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Senate Economics Legislation Committee
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24 July 2009

Dear Senator Hurley

**Re: Inquiry into the Renewable Energy (Electricity) Amendment Bill 2009**

Rio Tinto welcomes the opportunity to make a submission to the Senate Economics Committee Inquiry into the Renewable Energy (Electricity) Amendment Bill 2009.

Rio Tinto looks forward to the Committee's critical appraisal of the legislation with a view to proposing amendments that enable the legislation to truly meet the government's objectives of efficiently encouraging renewables deployment in Australia, maintaining the competitiveness of Australia's value adding industry and ensuring the primacy of emissions trading in Australia's emissions mitigation effort. The current Renewable Energy Target (RET) scheme design threatens the competitiveness of Australia's aluminium smelting disproportionately relative to most other trade exposed emissions intense activities in Australia. From aluminium smelting's point of view the proposed RET relief package shows poor business understanding of electricity intensive industries and is inadequate because the legislation is only providing relief for RET liabilities above the pre-existing 9500GWhr obligation.

Under the way in which a) Renewable Energy Certificate (REC) prices anticipate future renewables costs, and b) the new 45,000 GW hr liabilities progressively ramp up, the relief being proposed to aluminium smelting is not the 90 per cent claimed by the government, rather in the first decade it is only 55 per cent. This represents an uncompetitive A$465M cost burden to Rio Tinto's smelters. In the period until 2020 this is almost one third of the combined climate policy cost (RET plus Carbon Pollution Reduction Scheme [CPRS]) – few, if any, other industries face such large and unbalanced cost exposures from the RET. Such additional costs have flow-on implications for employment and expenditure in the Gladstone (Queensland), Tamar (Tasmania) and Hunter Valley (NSW) regions.

Changes in the legislation are needed to correct the cost imbalance for electricity intensive industries. Rio Tinto's suggested recommendation is for an additional, electricity intense and trade exposed class to be defined that is equally exempted from the pre-existing Mandatory Renewable Energy Target (MRET) liability and from the expanded RET liability. An appropriate threshold for that class would be (greater than 4000 MWh / $M revenue). Rio Tinto also seeks the RET exemption package to be decoupled from the Emissions Intense Trade Exposed (EITE) package in the CPRS. The electro intense sector should not have to have such a large line item of their costs tied to a separate piece of legislation. The linkage is inappropriate as a matter of what constitutes good legislative policy. Details to support these concerns are elaborated below.

***Rio Tinto's Aluminium Smelters in Australia*** - Rio Tinto has interests in three facilities which will be severely impacted by the current form of the RET legislation – all aluminium smelters (Table 1). These smelters are important regional employers, earners of export income and contributors to the local economy (Table 2).

**Table 1. Rio Tinto Electricity Intensive Trade Exposed aluminium smelting businesses in Australia**

| Rio Tinto Electricity Intensive Trade Exposed Facilities | Rio Tinto Ownership (per cent) | Region | 2008 Production (Saleable '000 tonnes) | 2008 Employees and Contractors | 2008 Electricity Consumption (GWh)[1] |
|---|---|---|---|---|---|
| Boyne Smelters[2] | 59.4 | Gladstone | 556 | 1382 | 8320 |
| Tomago Aluminium | 51.6 | Hunter Valley | 524 | 1230 | 7680 |
| Bell Bay[3] | 100 | Tamar Valley | 178 | 630 | 2780 |

**Table 2. Socioeconomic contribution of Rio Tinto aluminium smelting businesses to regional Australia**

| Regional Contribution | Capital Investment | Total Salaries Paid | Payments to Local Suppliers | Number of Local Suppliers |
|---|---|---|---|---|
| Boyne Smelters | $199 M[4] | $154 M | $450 M | 132 |
| Tomago Aluminium | $40-$50 M | $110 M | $450 M | Not available |
| Bell Bay[5] | $24 M | $50 M | $171 M | 334 |

***The cost of the proposed scheme to Rio Tinto*** - In its submission of 13 February 2009, Rio Tinto welcomed the recognition in the Department of Climate Change discussion paper[6] of the effect of the RET scheme on industries which are trade exposed and *electricity intensive* and the need to ensure that climate policy does not undermine Australia's international business competitiveness.

Consequently, Rio Tinto was most concerned when the Council of Australian Governments (COAG) meeting of 30 April 2009 accepted an option which was not raised in the discussion paper. This option failed to recognise *electricity intensity* and instead provided a partial exemption for *emissions intensive* trade exposed industries from only part of the RET. From Rio Tinto's point of view it is disingenuous to separate the impacts of MRET from those of RET. The two are closely inter-related and cannot be separated.

[1] This compares to Australian total consumption of ~260 000 GWh (ABARE 2006-2007). Rio Tinto's aluminium smelters consume around 7 per cent of Australia's power.
[2] BSL data taken from 2008 Sustainable Development Review, available from www.riotinto.com
[3] Bell Bay data taken from 2008 Sustainable Development Review, available from www.riotinto.com
[4] Includes investment in major capital projects. For more information see http://www.riotintoalcan.com/ENG/media/media_releases_1159.asp
[5] Bell Bay data taken from 2008 Sustainable Development Review, available from www.riotinto.com
[6] COAG Working Group on Climate Change and Water discussion paper *Treatment of electricity-intensive, trade-exposed industries under the expanded national Renewable Energy Target scheme*

The result of COAG's decision is that the exemption provided to Rio Tinto's aluminium smelting assets is equivalent to only a 55 per cent exemption over the first decade of the scheme. Based on the MMA[7] modelled REC prices, Rio Tinto's smelters will be required to pay A$465 M over the first decade. This $465M does not include the cost of the CPRS, electricity pool price increases, and charges associated with additional physical infrastructure to accommodate the intermittency and non-scheduled nature of renewables.

***The impacts of these costs*** - As aluminium is internationally priced and new operational costs cannot be passed through to customers, most aluminium smelters have limited options in the way in which these imposts can be addressed. Options include reducing workforce and winding back capital expenditure. Each of Rio Tinto's Australian aluminium smelters spend in the order of $50 million annually on sustaining capital. Much of this spend is done locally - paying for regional employment, equipment and supplies. Faced with additional costs from RET, sustaining capital allocations will be closely scrutinised and cuts inevitably made. These cuts, if they continue over the medium term, will progressively impact the ability of Australian smelters to successfully compete within international companies and attract ongoing sustaining capital. Funds are likely to be directed elsewhere.

***The solution*** - The expanded RET scheme in conjunction with the CPRS will have a significant adverse impact on the viability of electricity intense trade exposed activities. To manage the combined impact, industries which are both electricity intense (>4000 MWh / $M revenue) and emissions intense (>2000 t CO2-e / $ million revenue) should be equally exempted from both the *current and expanded* Renewable Energy Target.

For electricity intense industries, Rio Tinto is seeking an exemption that maintains the balances between both a) the cost impacts of the CPRS and RET, and b) the RET cost impacts faced by electricity intense activities and other emissions intense activities. Rio Tinto notes that a true 90 per cent exemption from the current and expanded RET will still cost its aluminium smelting assets A$100 M over the first decade, and make those assets amongst the largest of Australia's RET liable parties. Anything less than a true 90 per cent exemption, in conjunction with the CPRS, will distort the policy signals and disproportionately impact aluminium smelting's competitive positioning. Amendments to support a change to a true 90 per cent exemption are attached in Appendix 1.

The amendments proposed also seek to decouple the RET and CPRS legislation. Claims that both pieces of legislation are inextricably linked are not supported by the release of the CPRS Emission Intense Trade Exposed regulations on 19 June 2009 which contain no such reference. The RET regulations will be additionally complicated as a result of this linkage. The more simple solution is the proposed decoupling.

While the existing MRET scheme does not provide for an exemption, it was established when there was no price on carbon and it was a major plank in the previous government's climate strategy. The RET scheme differs from MRET in two important ways:

a) it competes with the CPRS, the Government's core mitigation policy, and adds to the cost of climate policy,
b) it prolongs for a decade, and increases by a factor of five, the support for new renewables. It will increase REC charges significantly compared to the MRET scheme.

In these practical ways RET fundamentally changes MRET. To recognise this, as an activity which is both electricity and emissions intense, aluminium smelting's 90 per cent exemption should apply to the entire scheme.

[7]McLennan Magasanik Associates, Report to Department of Climate Change, Benefits and Costs of the Expanded Renewable Energy Target, January 2009

Rio Tinto

This submission in part reiterates the issues also raised in our submissions to the Department of Climate Change of 6 August 2008 and 13 February 2009 on the RET scheme. Relevant parts of those submissions are summarised in Appendix 2 of this document.

No part of this submission is confidential. Should you wish to follow up on any matter raised in this submission, please contact Neil Marshman (neil.marshman@riotinto.com)

Yours sincerely

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## APPENDIX 1 – PROPOSED AMENDMENTS

**38C Information about partial exemptions to be published on Regulator's website**

(1) If a liable entity receives a partial exemption for a year, the Regulator must, before 1 October in the following year, publish on its website:

(a) the name of the entity; and

(b) the value in dollars, estimated by the Regulator, of the amount of the entity's partial exemption for the year; and

(c) such other information in relation to the partial exemption as is required by the regulations.

(2) The Regulator must also publish on its website such other information in relation to partial exemptions as is required by the regulations.

(3) If a liable entity's partial exemption is later reduced or increased, the Regulator must correct the information on its website.

**38D Regulations**

(1) The Governor-General may make regulations for the purposes of:

(a) identifying emissions-intensive trade-exposed activities; and

(b) classifying such activities as:

(1) both highly emissions-intensive (>2000 t CO2-e / $million revenue) and electricity intensive (>4000 MWh / $million revenue); or

(2) highly emissions-intensive (>2000 t CO2-e / $million revenue); or

(3) moderately emissions-intensive (1000-2000 t CO2-e / $million revenue); and

(c) prescribing all matters necessary or convenient to be prescribed for carrying out or giving effect to the matters in paragraphs (a) and (b).

(2) The regulations are to ensure that the activity consisting of the physical and chemical transformation of alumina (aluminium oxide, $Al_2O_3$) into saleable aluminium metal (Al) is classified as an activity which is both emissions-intensive and electricity intensive.

(3) The regulations are to provide that the amount of the partial exemption stated in a partial exemption certificate is as follows:

(a) for an activity which is both highly emissions intensive and electricity intensive—90 per cent of the total liability;

(b) for a highly emissions-intensive activity—90 per cent of the expanded liability;

(c) for a moderately emissions-intensive activity—60 per cent of the expanded liability.

(4) The Minister must take all reasonable steps to ensure that regulations are made for the purposes of subsection (1) before 1 July 2010.

(5) In this section:

***expanded liability*** means, in relation to an activity, a liable entity's additional liability for the renewable energy shortfall charge that would be incurred as a result of the enactment of the *Renewable Energy (Electricity) Amendment Act 2009*, including the entity's entire liability for the renewable energy shortfall charge in respect of the period commencing on 1 January 2021, but for the liable entity's partial exemption.

***total liability*** means, in relation to an activity, a liable entity's liability for the renewable energy shortfall charge that would be incurred but for the liable entity's partial exemption.

## APPENDIX 2– OTHER ASPECTS OF THE RENEWABLE ENERGY TARGET (RET)[8]

### The CPRS should be the primary climate change policy

The CPRS should be the main measure through which industries address and mitigate direct emissions and indirect electricity related emissions. Without exemption from RET this will not be the case for aluminium smelting. As set out in the RATE (Renewable Affected Trade Exposed) discussion paper[9], no other activity in Australia has such a high emissions intensity derived primarily from electricity use. Full exposure of aluminium smelting to RET will mean the measure acts as a demand side (mitigation) measure – driving a reduction in electricity use and subjugating the intended role of the CPRS.

Consequently, RET should be designed, implemented and phased out with full consideration given to the central role that the CPRS is intended to play in emissions mitigation. The RET scheme should identify the key issues that renewables face and target them. Issues around cost and deployment should be left predominantly to the CPRS. Adversely impacting the aluminium smelting activity through the RET scheme will have significant employment, regional and economic impacts. These impacts will not assist Australia meeting its 45 000 GWh new renewables target – appropriate consideration for aluminium smelting and meeting the 45 000 GWh target are not mutually exclusive policy goals.

As soon as practicable, carbon pricing via the CPRS should provide the market signals for sustainable supply side investments in economically prudent renewable energy generation. The RET scheme should be an interim short term measure to address perceived electricity supply side / technology market failures. The cost of this subsidy, if one is justified, should fall lightly across those for whom electricity charges are a small proportion of total revenue and should taper out before 2030. A RET scheme that is broadly, but lightly applied will also ease-in the CPRS as all emitters including EITE industries will have greater confidence in the scheme's integrity.

A key issue for Rio Tinto is the combined climate policy cost that it faces from the CPRS and RET. The two measures, when combined, increase the cost of electricity usage[10] and there is a limit to the cost increase that any business can afford given the costs cannot be passed through to global customers. The RET represents no additional abatement under a CPRS, as abatement achieved by the RET directly contributes to the CPRS abatement challenge. To the extent that the RET displaces cheaper abatement from other sectors of the economy, the renewable energy generator will receive the benefit from the pool price lift due to the introduction of the CPRS and the benefit from the sale of RECs. In effect this means that RET adds to the abatement cost but does not increase abatement.

The RET should be fully integrated with the CPRS and other climate change policies in its design, implementation and phase out. In particular Rio Tinto considers that the measure should identify the key issues that renewables face and target them. Issues around cost and deployment should be left predominantly to CPRS.

### Resource allocative efficiency and costs

RET is designed to enhance returns and thereby accelerate the deployment of renewable technologies. It distorts prices in the electricity market to induce substitution of renewable energy as defined by the scheme (i.e. pre 1997 renewable energy does not benefit from the scheme). In effect the RET represents an income transfer from electricity users to renewable generators. The consumer pays for both the CPRS and the RECs. It is important that this payment is constrained and proportionate to the actual scheme benefits. From an economy-wide perspective, the result would be similar to both a tax being applied to the electricity

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[8] This Appendix reiterates issues, and includes relevant summaries, raised in our submissions to the Department of Climate Change of 6 August 2008 and 13 February 2009 on the RET scheme.

[9] COAG Working Group on Climate Change and Water discussion paper *Treatment of electricity-intensive, trade-exposed industries under the expanded national Renewable Energy Target scheme*

[10] Productivity Commission (2008) *What Role for Policies to Supplement an Emissions Trading Scheme?* Productivity Commission Submission to the Garnaut Climate Change Review, May.

intensive export and import competing industries, and consumers on fixed incomes to assist renewable energy generators.

Rio Tinto's concern is that the scheme design could result in the REC price escalating leading to development of very expensive and unsustainable renewable technologies that distort, directly or indirectly, resource allocation in the Australian economy – particularly the EITE sector. Four recent modelling efforts detailing the combined effect of the CPRS and RET (CRAI[11], MMA[12], NIEIR[13], ACIL Tasman[14]) point to a potential need to step towards a significantly more expensive mix of renewables for the 45 000 GWh target to be met. There remains some uncertainty that the 45 000 GWh target can be supplied in the short timeframe of this scheme.

For these reasons Rio Tinto is concerned that the amended shortfall charge of $65/MWh may well form the basis for future REC prices, and that this price is too high. The absence of a realistic, certain and measured ceiling to scheme costs via an appropriate shortfall charge lends further support to the establishment of a true 90 per cent exemption from the current and expanded scheme for electricity intensive and highly emissions intense industries.

***Ability of renewables to supplement baseload***

In Australia, Rio Tinto purchases the majority of its electricity for its aluminium business. To provide commercial certainty, electricity is typically supplied via long-term contracts to its three aluminium smelters. Of these ~ 14 per cent is renewable, sourced through Hydro Tasmania for the smelter at Bell Bay. However, the focus of the renewable energy target schemes on 'new' electricity generation means that this use of pre-1997 hydropower cannot be counted in the scheme. The operation of an aluminium smelter is dependent on low cost, reliable power and a secure electricity system. The need for constant baseload power for an aluminium smelter at a competitive price precludes the exclusive use of intermittent renewables for self-generation or contracted supply without some form of load balancing. Wind, for example, is estimated to have a capacity factor of ~ 30 per cent compared to the smelter requirement of 100 per cent.

Long term contracts for baseload power also reduce the flexibility of the business to source electricity from other suppliers, including those renewable generators that might be suitable. As required, Rio Tinto sources RECs on the market via intermediate market players. It is therefore important to Rio Tinto that scheme design should promote a liquid REC market that has a low, foreseeable and stable cost.

Rio Tinto also operates the Pilbara Iron and other remote grids. These grids have specific system stability and locational disadvantages which make the deployment of renewable generation difficult and significantly more costly than within the National Electricity Market (NEM).

Rio Tinto welcomes recognition that renewable energy targets are an interim measure, but is disappointed with the apparent lack of integration in the design and operation of the CPRS and expanded RET. Design issues for the RET, including the scope of the scheme and its interactions should be assessed on the basis of compatibility with and complementarity to the CPRS and other elements of climate change policy. Without this there is a danger of adverse effects, with electricity users paying an inflated climate policy price.

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[11] CRA International (2007) Implications of a 20 per cent renewable energy target for electricity generation: A report prepared for APPEA, November 2007

[12] McLennan Magasanik Associates (2007) Increasing Australia's Low Emission Electricity Generation – An Analysis of Emissions Trading and Complementary Measures, Report to the Renewable Generators Association, October

[13] National Institute of Economic and Industry Research (2008) *Climate Change Policies: International and Australian trends and impacts on the national electricity Market* – A report prepared for National Electricity Market Management Company, June

[14] ACIL Tasman (2008) The Impact of an CPRS on the energy supply industry – Modelling the impacts of an emissions trading scheme on the NEM and SWIS , Report to the Energy Supply Association of Australia, July