

What is the EITE certainty factor (ie sovereign risk)?

- ◆ **the EITE risk is having the transitional arrangements withdrawn under various conditions/scenarios before our major competitors face similar carbon constraints**
- ◆ **this needs to be bullet-proofed via legislation**
- ◆ **guarantees for existing operations**
- ◆ **similar guarantees for new investments.**

Criteria for withdrawal of transitional arrangements for trade-exposed, emissions-intensive firms must be clearly defined.

ETS – key issues for alumina and aluminium

Issue of new EITE investments

- ◆ **the ETS conditions to apply to potential new EITE investments, greenfields and/or brownfields, will require specific unambiguous long-term rules to avoid the loss of future growth opportunities for the Australian economy**
 - **no loss to the internationally-mobile companies but a loss to Australian direct employment and the multiplier effects into local industries and services**
 - **Australian alumina/aluminium projects must compete against well-established alternative locations.**

ETS – EITE summary for alumina-aluminium

- 1. Enshrine the emissions-intensive trade-exposed (EITE) concept within the ETS design to avoid prejudice to Australia's global competitiveness**
- 2. full administrative allocation of permits for indirect emissions, applying facility level intensity (not average grid factors)**
- 3. administrative allocation of permits for direct emissions with some formula to allow contribution by industry**
- 4. full administrative allocation of permits for direct and indirect emissions for new investments applying facility level emissions intensity factors and relevant industry asset life time profile.**



ETS – key issues for alumina and aluminium

- ◆ **Contrary to Rudd Government election promises, proposals by some for EITE transitional arrangements to erode prior to global competitors facing similar carbon impacts**
 - **the Rudd “no disadvantage” commitment must be delivered**
- ◆ **also, some seeking to severely limit EITE coverage**
- ◆ **[and some seeking to ignor the impact of the increased (M)RET plan on the ETS and the flow-through to industry]**

Rudd Government 20% renewable energy target

- ◆ **an electricity-only intervention, defined as 45,000 GWh per annum renewable electricity target by 2020**
- ◆ **taking over from existing MRET (ramping up to 9,500 GWh by 2010) and state schemes (eg VRET)**
- ◆ **cost to Aust economy yet to be measured and reported**
- ◆ **already, forward price over \$60/REC = \$180 tax per tonne aluminium**
- ◆ **target difficult with existing technology, grid stability questions**
- ◆ **efficiency basis for ETS seriously undermined by MRET.**

Rudd Government 20% renewable energy target

- ◆ **Avoid potential for increased renewable energy target to further undermine international competitiveness by adopting the approach proposed for the ETS:**
 - a. **large trade-exposed electricity users be allocated REC certificates to avoid adverse impact on competitiveness; similar test to ETS be established to determine eligibility, substituting electricity-intensive for emissions-intensive**
 - b. **RET liable parties not required to surrender REC certificates in respect of sales to large trade exposed electricity users.**

ETS Experience from Europe





Thank you



<http://www.aluminium.org.au>

Australian Aluminium Council

