



Magnetite Industry - Energy Intensive Trade Exposed industry assistance – July 2011

BACKGROUND

Currently there is no industry assistance offered to emerging producers as these new Western Australian mines are not yet in production. MagNet represents 5 such companies.

Independent advice by Deloitte Access Economics has found that accessing magnetite iron ore increases Australia's existing iron ore reserves by 34%.

Assessment of MagNet members' current or proposed Stage One projects resulted in an estimate that projects in the pipeline will increase Australia's GDP by \$4.5 billion per annum and increase employment by 4,400 over the period 2006 to 2034.

Further, while magnetite requires extensive energy intensive processing in Australia, it requires substantially less energy (and therefore reduced emissions) to process it into steel offshore which more than offsets these early domestic emissions.

Independent modelling by Crucible Carbon finds that for every tonne of magnetite concentrate exported from the Sino Iron project and made into steel it will result in an overall global saving of 108kg of CO₂ equivalents when compared to Australia's existing DSO iron ore industry.

Since 2008 the magnetite industry has been in discussions with the Commonwealth in relation to the relevant Emissions Intensive Trade Exposed (EITE) industry assistance i.e. post the announcement of the Carbon Pollution Reduction Scheme (CPRS) and MagNet was formed in 2009.

In October 2010 activity definitions for magnetite concentrate and iron ore pellets were gazetted by the Minister for Climate Change and Energy Efficiency. These definitions do not account for emerging WA projects and are based on the two existing producers.

The finalisation of an activity definition allows the magnetite concentrate producers that were operating during the EITE base period (2006-07 and 2007-08) to submit audited data to Government for the activity to be formally assessed under the EITE policy. The relevant producers in this case are the Grange Resources Savage River project in Tasmania and OneSteel Whyalla in South Australia.

To date audited data has not been submitted by both and no allocative baseline has yet been established for magnetite concentrate. The Department of Climate Change and Energy Efficiency (DCEE) is yet to receive audited data from existing producers that would allow this to proceed, however Grange Resources has submitted unaudited data.

ISSUE

Magnetite processing is conceptually relatively simple. In broad terms it requires the ore to be ground following which the magnetite is magnetically separated from waste. However this activity is much more energy and emissions intensive for emerging producers, when compared to the existing producers.

The baseline for the magnetite concentrate activity definition will be set by two small producers who between them produce approximately 4 million tonnes per annum (mtpa) of magnetite concentrate/ pellets. The emerging magnetite industry in Western Australia is on a much larger scale but more importantly will be conducting an activity that is substantially different to that of existing producers.

For example the Sino Iron project (CITIC Pacific Mining) in advanced construction in the Pilbara will produce approximately 24 mtpa of magnetite concentrate. When compared to existing producers a more energy intensive process is required to produce a saleable product for the following reasons:

1. More effort is required to grind a substantially harder material.
2. The ore needs to be ground finer to extract smaller grain size magnetite, resulting in a substantially finer concentrate product (~28 micron particle size compared to ~45 for Savage River).
3. More ore needs to be ground for each tonne of concentrate because of a 20-30% iron content compared to approx 30-40% for Savage River.

This means that the Sino Iron project will be approximately twice as emissions intensive per tonne of concentrate than the Savage River project. Other future producers will face similar challenges.

The end result is that the baseline established by existing producers will not provide adequate levels of assistance for the emerging magnetite industry, and more significantly has the potential to prevent investment in an industry with substantial economic benefits and lower overall global emissions.

CITIC Pacific Mining, the proponents for the Sino Iron project, has provided all available projected data to the Department of Climate Change and Energy Efficiency for assessment.

SOLUTION

The magnetite industry has been working hard to find a solution to this problem and is now in a position to propose the creation of a new activity definition for ultrafine magnetite as per the statement of principles overleaf.

Adoption of these principles will allow the magnetite industry to support a carbon pricing mechanism as it would provide adequate levels of industry assistance for the emerging industry until the development of a global carbon trading scheme, at which time magnetite's global carbon benefits can be recognised by a market mechanism.



Principles for the introduction of an ultrafine magnetite concentrate activity to recognise emerging magnetite producers

Government will:

1. Establish a new activity definition for ***ultrafine magnetite concentrate***, which would allow the setting of a new baseline assessed according to the emissions data of emerging magnetite producers in order to recognise the increased emissions intensity of this activity when compared to the existing *magnetite concentrate* definition.
2. Set a process for the new baseline to be determined if necessary, including the development of a “true up” provision once a new baseline is established.
3. Allow emerging magnetite producers to have input to the new activity definition to recognise the different specifications of these emerging projects compared to the existing Grange Resources Savage River and OneSteel projects that formed the basis of the existing *magnetite concentrate* definition.
4. Commit that this activity will be considered as at least moderately emissions intensive (or higher) and entitled to industry assistance at that level as a minimum (66%).

The proposed new activity is related only to new projects producing ultrafine magnetite concentrate and is not intended to apply to existing magnetite concentrate producers nor impact on the assistance to be provided under the existing activity.

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