

## Garnaut Climate Change Review

CSR Limited has been operating in Australia for 152 years. The company is a leading diversified manufacturing company with operations throughout Australia, New Zealand, China and South East Asia. In 2007 revenues were \$3.1b with capital expenditure of \$256m. The company essentially operates within four divisions. These comprise aluminium smelting, though our shareholding in the Tomago aluminium smelter, Sugar, Building Products and Property Development.

CSR Sugar is the 5th largest sugar company in the world. The sugar division is involved with farming activities, operates seven sugar mills in North Queensland and in a joint venture with Mackay Sugar Cooperative Association Limited, 3 sugar refineries, located in Melbourne, Mackay and Auckland. The division also includes CSR Ethanol – a business which produces fuel, industrial, beverage, food and pharmaceutical grades of ethanol and liquid fertilisers. Integral to the sugar operations is an extensive network of rail freight. In addition the company operates two ocean going vessels for coastal and international transport of sugar and gypsum. Recently the sugar group extended its interest in power cogeneration using bagasse with an investment of \$160m in the Pioneer mill. The project was made possible through the MRET scheme. CSR is the sixth largest generator of RECS under MRET and the Pioneer facility is the third largest in capacity installed under the scheme. As the MRET target was not extended at the time, further investment in other CSR mills was suspended. An additional capacity of 300MW could be installed depending on default pricing and the forward curve estimates under the 20% renewables by 2020 policy of the Rudd Government. While the sugar industry has struggled in the recent past, the industry has almost completed deregulation and is well positioned to grow in strength in the future. CSR invests about \$80m of capital per annum in upgrades to its sugar business. The sugar sector presents some special issues in relation to coverage under the agricultural sector.

The building products division of the company was recently expanded by the acquisition of Pilkington Australasia and DMS Glass. Other well known building products brands held by CSR are Bradford Insulation™, Gyprock™ plasterboard, Cemintal™ cement sheeting, Monier™ and Wunderlich™ roof tiles and PGH™ bricks and pavers. We also own Edmonds ventilation and combined with our insulation and coated glass business are able to offer climate control solutions to our customers, reducing energy consumed in the built environment.

Notwithstanding the lowest number of housing starts in New South Wales since World War 2 and the need to mothball some tile and brick facilities, the building products group is a sound and profitable business. CSR is investing \$140m in a state of the art expanded plasterboard line in Melbourne and a \$50m green fields Bradford Gold™ Insulation in Brisbane. This follows an expansion at our Ingleburn site in New South Wales in 2006. Furthermore three new facilities have been built in China to serve that rapidly growing energy efficiency market. In 2006 the Oxley brickworks in Brisbane added a completely new line. Following the Pilkington Australasia acquisition, CSR has undertaken the previous owner's commitment to invest \$140m in the Dandenong furnace and in a glass coater, the only one in the southern hemisphere and one of only seven worldwide. This will produce Climate Smart Glass to tap into the demand for improved thermal efficiency in buildings and improve the performance of double glazing window systems.

In the absence of a timely international program, CSR Limited is supportive of a suitable Australian Emissions Trading Scheme, designed to link to other carbon markets as they evolve. It is vital to the trading scheme that Australia's energy intensive trade exposed industries are held even and that provision is made to allow for expansions and new facilities that could be built in Australia, but that otherwise would go overseas based on the differential treatment, or

in some important cases, no treatment of carbon price. CSR anticipates significant margin compression under an ETS regime and considers its glass and aluminium businesses as trade exposed and energy intensive. We note on p 48 of the Review that glass is not included in the category of TEEI.

The proposed trading scheme is not regarded by CSR as a sufficient measure to adequately deal with climate change, particularly as recent evidence presented by Professor Garnaut in his February interim report suggests that warming is proceeding faster than anticipated. To simply put a price on carbon and let that flow through market forces in the economy to correct and reduce carbon release, ignores the pace at which change needs to occur and overlooks market failure and potential perverse outcomes that can only be dealt with by other complementary measures. While the States, in the absence of federal leadership introduced a plethora of schemes the opportunity should be taken to not only streamline reporting, but to stream line the complementary policies and initiatives which amount to over 20 schemes. We should learn from each of these schemes and determine which should be carried forward, modified or wound up. Preferably the schemes should be carried at a federal level and not state by state. At a minimum, a consistent set of polices and accounting practices should be introduced where regulation is at a state level.

We agree with comments in the Review on p 48 that low income households may be disproportionately affected and complementary policies have a role to play in social equity. Improving the thermal efficiency of buildings not only saves money, but has well established health benefits.

Equally important is the extension of MRET and the implementation of the 20 per cent by 2020 policy. This allows existing technologies to capture renewable savings while other technologies develop eg hot rocks, CCS. It provides a window to deliver the extensive infrastructure associated with these new energy sources. P 51 of the Review notes that the ETS may have only a low price in the early years as abatement is taken up under MRET. In the end what matters is that abatement is occurring in the time table prescribed, or within the established trajectories. The burden may be higher for TEEI's in the early years as there is no planned compensation for costs arising from MRET. Renewable projects will be looking at project life of 20 to 30 years and this should be considered in the phase out analysis to ensure sovereign risk is not a factor. MRET going forward needs to provide a minimum of 10 years certainty to obtain board funding for renewable energy projects.

## Economic and Sectoral Impacts

CSR has not conducted or subscribed to any macro economic modelling of the impact of a carbon constrained economy. CSR has focussed effort on understanding the impact of a carbon constrained economy on its specific businesses.

### **Sectoral Impacts on CSR Business**

The trading scheme is not necessarily the best instrument to deal with each sector eg agriculture, built environment, transport etc. An unacceptably high price may be required in these sectors to bring about change and these are likely to be damaging to the economy as a whole. However to maximise the advantage available from minimum cost abatement and to have a stable and liquid scheme the coverage should be extended to those sectors which are

most effectively addressed by an emissions trading system. The scheme should be as broad as possible but only to the point that it is efficient to do so – capturing every last small segment or small scale facility may not be cost effective or have any significant outcome on mitigation. (An extreme case, although some think this is where carbon may end up, is that each individual has a carbon “credit” card and is accountable for their own emissions i.e. a system where everyone is responsible and the point of regulation is at the actual point of emissions).

No one measure will deal with GHG reduction. Introducing other sectors later in the program may add distortions and uncertainty to the market place. Future sectors should be identified now with a set timetable for inclusion and reporting data so that the market is informed. CSR made a separate submission to Professor Garnaut in December 2007, on the difficulties faced by the sugar industry in the event that this sector was to be covered.

CSR’s interests are diverse.

### **Agriculture**

Sectoral coverage would create substantial stress in the value chain for a commodity where 90% of the pricing received by farmers is set by the New York 11 commodity price for raw sugar. The value chain will bear higher cost inputs from fuel and fertiliser, but the overlay of N2O emissions without significant offsets through the value chain will impact Australia’s competitiveness against our biggest competitor, Brazil – a Kyoto signatory, but not yet applying a price to carbon. However the Brazilian industry has gained competitive advantage over the Australian industry through cogeneration projects providing access to CDM credits. Sugar harvesting and milling are integral processes. Sugar must be processed within hours of harvesting or the sugar content declines rapidly. Coverage of mills (food in manufacturing) and sugar growing and harvesting (agriculture) have cross sectorally linked boundaries. Given deeming provisions apply, as under the EU system, this should not create any complexity. However coverage of agriculture will potentially create difficulties in the farm sector, with implications for the whole industry. This issue is not faced by other Kyoto signatories in the sugar industry, eg Brazil Thailand, India and China because they don’t yet have a carbon obligation. Post 2012 it is not clear that a uniform scheme will apply and so Australian agriculture could still be significantly disadvantaged.

CSR Limited has in recent years become more actively involved in farming and is therefore very keen to participate in any further debates or discussion regarding agricultural coverage. CSR would be keen to ensure no double dipping occurred at the tax payers expense in relation to the interaction of ETS offset credits for forestry and the benefits accruing under the Government’s Managed Investment Scheme program.

Nevertheless opportunities do arise for the industry in extending production of renewable power generation. CSR also has opportunities to extend its investments in bagasse cogeneration through an extension of MRET through the 20% renewable power generation by 2020 policy and welcomes the potential opportunities that policy may bring.

### **Liquid Fuels**

For an ETS program, fuels can efficiently be treated through the application of a carbon excise or be brought into the scheme with an appropriate upstream acquittal point. The supply chain will acquit permits on behalf of the motorist in essence. A perverse outcome would occur if the same factor or requirement to acquit were applied equally to all fuels. Renewable fuels have a

quite different carbon footprint to refined petroleum products. To avoid perverse outcomes where renewable fuels attract the same treatment as petroleum fuels and are therefore either de-selected or non preferred by the fuel industry, requires special analysis and consideration.

While strictly reported under manufacturing, the fermentation of molasses and/or sugar is associated with the agricultural industry. Ethanol produced in this way has a low carbon footprint with each 1000litres of ethanol substituting for Mogas, reducing the life cycle emissions, conservatively calculated at 1.4t. (CSR Ethanol has completed a life cycle assessment which indicates higher savings, but is waiting independent verification). In effect, an E10 blend nationally would potentially reduce carbon emissions by at least 3mta. However for the industry to develop and invest, the credit needs to find its way back to the producer. It may be appropriate to set threshold levels as has been proposed in the EU and adopted in the US to ensure appropriate and desirable sustainability outcomes are met.

The coproduct of ethanol produced from sugar or molasses, is a liquid fertiliser which when applied back to the sugar crop using precision farming techniques, reduces N2O emissions from farming. The product is certified by the EPA for beneficial use.

The design of the ETS and treatment of fuels will be crucial in realising the potential of sugar based fuel ethanol. If not designed correctly, there is a potential for perverse outcomes whereby sugar derived ethanol may be deselected when in fact it is, sustainable and substantially greenhouse positive. Investment in the industry should be *encouraged* as a result of emissions trading.

### **Built Environment**

CSR can also play a significant role in demand side reduction through insulation, ventilation products and through coated glass and double glazing. Implementation of an ETS will provide other opportunities for CSR to improve manufacturing efficiencies and may lead to the creation of new products which will directly or indirectly lower greenhouse gas production. This is consistent with CSR's commitment to sustainability.

Sectors that can't reduce emissions or where there is a slow turnover of stock eg housing and commercial buildings should focus on other policies eg technical or performance standards. It is unlikely that households will be covered or that "price signals" arising from the scheme will cause substantial abatement at the consumer level. The building fabric for houses is regulated at a low level of thermal efficiency in Australia. Window treatment is generally poor and 5 star rating is well behind that of countries such as the USA, who although they turned their back on Kyoto, have at least seen the merit of good thermal insulation. Double glazing is the norm in California and regions with similar climates to Australia have 7 star ratings, out of a maximum score of 10 Forty percent of houses in Australia remain uninsulated. At what point do project home buyers decide to select additional insulation over granite bench tops? Queensland has the highest rate of penetration of air conditioners and the lowest levels of housing insulation and has not yet adopted 5 star rating. We continue to build thermally inefficient houses in this country and will live with the consequences for the life of the property – up to 70 years.

Reducing thermal leakage from buildings is the cheapest way to obtain carbon credits and has negative cost. This was reinforced in the recently issued McKinsey Report, An Australian Cost Curve for Greenhouse Gas Reduction, which confirmed similar findings in Europe. Some state policies promoting thermal efficiency have also assisted with recognition by home owners of the value of retrofitting their properties.

Building standards deal with new construction, but they don't deal with existing buildings. Due to asymmetries between tenant and landlord, remedies for the commercial and residential sector will need to be found outside of the trading system. It is clear that consumers perceive thermal insulation as a comfort factor and do not relate it to GHG savings.

In the built environment there is considerable research in Europe and the UK as to which schemes are effective or not. For instance a recent report from the UN dealing with this can be found at

[http://www.unepsbci.org/docs/openfile.asp?ID=AD127DD49740BC5D&fileName=SBCI\\_CEU\\_Policy\\_Tool\\_Report.pdf](http://www.unepsbci.org/docs/openfile.asp?ID=AD127DD49740BC5D&fileName=SBCI_CEU_Policy_Tool_Report.pdf). Complementary policies such as increased building standards, grants/rebates and white certificate schemes can deal with commercial and consumer market failure. CSR strongly advocates that energy efficiency schemes such as these are an important ingredient to capturing the low hanging fruit and embedding energy savings into the built environment. Every measure will be required in the economy to achieve the objectives of a 60% reduction in emissions by 2020.

The CSR glass business faces substantial import competition from, Thailand, Indonesia, and China where energy subsidies are well understood in relation to government owned enterprises. Over the years there has been a steady stream of antidumping inquiries and measures against producers of glass in these countries. The impact of an ETS on the profitability of this business, which uses gas and power, is significant. If the Australian industry is to prosper and realise the energy efficiency potential of these products then it must not be disadvantaged relative to competition which do not place a price on carbon. CSR would be seeking an allocation of permits under the ETS to offset any disadvantage from the introduction of ETS.

#### **Aluminium**

CSR has a 25% share of the Tomago aluminium smelter. This competes in global markets with a highly transparent international price through the London Metals Exchange. The industry needs to retain its competitiveness in a world where not all economies are factoring a carbon price into production. The Tomago smelter is highly efficient and has progressively been expanded over the years. CSR would like to pursue further investment opportunities in Australia should they arise. The scheme must make provision for additional expansion in Australia such that it is not disadvantaged in a world that is not, and emphatically not pricing carbon elsewhere. The Aluminium Council will be making its own submissions to the Review.

#### **Cost of Emissions Reduction overtime**

- The cost equation is rather complex and much of the published modelling to date has focussed on power supply side economics. Examination of projected demand and supply curves as a function of the size of emission reductions has had considerable attention from various parties. The NETT made similar projections for its proposed scheme. Further studies have been released which take into account scenarios such as no more conventional coal fired power installations, but with an overlay of the new renewables policy. Underlying power prices will increase in the NEM, under these scenarios. Shortages of infrastructure for gas distribution and the need for more gas capacity will also drive up energy prices.
- Energy prices are already impacted as the supply industry positions for the introduction of an ETS. East coast gas prices and in particular, NSW have escalated dramatically as gas is contracted for power generation. This is stressing the existing infrastructure and new supplies are not being developed yet to meet the market. ETS will overlay a carbon price on top of market factors, which to a large extent are in themselves driven by ETS.

In the absence of ETS, incremental coal fired powers stations would not have stressed gas supplies to the extent that is now occurring.

- The ETS is but one policy measure required to deal with global warming and should not be seen as the sole policy panacea to solve global warming. The ETS should be introduced as part of a comprehensive policy on energy and carbon equivalence. While markets are a preferred mechanism, being efficient and low cost, they may not deliver full optimal outcomes for the environment eg full externalities may not be factored in. Other measures, some of which are in place today, will need to form part of the overall policy mix. Many of these policies will be outside of a global scheme in that they will not necessarily involve trading, although they might be funded from the allocation of permits. Measures such as renewable energy, demand side reduction programs, home energy funds, white certificate schemes and the trade off between fast to implement versus costly power versus lower power cost generation, but high capital and technology barriers need to be part of the mix.
- Emissions trading will encourage greater focus on energy cost reduction through improved operating conditions and processes and additional capital investment in plant energy efficiency over and above the business as usual situation. Energy intensive investments already have a significant focus on energy conservation. For those industries it becomes an issue of whether Australia remains competitive as a supply source and whether further investment in production capacity is attractive in Australia or not. In the end, demand for the product will be fulfilled from the lowest cost international producers.
- Similarly MRET will impact the underlying price of power on the NEM. Renewables are not bid into the system. The impact of these increasing costs is not recoverable under ETS and the proposed mechanisms for permit allocations to TEEI. It is quite apparent to businesses today that the cost imposts of ETS will go beyond the simple cost applied to carbon as discovered through the traded market. The low cost energy based Australian economy is already undergoing a significant transformation. In theory the pathway of economic cost to the nation will be driven by the forward reduction curve, marginal cost of power generation as perceived by the market, and the cost of public good schemes on demand side reduction. These are all part of the mix to lowest cost abatement. However this is already being overlaid by other factors, such as infrastructure and scarcity ahead of ETS.
- Further developments are required in the NEM which may make low emissions technology more attractive. Reward the provision of network services – avoided TUOS, recognise the value of avoided network augmentation costs for embedded energy, provide improved rules and fairer guidance on network access and provide access to avoided network losses.
- The net cost will also depend on how government manages the tax stream likely to arise from an ETS – how much it costs to hold energy intensive import competing industries and disadvantaged utilities whole. Cost will also depend on which sectors are deemed in and out eg agriculture may be excluded, or if included could be costly to administer, transport could be handled efficiently through a carbon excise linked to some kind of forward carbon price. etc. In other words the full scope of the scheme will determine how much it costs. Already some unusual rulings are emerging in taxation treatment

whereby the cost of offsets is not deductible. New Zealand appears to be taking a pragmatic approach, whereby permit acquisition is treated as a legitimate business and therefore deductible cost and sale of permits goes to the revenue line. CSR's view is that permits should be exempt of tax. Taxing of permits defeats the purpose of any hold even provisions of a scheme. Trade exposed industries would effectively see only a partial allocation of permits if they were subsequently taxed. Furthermore there is likely to be an arbitrage market operating in an Australian scheme between those who have franking credits and companies that do not. Important questions to be addressed are whether acquiring permits is a tax deductible input and profits generated from allocated, created permits or auctioned permits are taxable as CGT are all important design features. Over laying this with international tax treatment will further complicate the admission to foreign schemes.

Internal trading within companies should be encouraged as a way to develop carbon neutrality. This should also be examined from a favourable position from a tax treatment perspective.

- There are many other tax treatments which could help drive to a lower the cost and accelerate the transition to a lower carbon economy.

These could include possible state and federal measures as:

- GST free products as approved under GHG Friendly accreditation
- Eliminate land tax on carbon neutral manufacturing facilities
- Double depreciation for abatement plant
- 150% deduction for abatement plant
- Eliminate payroll tax for employees dedicated to GHG matters
- 120% deductions for green power purchases for business
- Income tax rebates for energy efficiency installation in homes
- 200% R & D tax concessions on carbon sequestration work.

Some of these supplementary measures could be considered along with other policies introduced by the states and federal government as part of comprehensive measures. Adoption of these measures will depend on how quickly government perceives the need to accelerate programs to meet Australia's targets and whether warming is perceived to be more severe than previously thought.

However modelling should look at the impact of an AETS on an after tax basis as this will be the true basis on which decisions are made. So far the government has been silent on tax treatment and the go forward basis is not understood by industry.

- There will be a significant issue under an ETS regime in up skilling and re skilling resources. ETS will not only encourage low emissions power generation but will have profound effects throughout the economy. New manufacturing processes will be introduced throughout industry which will require foreign skills and know-how which will have to be translated/transferred into the local economy. If we have a skills shortage now, it is likely to become worse under an ETS regime and Education and Immigration policies will need extensions.
- Other costs will be those operating costs for covering the integrity and operation of a credible transparent trading facility. CSR has already spent considerable sum of money setting up systems to measure its carbon footprint. IT budgets to cope with NGERs alone will be substantial. In addition there is an auditing and compliance burden associated with the plethora of state and federal schemes.

- Once implemented some perverse outcomes will inevitably arise from a scheme which is carbon only focussed. Economic reality from a higher cost of carbon will overwhelm sustainability principles. Examples are starting to emerge whereby higher carbon footprint, but otherwise sustainable products manufactured today, can be replaced by naturally occurring products, which cannot be renewed. Overwhelming economic and competitiveness with nations not introducing carbon prices will in some instances, drive the use of natural resources. Sustainability will have a different meaning post ETS. No-one has undertaken broad research into the implications of ETS on business inputs and repercussions.

### CSR Seeks Comprehensive, but Streamlined Policy on Climate Change

#### 1. Comprehensive Policies Required

An ETS is but one policy measure required to deal with global warming and should not be seen as the sole policy panacea. A cap and trade scheme importantly introduces a carbon equivalent price. Such a model sets up a broad framework which should deliver the lowest cost and easiest to implement measures first. Some measures may be low cost, but not commercially ready or may in fact be high capital investment. Technologies will need to be suited to the Australian grid and on this basis government should not favour one technology over the other. A suite of technologies will be required in the mix.

An ETS should be introduced as part of a comprehensive policy on energy and carbon equivalence. While markets are a preferred mechanism, being efficient and low cost, they may not deliver full optimal outcomes for the environment eg full externalities may not be factored in. This was recognised by the Victorian Government when launching its VEET scheme it said "Emissions trading by, itself, will not realise all the cost-effective abatement available from stationary energy use" "Upstream carbon price alone not very effective in motivating households and other small users:". (John Krbaleski, Director Energy and Sustainability, Department of Primary Industries, 27 Oct 2007) The Victorian Government went on to examine the rigidities and price inelasticity associated with small users and households. The findings are consistent with market research undertaken by CSR in relation to barriers associated with the up-take of thermal insulation. Other measures, some of which are in place today, will need to form part of the overall policy mix. Many of these policies will be outside of a global scheme in that they will not necessarily involve trading, although they might be funded from the allocation of permits. While the States, in the absence of federal leadership, introduced a plethora of schemes, the opportunity should be taken to not only streamline reporting, but to stream line the complementary policies and initiatives which amount to over 20 schemes. While we have encouraged the states and applaud their initiatives in the absence of a broad based federal scheme, it is our strong view that for efficiency in an economy the size of Australia that we have a National Scheme. Once a national trading scheme is introduced, existing schemes wherever possible, should be folded into the new scheme with no disadvantage for investors. Equity could be hard to achieve and thus some existing schemes may need to run their course. A new scheme may well provide distortions to the old schemes, where old markets fall away as investments target the more attractive of the schemes. The design of any new schemes will need to examine double dipping carefully. It may be sound policy to maintain some schemes which may be targeting sectors where the full environmental costs of a technology are not caught by emissions trading alone eg solar cities programs etc. or where asymmetries exist eg tenant/landlord. CSR advocates new standards and complementary measures to deal with climate change including demand abatement through energy efficiency in the built environment. This embraces energy efficient buildings and

appliances. As the scheme develops the necessity for complementary schemes can be re-assessed.

We should learn from each of these existing schemes and determine which should be carried forward, modified or wound up. Preferably the schemes should be carried at a federal level and not state by state. At a minimum, a consistent set of policies and methodologies and accreditation schemes, where required, should be introduced where there is no alternative to regulation at a state level.

It is not clear from the February Review, (p 20) whether complementary schemes will be included in the modelling.

Under an ETS regime there should be no need for the energy components of schemes such as EREP and EEO. The Greenhouse Challenge Plus obligation on fuel tax rebate could also be decoupled.

The Review endorses many of the design features proposed by the former PM's Task Group. (p44). We would add to the second component of R & D strategy some funding for commercialisation. R & D is not sufficient – new ideas and new products have to be brought to market and commercialised. The Review suggests public funding or assistance with infrastructure for new R & D, presumably associated with CCS or bringing hot rocks power to market. The policy should also embrace non infrastructure funding for commercialisation and acceleration of new products.

## 2. RD & D

The Feb Interim Review Paper, p27 mentions high investment in early years and elsewhere the paper discusses funding flows from auction proceeds. In addition to RD & D funding, could also be used to flow through to assist with commercialisation of new technologies. This would assist in driving the cost down of new technologies or help speed up the commercialisation of new technologies. Current industry programs are aimed at small business and exclude large companies. Separate programs to COMET etc need to be established. P52 - much focus is given to new technologies. However much can be done with existing technologies. MRET will draw on this rather than new technologies and other complementary policies will help to exploit technologies and products which are in place today, but not fully utilised.

## 3. Linked Schemes

CSR's view is that given the complexity of international relations and interests, it is unlikely in the foreseeable future that there will be a universal or "global" emissions trading scheme. What is likely to emerge post Bali and in fact is emerging already, is a series of country or regional schemes which will integrate into some kind of international system, perhaps somewhat like a currency exchange or a WTO model. An international, (but not global) scheme would be one where there is perhaps an overarching global body which accredits schemes and provides oversight to country or regional schemes. Only accredited schemes can trade with one another. This would provide aspirants a pathway to accession, perhaps like a WTO model. The detail and how this will work is yet to be developed in the post Bali deliberations.

The Australian economy is energy intensive and as such stands to lose if a scheme is implemented poorly. CSR's preference would be to establish an Australian scheme and then migrate into an international scheme. This has the advantage of settling down our scheme and learning the lessons before accession to a greater market, but also to allow the larger markets to develop and grow. Provisions should be made so that we do not import a high carbon price resulting from any international linkages, which are to the detriment of the Australian economy.

Carbon manipulation in international markets, while these schemes are in their infancy, should not be permitted to stress the Australian economy. Again New Zealand, which has been quick to seek linkages to the EU, is considering similar escape provisions.

The principles espoused in relation to the allocation of a global emissions budget need further consideration. CSR has difficulty with the notion of per capita allocations. Those who have used the Australian per capita consumption of energy as a call to arms overlook the fact that Australia has been a significant exporter of embedded energy. It will continue to do so for some considerable time. Allowing per capita emissions to converge so that every country is treated equally seems to overlook the competitive advantage of nations or those who will exploit this in some form or other. Data integrity of these measures for many participants must be questioned. The convergence approach invites people to immediately stop investing in energy intensive developments in Australia and to seek locations elsewhere.

NGERs has potentially set a basis on which baselines will be determined. P 41. To use baselines that pre-date the reporting periods will be extremely difficult to obtain. Going forward, particularly with NGERs having been in operation for some time should not present too many difficulties eg the 2008-2012 period referenced in the paper.

#### 4. Take a lead from California

While there has been political focus on Kyoto and the EU trading scheme, it would appear that Australia should consider some alignment with developments in California. They are leaders in environmental standard setting and policy development in the US and are examining linkages with the EU ETS. The Californian economy is not too different from Australia, being largely service driven. They have addressed non ETS remedies associated with climate change, such as gas mileage for cars, emissions standards and equipment efficiencies. Furthermore the policies which make it attractive for retailers to pursue energy savings through their customer base has been very successful and should be considered in the context of how a white certificate scheme might work going forward.

#### 5. Coverage

While we seek the broadest base trading scheme as possible, there are some significant sectors where for political reasons or complexity, sectors are exempt or partially exempt from the trading scheme. The complexity may arise that within those sectors there may be considerable opportunities to create offsets or raise permits eg agriculture and transport. The creation of permits is to be encouraged, particularly where the benefit is through renewable products. There may be disconnects in sectors such as these between the point of regulation (and whether permits are in fact required) and the points at which credits are generated. One should not exclude the other. Permits generated should be freely tradeable on the market, even if the point or mode of regulation for the sector is controlled differently or exempted.

#### 6. Allocation of permits

Permit allocation will be a balancing act but CSR supports free allocation to generators who are unable to pass the full costs through to the market, and free allocation to trade exposed energy intensive industries. We do not seek to enter into subsidy mechanisms but an allocation of free permits to the user, in the case of energy intensive producers and not to the power companies. The scheme needs to have maximum political acceptance, but prevent windfall gains as we have seen in the EU where allocations ended up in sectors who were able to fully pass through their costs to the market, creating windfall profits. Consumer acceptance and engagement will be important for acceptability of the scheme.

The scheme needs to be comprehensive and embed the mechanisms for ongoing permit allocation, rather than the concept of enforceable promises, dependent on an unknown future. If trade exposed industry is to sign up to the scheme then it needs to understand the full proposal now and not leave important issues up to later discretion, manipulation or re-interpretation.

Permit allocation mechanisms should be based on fair and accurate estimation mechanisms, and where long term contracts exist, assessments should be made on an assessment of the actual cost impacts. Use of electricity models or general prices should not be used to determine future allowances, especially where forward data exist.

Permits must be allocated for the expected remaining life of the asset and allow for future capacity expansion.

A considerable amount of Australia's wealth and jobs has arisen from Australia's competitive and abundant position in energy. Permit allocations are necessary in the absence of complete international arrangements on carbon to protect Australia against policy (or non-policy as the case may be) induced economic dislocation, while still achieving emissions cuts. Such allocations must be enshrined in the scheme and future renewal or extensions of existing electricity/energy supply arrangements must also be taken into account. Permits are required for all production; otherwise importers will be given a free advantage, even if exports are held even.

Remaining permits should be auctioned and the revenues used to support abatement schemes, through complementary programs, where the re-investment period is too long or stock turnover too low (eg housing – 70 years), price inelasticity, adaptation measures, other market failures, RD & D and corporate tax relief

CSR supports the free allocation of permits to trade exposed industry. We do not support the proposals on p 49 of the review whereby the independent authority makes assessments and counterbalancing payments. While the details of allocation of permits are to be worked out given the likely length of the permits, the allocation basis and principles regarding TEEI coverage must be fully disclosed, open and transparent, although providing confidentiality of business data where necessary. Permits should be issued over a substantial period. Investments are made for a 20 or 30 year asset life and this must be taken into account. Proposals to have the independent authority make these assessments seems reminiscent of the Prices Justification Tribunal – not something we would wish to return to.

The Review on p50 goes further to imply there is no tradition of compensation for reforms. One example comes readily to mind where the tax payer is funding the motor vehicle industry into a transition as a result of lower tariffs. We have seen other examples with Kodak and further research would certainly reveal other complementary measures. Tariff reductions were brought in over a long period and other adjustments and reforms in the economy to reduce labour rigidities, training and generally improve economic productivity accompanied these adjustments. No such broad policy measures are accompanying this legislation. The Review is not proposing caps, but calls for more urgent action. Therefore the adjustment will be rapid and more severe than many companies would have anticipated as recently as one year ago. In this case we argue that there is a need to break with a tradition that has been honoured in the breach. While some consideration may have been given to carbon pricing in recent investment decisions there has been no way to factor in forward pricing of energy and carbon as the market does not exist. It is more likely that sensitivities were chosen and some investment judgements made about equipment efficiencies, but it would be an overstatement and a broad judgement to say that many businesses have re-engineered their production processes. If this was true on a broad scale then there would be no need for programs such as EREP and EEO.

CSR supports the free allocation of permits to trade exposed industry. We do not support the proposals on p 49 of the review whereby the independent authority makes assessments and counterbalancing payments. While the details of allocation of permits are to be worked out given the likely length of the permits, the allocation basis and principles regarding TEEI coverage must be fully disclosed, open and transparent, although providing confidentiality of business data where necessary. Permits should be issued over a substantial period. Investments are made for a 20 or 30 year asset life and this must be taken into account. Proposals to have the independent authority make these assessments seems reminiscent of the Prices Justification Tribunal – not something we would wish to return to.

The Review on p50 goes further to imply there is no tradition of compensation for reforms. One example comes readily to mind where the tax payer is funding the motor vehicle industry into a transition as a result of lower tariffs. We have seen other examples with Kodak and further research would certainly reveal other complementary measures. Tariff reductions were brought in over a long period and other adjustments and reforms in the economy to reduce labour rigidities, training and generally improve economic productivity accompanied these adjustments. No such broad policy measures are accompanying this legislation. The Review is not proposing caps, but calls for more urgent action. Therefore the adjustment will be rapid and more severe than many companies would have anticipated as recently as one year ago. In this case we argue that there is a need to break with a tradition that has been honoured in the breach. While some consideration may have been given to carbon pricing in recent investment decisions there has been no way to factor in forward pricing of energy and carbon as the market does not exist. It is more likely that sensitivities were chosen and some investment judgements made about equipment efficiencies, but it would be an overstatement and a broad judgement to say that many businesses have re-engineered their production processes. If this was true on a broad scale then there would be no need for programs such as EREP and EEO.

#### 7 WTO Compliance

Allocation rules, if that is the model adopted, must be WTO compliant.

#### 8. Offsets

CSR supports offsets for industrial process emissions. CSR believes that a wide a range of possible offsets should be made available under the scheme. This allows companies who may have diverse interests to use other mechanisms to reduce the cost of compliance.

CSR has international operations in developing countries and may have the potential to generate projects under the CDM. CSR seeks to have flexibility within a national scheme to apply those credits to its Australian operations should it choose to do so. If the scheme is linked internationally or part of an international ETS then it would be expected that CDM type credits could be realised.

CCS should not be covered under any offset arrangements. Generators are covered by the trading scheme so they can simply take account of reduced emissions through CCS – i.e. a net acquittal is sufficient.

Proponents should consider the extent to which internal trading may take place within a company i.e. intra company trading or between related entities. Off market deals can reduce the cost of transactions significantly. How these would work across international borders needs consideration.

#### 9. Scheme Arrangements

Market liquidity and design of permits eg life of permits, banking and limited borrowing rules must be developed to have an effective market place. Decisions will have to be made as to the level of standards of the scheme. To use an analogy do we operate under ASX standards or

Bendigo Exchange rules for example. There are plenty of financial and hedging models to use as benchmarks. Given the likely size of funds, rules and models appropriate to the risk need to be developed and there are plenty of skilled parties to advise on these matters.

### Acquittal

The basis for liability to acquit permits is not yet clear. The number of liable parties should not impact the number of permits required, but it will impact the number of market players and their size in a liquid market. If the PM Task Group report is adopted then approximately 900 facilities will trip. This creates some interesting dilemmas for manufacturers where energy is likely to be priced at two levels. One price for those who have to acquit carbon themselves and those who don't, where the supplier will acquit upstream. Thus the large "tripped" facilities need to manage their carbon risk, while their smaller competitors do not. Whether this bestows competitive advantage on one party or the other is yet to be discovered and it is tied up in risk management. New Zealand has addressed this issue by allowing untripped facilities to have the choice of opting into the scheme and allowing companies to manage their own risk. This should be a consideration for any Australian scheme.

It is also not clear where a party is a liable party that is liable for ALL scope 1 emissions. This could extend to other raw materials, not necessarily combustion products. If required to acquit then those that trip have to acquit and those that don't get a free ride.

A related issue is described in the Review, p 45 dealing with the forward establishment of prices. The more players who opt in to the market the more robust the market is likely to be. This supports our contention of opt in provisions.

### Institutional arrangements

Review p 46 describes institutional arrangements. CSR is of the view that policy, meaning policy settings, targets etc must be set independently of the authority, which in itself we agree should be independent.

### Summary

- CSR is an advocate for the introduction of a National ETS as a forerunner to joining an international scheme.
- The early introduction of a scheme removes the existing uncertainty and potentially allows projects currently shelved to move forward earlier than may otherwise occur.
- We recognise that an ETS won't provide certainty about forward pricing, unlike a carbon tax (although taxes are always subject to change); however business examines and deals with market risk all the time. CSR currently hedges aluminium, sugar, RECs and forex.
- However, the competitiveness of our energy intensive trade exposed sector must be protected until such time as our competitors embrace similar schemes. It is unlikely in our view that carbon based border adjustments will ever be introduced or effectively work.
- ETS is only one of many policies which will comprise a greenhouse gas abatement program. There are many complementary policies, which need streamlining into

complementary arrangements. Transitions from existing schemes must be at a no cost disadvantage.

- Complementary policies at a state level should be consistent if necessary at all.
- Given the diversity of interests within CSR commentators have noted that if the government gets it right for CSR, then they will get it right for the rest of Australia.