

**Submission to Garnaut Climate Change Review
by BlueScope Steel Limited
18 April 2008**

regarding
Emissions Trading Scheme Discussion Paper, March 2008

Executive Summary

- BlueScope Steel believes reducing greenhouse gas (GHG) emissions is an important global issue and we have a responsibility to join with the rest of the community to address climate change concerns.
- BlueScope Steel is committed to improving its environmental footprint, including GHG emissions. The company is currently undertaking a feasibility study for a project at Port Kembla Steelworks, which has the potential to offset approximately 800,000 tonnes of GHG emissions per annum in NSW, by reducing the steelwork's demand for coal generated electricity from the grid.
- An Australian emissions trading scheme (ETS) will have a very significant impact on the Australian iron and steel industry – both on its ongoing competitiveness and its ability to invest in offset or abatement projects.
- Australia is a competitive place to make iron and steel, and our Australian operations are world class and cost competitive. The Australian steel industry is also an important economic contributor, particularly in regional Australia.
- Carbon is an integral ingredient in the manufacture of iron and steel, and CO₂ is an unavoidable by-product of this process. There is currently no low emissions alternative technology worldwide for making new 'virgin' steel. BlueScope Steel is contributing to research and development efforts both in Australian and overseas, but commercialisation of new, low carbon technology is likely to take many years.
- Steel is a globally traded commodity, with most new steelmaking capacity and exports coming from non carbon-constrained jurisdictions. Steel products from Australia must be able to be sold on international markets equitably against products manufactured in countries that do not impose a carbon cost on their steel industries. Closure of Australian steelmaking facilities and carbon leakage to overseas producers would do nothing to cut global GHG emissions.
- An Australian ETS should be designed with the underlying premise that its is economically and environmentally efficient to provide transitional assistance to trade-exposed, emissions-intensive industries (TEEI firms), until such time as overseas competitors face effective carbon constraints.
- BlueScope Steel supports free allocation of emission permits as the most effective and practical method of providing transitional assistance to TEEI firms. We are strenuously opposed to the auctioning of permits to TEEI firms.

- Provision of post-hoc assistance to TEEI firms *after* purchasing emission permits would be highly complex, burdensome and unlikely to be effective. It would also introduce a high degree of uncertainty regarding future costs and cash flows, thereby introducing greater risk and uncertainty for investors.
- Given very large and long-lived capital investments in the steel industry, an ETS also needs to provide medium to long-term certainty for investment purposes. BlueScope Steel is concerned that a five-year emissions trajectory would be inadequate for large, long-term abatement projects.
- BlueScope Steel is currently undertaking economic modelling work in support of its submission. The results of this work will be made available to the review on its completion.

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1. Introduction

This document is BlueScope Steel's submission in response to the Garnaut Climate Change Review *Emissions Trading Scheme Discussion Paper*, dated March 2008.

The focus of this submission is on the potential impact of an ETS on BlueScope Steel's domestic and international businesses. We have not provided detailed comment on every issue in the discussion paper but only on those of direct relevance or consequence to BlueScope Steel.

1.1 About BlueScope Steel

BlueScope Steel is one of two publicly listed steel companies in Australia, and the only flat steel products manufacturer. The company was formerly a part of BHP Billiton but was publicly listed in 2002. There is no equity relationship between the two companies today.

BlueScope Steel's products include steel slab, hot rolled coil, cold rolled coil, plate, and coated and painted steel products, such as ZINCALUME® steel and COLORBOND® steel. They also include the LYSAGHT® range of steel building products, and complete steel solutions, such as BUTLER® pre-engineered steel buildings and THINKTANK® rainwater harvesting systems. BlueScope Steel's customers are in the building and construction, automotive and general manufacturing sectors.

BlueScope Steel has over 40 manufacturing facilities in Australia, including an integrated steelworks at Port Kembla, New South Wales, the adjacent Springhill metal coating and painting plant, and a rolling, coating and painting plant at Hastings, Victoria. Port Kembla Steelworks is BlueScope Steel's largest primary manufacturing site. The site is world-class and manufactures iron using the highly efficient blast furnace process, its principal raw materials being iron ore and coking coal. Raw steel from Port Kembla Steelworks is used to produce value added products in downstream processing plants in BlueScope Steel's Australian and international operations.

BlueScope Steel employs approximately 10,000 people in Australia, including approximately 5,000 in the Illawarra region of NSW, and about 1,000 on the Mornington Peninsula in Victoria. In the Illawarra, the Company has a very significant economic and social impact, creating some 12,000 direct and indirect full time jobs and contributing \$2 billion in gross regional product¹.

BlueScope Steel is in the top one per cent of Australian exporters by value.² In the last (2006/07) financial year, BlueScope Steel exported approximately \$1.6 billion of steel products from its Australian operations (about half its domestic steel production by volume). Our Australian plants are the largest source of exports amongst the seventeen countries in which we manufacture.

¹ IRIS Research Ltd. *'BlueScope Steel Economic Impact Assessment'*, June 2007

² ABS, *'Number and Characteristics of Australian Exporters'*, 2006-07, at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/5368.0.55.006?OpenDocument>

Australia is one of the few locations worldwide that has the key natural resources (high quality iron ore; metallurgical coal) for iron and steelmaking and Port Kembla, with its deep-water port access, has a unique competitive advantage. BlueScope Steel has leveraged this asset to build an outstanding portfolio of downstream processing facilities throughout Australasia, Asia and North America.

1.2 Principles to Guide the Design of an ETS

The proposed framework for an ETS is described Section 2 of the paper and the notion of five basic principles (which are “the necessary conditions for a smooth operating market for emissions permits”), is introduced. The five principles are:

1. Scarcity aligned with the emissions target;
2. Tradeability;
3. Credibility;
4. Simplicity; and
5. Integration with other markets.

In general, BlueScope Steel supports these principles. In reviewing the content of the paper, however, we note that some proposals are not necessarily consistent with these principles. In particular, the proposed treatment of TEEI industries is not simple, and this is discussed in detail in subsequent sections of this submission.

1.3 What is the Potential Impact of an ETS on BlueScope Steel?

Australia is a small steel producer in global terms (less than one per cent of global production) and Australian steelmakers do not have the pricing power that would enable them to pass through a carbon price to their customers. Most new steelmaking capacity is being built in developing countries that are not subject to binding emissions reduction targets under the Kyoto Protocol, such as China, India, Brazil and Indonesia. These countries are also growing exporters of steel, including to very open markets such as Australia. BlueScope Steel is trade exposed in both its export and domestic markets.

In Australia, BlueScope Steel’s total greenhouse gas emissions in the year to 30 June 2007 were 12.53 million tonnes (CO₂ equivalent or ‘CO₂-e’), of which 10.97 million tonnes was Scope 1 and 1.56 million tonnes Scope 2. Of BlueScope Steel’s emissions in Australia, over 90 per cent are the result of operations at the Port Kembla Steelworks.

Iron and steelmaking is also emissions-intensive (see next section) and a number of analysts have recognised that the iron and steel industry should be classified as ‘trade-exposed, emissions-intensive’.³

The introduction of an ETS in Australia, independent of an effective global arrangement and without effective transitional assistance for TEEI firms, would have a detrimental affect on BlueScope Steel’s Australian operations. The step change in technology needed

³ See for example, H Saddler, F Muller and C Cuevas, ‘*Competitiveness and Carbon Pricing: Border adjustments for greenhouse policies*’, Australia Institute, April 2006

to significantly reduce emissions from the iron and steel industry is likely to be many years away. In such circumstances, an ETS would not act as an incentive to reduce emissions, but would simply be a deadweight burden, increasing costs, decreasing competitiveness and reducing investor confidence.

It would also be likely to cause Australian TEEI firms to reduce their domestic production in favour of imports. Relocation of production offshore would not reduce global GHG emissions and may actually increase them. Such outcomes would not be environmentally or economically efficient.

2. BlueScope Steel's Response to Climate Change

2.1 Reducing Emissions Intensity of Steelmaking

All current, commercially available ironmaking technologies are inherently GHG intensive, because they rely on a chemical reaction that utilises carbon as a reductant. The majority of GHG emissions produced from the blast furnace method of iron and steel manufacture, employed at Port Kembla Steelworks, are a direct result of this chemical process to extract iron from iron ore. The remaining GHG emissions at Port Kembla are indirect, largely from purchased electricity.

Over the last 50 years, the average energy intensity of steelmaking has improved by approximately 50 per cent and continues to improve.⁴ However, steelmaking technology is now reaching the limits set by the laws of physics and chemistry and the opportunity for further reductions is minimal.

As such, a significant cut in GHG emissions is unlikely in the absence of a technology breakthrough. In an effort to expedite such a breakthrough, BlueScope Steel is participating in international efforts to find new, lower carbon iron and steelmaking technology, including the International Iron and Steel Institute's (IISI) *CO2 Breakthrough Programme*. This programme is taking a multiphase approach to radically reduce CO2 emissions from the steel industry. Developing a new low emissions technology for making iron and steel is an enormous challenge and will take the combined efforts of steel manufacturers and governments, working together on a global scale, in order to succeed.

Despite the emissions intensity of its production, steel is an essential ingredient in the modern world. It is one of the most common materials that we come into contact with every day. There is hardly any object that we use today that does not contain steel or that is not created with equipment made from steel. Steel is also the most recycled material in the world, with more steel being recycled than all other recyclable materials combined, including aluminium, glass and paper.⁵ Scrap steel is a key ingredient in the integrated steelmaking process, with recycled scrap comprising almost 20 per cent of raw steel production at Port Kembla.

⁴ International Iron and Steel Institute, 2007

⁵ Ibid.

2.2 Additional BlueScope Steel Activity

BlueScope Steel is actively engaged in the Asia-Pacific Partnership on Clean Development and Climate (APP) Steel Task Force, which is aimed at facilitating effective technology transfer to help the many inefficient iron producers (mainly in countries like India and China) to reduce their emissions intensity.

BlueScope Steel is also considering construction of a new Steelworks Co-generation Plant (SCP) at Port Kembla. This plant would offset in the order of 800,000 tonnes of GHG emissions (CO₂-e) per annum in NSW, by reducing the steelwork's demands for coal-generated electricity from the grid. However, even these incremental abatement opportunities currently available in the steel industry (this amount represents less than 10 per cent of BlueScope Steel's annual Australian emissions) still require very large capital investments (the current estimates place the proposed cost of the SCP at Port Kembla at more than \$800 million).

In order to commit shareholders funds to a project of this magnitude, the Board of Directors must have long-term certainty regarding GHG regulation, including the proposed long-term emissions trajectory.

3. Setting and Changing the Emissions Limit

BlueScope Steel accepts the concept of expressing an emissions limit as a trajectory of annual emissions targets over time and recognises that these trajectories will define the long-term emission budgets.

The review has put forward four specific emissions trajectories. Movement to a more stringent trajectory will be governed by international policy development. At this stage no specific targets or budgets for reduction are linked to the proposed trajectories, with the exception of trajectory C, which is tied to the current Federal Government commitment to a 60 per cent reduction (from 2000 levels) once a significant proportion of developed nations have accepted similar commitments. Without further detail regarding the proposed trajectories and their potential impact on its operations, BlueScope Steel is unable to provide detailed comment on this proposed method.

Setting of unreasonable targets in the early years of the ETS has the potential to undermine efforts to assist TEEI industries. A pragmatic approach needs to be taken to target setting that will allow companies time to 'digest' the detail and impact of an ETS, and time to implement appropriate responses.

BlueScope Steel is concerned that five-year emission trajectories will not provide the medium to long-term certainty needed for significant capital investment, such as the Port Kembla Steelworks Co-generation Plant, which will have an asset life of 40-50 years. The steel industry typically utilizes plant with very long asset lives. For example, No.6 Blast Furnace at Port Kembla Steelworks, built in 1996, is designed for three campaigns each of 20 years duration.

The recent States and Territories NETS report proposes emission caps would be initially fixed for 10 years and a gateway (or series of gateways) established for a second period of

10 years. Whilst BlueScope Steel would prefer an even more definitive plan, the NETS proposal provides greater certainty than that proposed by the Garnaut Review and we see the NETS as the minimum practical approach.

The duration of the emission cap is only one factor that introduces uncertainty into the economic assessment of a capital-intensive abatement or growth project. Other matters requiring clarification that affect capital assessments include:

- Emission cap duration;
- Permit allocation method;
- Method and scope of assistance for TEEI industries;
- Likely cost and variability of permit prices over time;
- Impact of a carbon price on input costs from suppliers;
- ETS administrative and compliance costs;
- Costs of trading permits; and
- Tax treatment of permit allocation or purchase.

Design, approval and construction of capital-intensive abatement or growth projects may be delayed until clarity is obtained about these and other elements of an ETS.

BlueScope Steel broadly supports the development of a global carbon market; particularly as such a market would be likely to alleviate many of the problems faced by TEEI industries as a result of stand-alone national schemes. With a significant percentage of world steel production (and projected growth) coming from developing countries, criteria for movement to a more ambitious emission trajectory must be based on the development of a global carbon market that includes comparable carbon pricing in steel producing developing countries.

Whilst periodic review of the emissions trajectory according to international developments is a necessary part of a successful and forward-looking emissions trading scheme, this must be balanced against the need to provide certainty for TEEI industries regarding permit allocation and transitional assistance arrangements.

4. Coverage

Provided appropriate assistance mechanisms for TEEI industries are established, BlueScope Steel accepts and supports the need for broad sectoral coverage in an Australian ETS. The design of the ETS does, however, need to ensure that companies in non-covered sectors are not provided with an artificial advantage over their competitors. For example under the current proposal, non-participant firms may be able to generate valuable offsets. The same firms won't be required to surrender any permits, effectively giving them a windfall gain for any offsets. This will disadvantage their competitors in covered sectors who can't generate offsets.

5. Domestic Offsets

5.1 Inclusion of Offsets

Domestic offsets should be included from the commencement of an ETS although offset opportunities are likely to be limited given the proposed wide coverage of the ETS. The eventual inclusion of the forestry and agricultural sectors in the proposed ETS will substantially reduce the opportunity for domestic offsets in non-covered sectors. Accordingly, as set out below, BlueScope Steel supports the linking of a domestic ETS with existing international carbon offset programmes upon commencement of the scheme.

5.2 Transitioning the NSW Greenhouse Gas Abatement Scheme to the ETS

The paper does not explicitly discuss the integration (or otherwise) of other abatement schemes such as the NSW GGAS. BlueScope Steel strongly supports transitioning of the GGAS scheme into the ETS.

The Port Kembla SCP will generate electricity from waste steelmaking gases that are currently flared. This electricity will be introduced into the NSW state electricity generation grid. BlueScope Steel believes that the credit received from the installation of the SCP facility will be in the form of either avoided electricity costs (which will have a carbon price included) or additional revenue from sales into the market (due to the embedded carbon price).

The demise of the GGAS scheme and introduction of an ETS potentially has a significant impact on the SCP project's economics, due to two conditions of GGAS. Firstly, under GGAS compliance costs are only based on a percentage of purchases, whereas under an ETS they are potentially imposed on all transactions. Secondly, under GGAS the SCP creates New South Wales Greenhouse Abatement Certificates (NGACs) for electricity produced using indigenous fuels. Therefore movement to an ETS potentially destroys value that is attainable under GGAS as no certificates of any kind are created from SCP under an ETS.

BlueScope Steel seeks early clarification regarding the proposed transitioning plan for the NSW GGAS. We note the NSW Government has released a paper on this matter: *'Transitional arrangements for the NSW Greenhouse Gas Reduction Scheme'*, April 2008. We believe it is crucial that both the State and Federal governments ensure appropriate and fair transitional arrangements are developed.

6. Point of Obligation

The paper suggests the point of obligation will be set at the point of emissions where practical. It is assumed, given the details outlined in the NGERs requirements, that the point of obligation will be at facility level for industrial processes.

6.1 Specifics of Point of Obligation

Clarification is required on the specific points of obligation, as movement upstream or downstream will have significant impact on the obligation of a business to surrender

permits. For example, accounting for transport emissions for large commercial fleets at an upstream point of obligation (such as fuel suppliers) would minimise the administrative burden associated with collecting emissions data from transport activities. Conversely, if the point of obligation were at the source of emissions for transport activity, the administration required to ensure accurate permit surrender would be significant.

6.2 Site Thresholds

Confirmation is also required of the emissions threshold above which facilities will be required to surrender permits. Thresholds have been outlined in the National Greenhouse and Energy Reporting System (NGERS) at 25kt CO₂-e emitted per annum. This is the system that reportedly will underpin an ETS. The application of this threshold was also recommended in the latest NETS report. To minimise administrative burden and complexity for companies with a large number of smaller sites that trigger the threshold some level of aggregation may be prudent. There is likely to be a reduction of administrative complexity if the aggregation is made as far upstream as practicable.

7. Permit Issuance and Permit Design

7.1 Auctioning versus Free Allocation of Permits

BlueScope Steel acknowledges that the paper favours full auctioning of emissions permits with the auctions to be held at regular intervals throughout the year (i.e. weekly, monthly, quarterly) to enable early price discovery. BlueScope Steel supports the free allocation of permits and is strenuously opposed to auctioning of permits to TEEI firms.

The German Steel Institute VDEh has reviewed the impact of auctioning permits in the EU ETS on the German steel industry and states:

*“Assuming a sale at auction, allowance prices of 33 Euro per tonne of CO₂ would raise the cost of manufacturing, say, one tonne of hot wide strip by the blast furnace / converter route (oxygen steel) by about 65 Euro per tonne... The product, hot wide strip, trades for about 300 Euro per tonne today; its price would thus be driven up by more than 20%. In addition, the emissions trading system would raise the prices of lime and electricity, two important input factors. These cost burdens would constitute a major distortion of competition not only within the European Union, due to differing production methods, but also in the now globalised world steel market. An exodus of steelmaking operations to other countries and more imports would be the inevitable result. Quite possibly, production would even be shifted to facilities emitting clearly more CO₂ per tonne of product than Germany's optimised steelmaking sites. The benefit to the climate would be zero”.*⁶

The latest NETS paper recommends annual allocation of free permits to TEEI firms with certainty provided on the level and duration of assistance through a pre-specified permit allocation plan backed by legislation and regulations.

⁶ VDEh Website http://www.stahl-online.de/english/research_and_technology/power_and_environmental_technology/emissions_trading.asp

Free allocation to TEEI firms would not add complexity to the ETS, as the main difficulty and administrative load for companies and regulators will be in determining the level of assistance. This exercise needs to be done in any event, whether for cash assistance or free permits, and whether such assistance is provided before or after carbon costs are incurred. Free allocation of permits also potentially reduces compliance costs incurred by TEEI firms, and limits financial exposures, helping to maintain investor confidence.

If auctions are used, then they must be structured to provide participants with access to permits close to the time that they need them. If the timing of auctions is not effectively managed, then companies may need to change balance sheet gearing to cater for this risk, this takes time and in turn presents its own risks. Failure to get this timing right could also allow financial institutions and other intermediaries with trading experience and access to capital to purchase permits and extract rent by re-selling them to participant firms.

7.2 Trading of Permits

BlueScope Steel cautions against a model that allows financial institutions and other non-participant companies, with capital flexibility, to take excessive advantage of the trading scheme to the detriment of firms who do not have the same capital flexibility.

A concern raised by the review has been that if free allocation of permits was made to TEEI firms then they may have the potential to gain a windfall, as happened in the EU ETS when permits were allocated to electricity generators. To address this concern it would be possible to issue non-tradeable permits.

8. International Linkages

8.1 Iron and Steel Sectoral Approach

BlueScope Steel recommends that an ETS provide for the possibility of sectoral arrangements.

The steel industry is responsible for 3-5% of global CO₂ emissions and 90% of these emissions come from the BRIC economies of Brazil, Russia, India and China plus the EU27 economies and Japan, Korea, Ukraine and USA. The construction of an international sectoral approach appears therefore to be a practical proposition with the potential to incorporate most emissions from the global sector without the need to involve 200+ countries and jurisdictions. The International Iron and Steel Institute is currently working to develop a sectoral approach for the international iron and steel industry. BlueScope Steel is currently considering the value of such an approach.

8.2 International Trading

We support the development of an ETS with the capacity for future international trading linkages. International linkage has the potential to provide alternative mitigation options, improve access to 'least cost' abatement and efficiently reduce global GHG emissions as a result.

8.3 International Offsets

Upon introduction of the scheme, and in the absence of other international linkages, BlueScope Steel believes that it is prudent to allow linkage into existing international carbon offset programmes, such as the Clean Development Mechanism (CDM) and Joint Implementation (JI) projects. The acceptance of the Kyoto Protocol and associated targets by the Australian Government effectively indicates political support for these mechanisms.

The review appears to have concluded that the primary risk of inclusion of these programmes is due to weaknesses in the additionality provisions of the mechanisms. BlueScope Steel supports a sound measure of additionality and suggests that an alternative exists to utilise the CDM or JI mechanisms but add a requirement for Australian scheme participants to use the Australian ETS additionality rules (i.e. the same rules as those that would be used for a domestic offset).

9. Treatment of TEEI Industries

9.1 Overview of TEEI Industry Issues

In the absence of an effective global carbon market and/or an established international iron and steel sectoral approach, the review is correct in identifying that an effective mechanism for assisting TEEI industries will be critical in maintaining efficiency in international resource allocation.

The specific methodology for assisting TEEI firms will be the principal factor in determining BlueScope Steel's overall position with respect to an Australian ETS. Without further detail of the methodology it is difficult to provide comprehensive comment on the proposed ETS. In particular, we would like to see further detail regarding:

- The criteria for assessing whether a product or company is classified as TEEI;
- How the cost differential as a result of the imposition of a carbon price would be calculated, especially against international multi product competitors, or inter-material competitors;
- How the proportion of sales that are trade exposed would be calculated;
- In what form assistance will be provided;
- How developments of new lower emission technology will be treated;
- Timing of assistance payments; and
- Certainty of future assistance.

9.2 BlueScope Steel's Trade Exposure

Australia produces less than one percent of a world steel market of 1.34 billion tonnes.⁷ With such a small share of the market, Australian steel producers are price takers and do not have the pricing power that would enable them to pass through a carbon price to their customers.

⁷ International Iron & Steel Institute, 2008

9.2.1 Domestic and International Direct Competition

A large majority of world steel production, and therefore BlueScope Steel's international competition, comes from non-Annex 1 countries with no Kyoto Protocol targets. Indeed China, the world's largest steel producing country by a considerable margin, has changed from being a net importer to the world's largest steel exporter in recent years.⁸ In 2007, China alone accounted for 38 per cent of world steel production and exported a total of 65 million tonnes of steel products.⁹ Since 2000, China has sustained an average annual growth rate in its steel industry of 15.7 per cent, versus 3.3 per cent in the rest of the world.¹⁰ Approximately 25 % of all flat steel imports to Australia now come from China.¹¹

Australia has a very open market for steel products, with low tariffs and non-tariff barriers and negligible levels of government assistance. Imports of flat steel products from developed countries typically face a tariff of 5%, while tariffs on imports from developing countries are normally zero.

Overall, Australia is a net exporter of flat steel products (these exports being BlueScope Steel's product range) and a net importer of long steel products. Upstream steel products such as slab and hot rolled coil comprise the majority of exports, while some coated and painted steels, along with finished products such as wire, reinforcing bar, structural sections and pipe & tube comprise the majority of imports.

Imports of steel products to Australia have grown year-on-year for most of the current decade. In 2003, Australia imported about 1.7 million tonnes of steel products. By 2007, imports had grown to approximately 2.7 million tonnes, split relatively evenly between flat and long products.¹² In turn, BlueScope Steel exported approximately 2.3 million tonnes of flat steel products from Australia in 2007.¹³ Key export destinations include South Korea, the United States, Thailand and Indonesia.

9.2.2 Domestic Indirect Competition

Indirect domestic competition comes in the form of a large variety of imported items containing steel. This may include anything from a small electronic component, to a barbeque or even a complete motor vehicle. The massive manufacturing capacity of China is underpinned by government incentives. The impact of this capacity on the Australian manufacturing sector, combined with the influence of the high Australian dollar and open domestic markets, is well documented. In many cases, such imports constitute direct competition to BlueScope Steel's Australian manufacturing customers, and therefore indirect competition to BlueScope Steel itself. BlueScope Steel's exposure to indirect domestic competition was a significant factor in its 2006 decision to close Australia's only tin mill.

⁸ Iron and Steel Statistics Bureau, 2008

⁹ International Iron & Steel Institute, 2008

¹⁰ Ibid.

¹¹ ABS data

¹² OneSteel Limited data

¹³ BlueScope Steel data

9.2.3 BlueScope's Classification as a TEEI Firm

While neither the paper nor the previous Task Group report on a proposed Australian ETS provides much detail on industries which would be classified as TEEI industries, the latest NETS paper states that such industries are those that have a high emissions intensity, are exposed to increased costs due to an ETS and have trade exposure to competition (international and domestic) from companies in countries with no commensurate emissions constraints.

On this definition and any other reasonable definition of TEEI industries, BlueScope Steel is a TEEI firm that will face increased competitiveness issues as a result of the increase in energy prices and the costs of direct emissions when an ETS is introduced if similar emissions constraints are not imposed in competing countries. This is supported by the latest NETS report and a number of analysts that expressly recognise that the iron and steel industry should be classified as a 'trade-exposed, emissions-intensive' industry.¹⁴

9.3 Recommended Form of Assistance for TEEI industries

The Government should consider a range of measures to assist those businesses which will be most severely impaired by an ETS obliging emitters to acquire and acquit permits. BlueScope Steel recommends that all options be considered against the impact that each is designed to alleviate and a range of options may be capable of being applied to address the different ways in which various TEEI firms will be affected by an ETS. BlueScope Steel favours an appropriate allocation of free permits.

9.3.1 Negotiated Agreements

The 2002 COAG Energy Market Review proposed that the traded goods sector be excluded from the operation of an ETS until Australia's international competitors had introduced comparable carbon constraints.

Negotiated agreements represent a variation on the exemption model, by which TEEI firms are eligible for exemptions if greenhouse performance is improved to an agreed benchmark. The New Zealand Government intended to introduce negotiated agreements as part of its proposed carbon tax. Under these agreements, TEEI firms could apply for full or partial relief from the carbon tax in return for moving to 'world's best practice' emissions technology and processes.

9.3.2 Free Permit Allocation

If the government elects to make TEEI industries liable under the ETS rather than exempting them, BlueScope Steel submits that free permit allocation with minimal administrative burden is the most appropriate, simple and effective assistance methodology.

¹⁴ See for example, H Saddler, F Muller and C Cuevas, '*Competitiveness and Carbon Pricing: Border adjustments for greenhouse policies*', Australia Institute, April 2006

Both the National Emissions Trading Taskforce and the Prime Minister's Task Group on Emissions Trading proposed to compensate TEEI industries via the free allocation of permits. The number of permits allocated would be tied to the likely financial effects of emissions trading on the relevant firm and would be determined in advance by an independent body.

Similarly, under the EU ETS, at least 95% of permits were required to be allocated free of charge in Phase 1 (2005-2007), and at least 90% in Phase 2 (2008-2012).

BlueScope Steel recognises that the provision to it of free permits to enable it to conduct business on a level playing field should involve tangible commitments on its behalf to reduce greenhouse gas emissions. On the final design of the scheme, consideration may be given to linking the number and nature of free permits allocated to the effort expended on, and effectiveness of, emission reduction measures. Any such linking should be made with regard to each specific industry and its technical ability and financial capacity for abatement.

9.3.3 Cash Payments

The paper suggests that whether TEEI firms receive payments in cash or free permits is immaterial. This is not the case for BlueScope Steel. If TEEI firms are required to purchase permits at auction upfront and seek assistance “as closely as possible to contemporaneously with the loss of revenue”, then those firms would be required to use large sums of cash to purchase permits, without the ability to pass this cost on to customers. This, in turn, would constrain the amount of cash available for investment in other areas.

Furthermore, seeking and having to justify post-hoc compensation to a government authority would create enormous uncertainty with regard to a TEEI firm’s investment and dividend planning, balance sheet gearing and credit rating. This would introduce greater risk and uncertainty for investors.

9.3.4 Offsetting Tax Reductions

This option involves offsetting the cost of acquiring permits through auctions or on the secondary market with a reduction in other business taxes. The United Kingdom's Climate Change Levy adopts this approach. Although businesses are required to pay the levy, this is offset by reductions in compulsory employer contributions to social security taxation.

Typically, offsetting tax reductions are designed to achieve economy-wide benefits, not compensate individual firms. General cuts in existing Commonwealth or State-level taxes would benefit each firm equally, but carbon prices would burden some firms more than others. Therefore, individual sectors and firms are likely to experience differing impacts. As a result, offsetting tax reductions are less suited (compared with negotiated agreements, free permit allocations and cash payments) to the specific task of preserving the competitiveness of TEEI industries.

9.4 Method to Determine Assistance Required

BlueScope Steel is very concerned about the likely unworkability and ineffectiveness of any methodology that attempts to determine the impact of a carbon price on steel prices. The paper proposes, *“there will be a calculation of the differential between actual international prices of the trade-exposed emissions-intensive product, and the price that would have been obtained if all substantial competitor and potential competitor countries applied emissions or energy or carbon prices at similar levels to Australia”*.¹⁵

A complex system for calculating disadvantage on a product-by-product basis is not a workable methodology; nor is it likely to meet the stated design principles of the ETS or the intent of the scheme to provide effective assistance for TEEI firms.

There are a large number of complexities and issues that BlueScope Steel suggests would need to be addressed when attempting to complete this exercise including:

- The fact that international prices for the same product often vary in different markets (i.e. there is not one international benchmark price for each of BlueScope Steel’s products) and can be highly volatile;
- The fact that BlueScope Steel has multiple supply offers and multiple price streams across multiple clients covering multiple periods means that simply using the average of industry price benchmarks is not appropriate;
- How will “potential competitor countries” be determined? They are likely to be any country that has the potential to adjust product mix or increase steel production to enable export;
- How will pricing changes to protect markets be treated?
- Steel companies internally transform energy on site via various uses of coal. How will the government or Independent Carbon Bank (ICB) gain access to accurate and comparable base cost of energy or associated GHG emissions, from international competitors (that would then have an additional notional carbon cost applied)?
- How will the government or ICB gain access to sensitive proprietary information belonging to international competitors relating, for example, to current operating costs? Information of this sort is not publicly available;
- Will the treatment or calculation be different when trade exposure is to both imports and exports?
- How trade exposure will be calculated if an imported product is finished (e.g. a fabricated product) whereas the domestic product produced by BlueScope Steel is a semi-finished input (e.g. cut to order steel plate);

¹⁵ Section 3.8, Avoiding Distortion in trade exposed, emissions-intensive industries (TEEIs), Page 39 of Discussion Paper

- Whether the assistance calculation will apply only to like-for-like product (for example, domestic plate versus imported plate)?;
- How any calculation will take account of the steel sold by our domestic distribution customers to a myriad of their own customers and for a range of end-uses too numerous to track. The steel in these products is also trade exposed; and
- The fact that an assistance calculation made in this way could not be transparent due to the type of commercially sensitive information that would be required.

To provide an accurate calculation of price impact would place an enormous administrative burden on TEEI firms. An idea of this administrative cost can be found by examining anti-dumping applications. BlueScope Steel's experience with lodging an anti-dumping action to prevent steel products being dumped in the domestic market by international competitors is that such claims consume thousands of hours of labour over a period usually extending for 12 months or more. Regulators also typically incur significant costs in investigating and determining such claims. If the anti dumping experience is representative of the process that TEEI firms would need to go through, it could take years from the commencement of an ETS before industry received assistance payments.

The model proposed in the paper, when applied appropriately and accurately to the steel industry, clearly does not meet the design principle of simplicity stated by the review. To address all of the issues above is an impractical and immense task. Compliance costs would be significant for both participants and regulator, and the uncertainty of outcome inherent in such a complex process would significantly add to the level of regulatory risk.

9.5 Flow-on Costs of the ETS

In addition to the direct cost of carbon for emissions generated through BlueScope Steel's manufacturing processes, flow-on costs resulting from the introduction of a carbon price – such as increases in prices for raw materials, distribution, fuel and electricity - will likely be passed directly to BlueScope Steel as the end-use customer. As previously discussed, BlueScope Steel would have limited ability to pass these additional costs on to its customers.

Any assistance mechanism for TEEI firms must therefore also include a comprehensive evaluation of the impact of a carbon price on the cost of inputs. The recent NETS report recognises the need to provide assistance to TEEI firms for increased electricity costs. Some of the inputs where BlueScope Steel believes it is likely to face increased costs include (but are not limited to):

- Iron Ore and Coal – The price is linked to negotiated world pricing but domestic transport and handling costs will be affected.
- Steelmaking Ferro Alloys and Coating Metals – A significant percentage of these high value inputs are sourced locally and will be impacted by carbon costs passed on by supplying companies.

- Labour - Employees and contractor wages will be affected by the flow on costs through the economy causing a higher cost of living and potentially inflation.
- Paint – Produced and sourced domestically and BlueScope Steel expect an ETS flow on cost.
- Electricity - Expecting an ETS flow on cost increase for any purchased electricity not supplied by the planned SCP at Port Kembla.
- Purchased gases - Expecting an ETS flow on cost increase.
- Refractories – Some sourced from domestic suppliers and expect an ETS flow on cost increase.
- Supplies and consumables - Expect an ETS flow on cost increase.
- Freight - Expect an ETS flow on cost increase.

With such a broad range of potential cost imposts it is imperative that these are addressed in the assistance provided to TEEI firms.

9.6 Future Treatment of TEEI Firms.

Details (and certainty) about the criteria for assessing a future phasing out of assistance to TEEI firms are also critical to enable us to evaluate the prospective medium and long-term costs for BlueScope Steel of an ETS. Such information is yet to be made available for review.

9.7 Abatement Agreements

BlueScope Steel has negotiated an agreement with the NSW State Government to provide some assurances regarding the Port Kembla Steelworks Co-generation Project. This agreement provides certainty that the large capital investment for the SCP will provide a sufficient return to make it viable, and that the value of the project will not be destroyed by changes to the rules of the GGAS or other NSW Government GHG schemes. BlueScope Steel believes that a place exists for this type of arrangement in a Federal ETS. Firms investing in large abatement projects will need long term regulatory certainty in order to avoid sovereign risk and for such projects to be feasible.

9.8 Recommended Assistance Methodology for TEEI firms

An effective method of transitional assistance for TEEI firms should include the following:

- Free allocation of permits to cover the majority of direct and indirect emissions;
- Emissions permits allocated to an agreed baseline, subject to achievement of agreed improvements, over a reasonable time period;
- Regular review of international technology developments and regulatory arrangements;
- A ‘guaranteed’ long term improvement trajectory that allows company directors to confidently make investment decisions in long-lived assets; and
- Administratively simple with no complex or expensive administrative burden.

BlueScope Steel accepts that there needs to be an incentive to drive efficiency improvements; however such an incentive needs to be set with specific regard to each industry and its technical ability and financial capacity for abatement.

A complex system for calculating disadvantage on a product-by-product basis is not a workable methodology; nor is it likely to meet the stated design principles of the ETS or the intent of the scheme to provide effective assistance for TEEI firms.

10. Governance

BlueScope Steel agrees with the review that it is the role of the Government to develop the policy framework around which an ETS will be based. Similarly, BlueScope Steel broadly accepts the proposed model of an independent body (ICB) to administer the ETS.

11. Compliance and Penalty

BlueScope believes that a penalty for failure to surrender the required emissions permits and/or failure to repay borrowed emissions permits is necessary for the scheme to achieve its overall aim of reducing emissions.

The application of a ‘make-good’ provision in addition to penalties in the event of non-compliance would be likely to also assist in maintaining the integrity of an emissions trading scheme.

BlueScope Steel cannot provide further substantial comment on this arrangement until more detail is available.

12. Use of Permit Revenue

12.1 Assistance for TEEI Firms from Permit Revenue

A matter of importance to BlueScope Steel is the use of permit revenue to provide assistance to TEEI firms, or preferably to structure the revenue collection such that it enables the issuance of free permits to provide this assistance.

12.2 Regional Assistance Programs

Regions such as the Illawarra in NSW are greatly exposed to the potentially adverse economic effects of an ETS. Both the coal and steel manufacturing industries (and their supporting infrastructure) are significant contributors to the region's economy. Similarly, the steel industry is also a significant contributor to the Mornington Peninsula region in Victoria.

The need for structural assistance for communities, such as the Illawarra and Mornington Peninsula, would be greatly increased should the ETS design (in particular the assistance for TEEI firms) have an adverse effect on the iron and steel industry.

In the event of an ETS affecting the ongoing viability of the iron and steel industry in Australia, the negative impact on these communities would be significant. It is important that the scheme allows for assistance to be made available to these communities.

12.3 Abatement Projects

The government should also consider hypothecating revenue raised from the sale of permits to fund emission abatement or reduction projects, including major capital projects needed to cut emissions in emission intensive sectors (such as steel).

13.0 Comments on Appendix 3 –TEEI Firms

The paper includes a proposed conceptual model in Appendix 3 for transitional assistance for TEEI firms. BlueScope Steel would like to comment on some of the underlying assumptions made in Appendix 3 in light of its own operations.

The assumption that plant and machinery (capital stock) is fixed only for the short term cannot be applied to steel manufacturing infrastructure. BlueScope Steel reiterates that the steel industry typically utilises plant with very long asset lives.

The implication that production levels can be easily adjusted to match the market is difficult to apply to the steel industry. A steelworks is a vertically integrated asset in which each major process or piece of equipment is optimised in size in order to provide an overall site efficiency and allow the manufacture of steel at a competitive cost. Adjusting production downward by even a small percentage has a large flow-on effect on unit costs throughout the site, as in most cases fixed costs do not change substantially.

Adjusting (lowering) production levels quickly moves the plant into an uneconomic state of operation. The economics of the steel industry requires that plants be run at full utilisation

all of the time in order to stay competitive. There is a 'tipping point' at which they rapidly become uneconomic. This 'tipping point' needs to be considered in relation to the transitional arrangements for TEEI firms.

Using the blast furnace process also limits potential turn down capability. Port Kembla Steelworks, for example, operates only two blast furnaces. Reducing production levels would eventually lead to a large step down in production as one furnace is closed.

The statement in the appendix that, "with the passage of time, the firm will invest in new production processes" is assumed to refer to new 'low emissions' production processes. As explained previously, new technology for low emissions iron and steelmaking is likely to be decades away from commercialisation.

The problem of overshooting and forcing firms to 'under produce' for a period of time whilst waiting for the rest of the world to implement carbon constraints is a real problem that needs to be addressed. However, the response to this problem, and the assistance provided to TEEI firms, needs to take account of the specific circumstances of the steel industry.