

**The Carbon Market – The Future for Australian Business
(Delivered by Grant Bransgrove, Net Balance Foundation -
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As I am sure everyone here today would agree, what a phenomenal twelve months we have seen on the issue of climate change right across the world. Nearly a year ago, Al Gore launched onto our cinema screens with the documentary 'An Inconvenient Truth' which presented the science and impacts of climate change in a way that was able to engage a whole new cross-section of society and it was leapt on by the mainstream media.

This was soon followed by the former Chief Economist of the World Bank Sir Nicholas Stern releasing the 'Stern Review on Climate Change' which spoke of the huge economic and social consequences of failing to act in the short term to curb greenhouse pollution.

The fact that these findings were released by highly reputable economist, rather than a guy in a lab coat, has had a pronounced effect in swaying public and media opinion behind climate change being not only just an environmental issue, but one that has massive economic and social consequences as well. Stern's report has

essentially destroyed the myth that taking action to address climate change is bad for the economy.

In Australia, climate change has gone from being an issue on the periphery of the Australian political landscape to one that could very well decide the outcome of this year's Federal election. The fact that you can't open a newspaper these days without seeing several articles per day on the issue and that we now even have reality T.V shows on climate change, suggests how far public opinion in Australia has shifted on the issue.

Only last week, Australia's peak scientific body the CSIRO released the results of a two year survey of people in NSW and Queensland where over 90% of respondents rated climate change as an issue that is vital to the nation's future. It also found the public was crying out for more information on what was being done to combat climate change and wanted more leadership on the issue, including financial incentives or penalties to bring rapid change.

Perhaps as a response to this survey or more likely just good timing, the Federal Labor opposition at its National Conference last weekend announced plans to provide \$10,000 interest free loans for up to

200,000 households to install energy and water saving products around the home. This policy which is clearly targeted at the green vote is further demonstration of just how much climate change has resonated around the electorates of Australia. It will be very interesting to see when handing down his twelfth Budget speech next week whether our Treasurer, Mr Costello utters the words "Climate Change" for the first time. My guess is probably yes!

Despite the groundswell of public and business support for action to address climate change, our Prime Minister re-asserted his views only last week that the economy is still a far more morally important issue than climate change. But however reluctant he has been in the past to develop a national carbon trading scheme or carbon taxes to address climate change, it now seems that even he sees the inevitability of market based instruments combined with reduction targets as being critical to reduce greenhouse pollution.

Later this month, the Prime Ministerial Task Group on Climate Change will hand down its advice on the nature and design of a global emissions trading system in which Australia would be able to participate. Whether the task force can come up with the design of a global emissions trading scheme in a few months compared to almost

a decade that it took to get final agreement on the Kyoto Protocol remains to be seen, but it is widely expected that the Task Group will announce a national target for the reduction of greenhouse gas emissions.

The Labor State Premiers have already announced their intentions to introduce a state-based carbon trading scheme by 2010, unless the Commonwealth acts to implement a national scheme. It is therefore seemingly a fate accomplished that Australia will have a nation-wide emissions trading scheme in place by 2010 at the very latest.

So what effect will the introduction of a National Emissions Trading Scheme or the imposition of a carbon tax have on business in Australia? Given Australia's historical reliance on abundant, cheap fossil fuels to meet its energy needs, it is inevitable that there will be an increase in the cost of energy. This will impact most on companies that use a lot of energy directly or that rely on suppliers that use a lot of energy, which will result in increased costs. Companies that sell high energy using products or services are also likely to be impacted with rising energy costs through reduced sales.

Having an understanding of these 'greenhouse liabilities' across the entire value chain is going to become increasingly important for companies in the 'carbon-constrained' world of the future and shows the importance of compiling and reporting on a comprehensive Greenhouse Gas Inventory across this value chain to help understand and therefore better manage their greenhouse exposure.

Companies that only have a limited focus on the direct emissions from their operations may misinterpret their actual greenhouse exposure and therefore miss out on major greenhouse risks and opportunities.

Investors may also view any significant indirect emissions either upstream or downstream from a company's operations as potential liabilities that need to be managed or reduced.

One business sector that has so far been a leader in trying to better understand and appreciate the large indirect emissions arising from their operations has perhaps surprisingly been the retail sector.

Wal-Mart which is the World's largest retailer having announced it's most recent annual net sales at almost 345 billion US dollars has launched an ambitious program to reduce the carbon footprint of it's

enormous supply chain which it estimates to be ten times the size of its own carbon footprint. It has developed an environmental scorecard for its suppliers to grade their environmental progress and will select those suppliers "moving in the right direction". It will also challenge its suppliers to come up with ways to remove non-renewable energy from the products that it sells and "make products that rely less and less on carbon-based energy". Wal-Mart is also currently developing a supplier energy efficiency program that will enable low cost technology transfer throughout its vast supply network.

Tesco, who is the UK's major food and grocery retailer has announced plans to list the 'carbon footprint' on each of the products that it sells so that consumers can make better informed decisions when purchasing products. It is also intending to limit air transport to less than 1 per cent of its products and will put an airplane symbol on all air freighted products.

IKEA is another retailer who is seeking to reduce its indirect emissions stemming from its operations. It has estimated that 83% of its total carbon footprint stems from customer and contracted freight travel. It has now developed policies aimed at encouraging more efficient fuel use by its freighting suppliers and is also endeavouring to locate stores

in areas that are served by efficient public transport and that reduce the distance in which customers travel to get to their stores.

Given the increasing consciousness of consumers on climate change, it seems inevitable that the carbon footprint of products and services will be a key factor influencing their purchasing decisions alongside other variables like price, product quality and branding. Companies that fail to recognize and respond to this consumer sentiment will potentially face losing market share in an era where individuals may actually have to conduct their lifestyles within a set carbon allocation which has recently been proposed in the UK and is receiving growing endorsement in Australia.

We are perhaps approaching an era where the taking of a non-essential short distance trip by air will be viewed as socially unacceptable as speeding or littering!!

The current structure of the Australian economy is also seemingly at risk with the adoption of global carbon markets in future. The export of coal is currently Australia's largest and was worth around \$24.5 billion in 2005/06.

As a person who grew up Newcastle, which is around a two hours drive north of Sydney, I have been able to witness first hand the profound effect that the rapid industrialization of the world has had on the demand for Australian Coal and particularly that coming out of the Hunter Valley. I can remember as a young boy in the early 1980's counting the number of ships waiting off the port of Newcastle to get loaded and five or six would be a big number. This past Easter, the number of ships waiting to be loaded at the world's largest coal port was said to be 75 meaning that a five year old probably wouldn't be able to play the game that I used to play as they would either get bored or lack the numeracy skills!! I can also remember waiting several minutes at rail crossings for huge coal trains to pass with well over 100 carriages.

While the coal industry has undoubtedly played a significant role in the Hunter and Australia's past and current economic prosperity, it seems that unless clean coal and carbon sequestration technologies are brought forward and deployed at a rapid pace, Australia's coal industry faces a very uncertain future. This is because of one thing. The world putting a price on a tonne of carbon to properly reflect its true cost on the world environment and to correct what Stern labeled the 'greatest market failure the world has seen'.

Australia is currently the world's largest exporter of coal having more than double the market share of the second highest exporter, Indonesia. Of the 233 million tonnes of coal that was exported out of Australia in 2005/06, around half was used for steel making with the other half used for electricity production. Japan was the major destination, receiving 45% of the total exports.

The greenhouse pollution produced by the eventual combustion of these Australian coal exports amounts to a whopping 565 million tonnes of carbon dioxide equivalent, which is between 1 and 2% of global greenhouse pollution. To put this into context, this is actually slightly larger than Australia's **net** greenhouse gas emissions calculated for 2005 of 559 million tonnes which was released only this week.

Yet because we export this coal and it is burnt in another country, these emissions count towards other countries greenhouse inventories - most notably Japan's. The carbon footprint of coal exports would be even larger once the energy of transporting this coal to distant countries is factored into the full life cycle as well as the emissions generated from the extraction of this coal back in Australia.

So what are the implications of these emissions on the long term future prospects on the Australian Coal Industry?

You probably would have heard in the media this week that the IPCC will later today in Bangkok release the findings of the Third Working Group Party on the Mitigation of Climate Change. An early draft version of the report obtained by the Fairfax Media last week is alleged to conclude that the cost of greenhouse gas pollution needs to jump to between \$US20 (\$24) and \$US50 (\$60) a tonne to tackle global warming.

If this was to be imposed now, the cost of the direct carbon emissions from the combustion of Australia's 2005/06 coal exports would attract costs of between 14 billion Australian dollars at the lower end and 35 billion dollars at the upper end. Given that Australia's coal exports were worth almost \$24.5 billion Australian dollars in 2005/06, you quickly see that the imposition of a price on carbon in future could severely jeopardize the long term economic viability of the coal industry.

It also has implications on the planned future expansion of Australian coal mines and coal loading capacity at ports. Only in the last month the NSW State Government approved two coal loading projects in Newcastle Harbour worth a combined total of \$1 billion that will see an 80% expansion in the coal loading capacity from 102 million tonnes per annum up to a maximum potential of 186 million tonnes per annum. This is on top of the \$900 million already spent on expansions in the previous decade.

There are also nine proposals to expand existing NSW coal mines and 13 proposals to develop new coal mines across New South Wales.

The imposition of a price on a tonne of carbon has the potential to lead to a significant drop in demand for Australian coal in the longer term, particularly if clean coal or carbon sequestration technologies are proven to be technically or economically unfeasible compared to other cleaner energy sources. These factors may make it difficult to get long term investment certainty on expansions to the Australian Coal Industry and potentially threatens the jobs of thousands of people employed in the coal industry.

It also seems that putting a price on a tonne of carbon is not going to be the only thing threatening the long term future of the fossil fuels industry. Just last month, in a landmark legal decision, The U.S Supreme Court ruled that the scientific consensus about global warming has legal merit, and that greenhouse gases are air pollutants that can be regulated by the US Environmental Protection Agency under the Clean Air Act. While the ruling was made in relation to the regulation of carbon dioxide emissions from new cars, legal experts in the U.S are seeing it as inevitable that it will also be eventually applied to greenhouse pollution from power stations and industrial emissions. The ruling is almost certain to have regulatory flow on effects to other nations as well.

So to sum up,

the future global economy is undoubtedly one that will see greenhouse pollution subject to increasingly stringent regulation to achieve the cuts we need to help avert the worst impacts of climate change.

Australia's long term future prosperity is going to be heavily dependent on how it responds to this issue over the next decade.

Perhaps we need to expedite research into clean coal or carbon sequestration technologies to ensure the long term future protection of

Australia's lucrative coal export market. Or perhaps it might make more economic sense and be a more effective global response to climate change for Australia to support the rapid expansion of its uranium industry? Or perhaps it might be better for Australia to focus its efforts on developing and deploying world leading renewable energy technologies to the developing world that sits virtually on Australia's doorstep.

These are all the debates that we urgently need to have in Australia and it will be essential to utilize the intellectual and financial capacity of the Australian Business Community to develop an effective national response to this global environmental crisis.

We can no longer assume that the natural advantages that have underpinned our economic successes of the past will be around in the future and Australia will need to be part of a global co-ordinated effort in responding to this substantial challenge.

Businesses that publicly report on their carbon emissions across their value chain have taken the first but perhaps most essential step that they can take to manage and reduce their carbon footprint. There is the old adage that "you can't manage what you don't measure", so

companies that establish a Carbon Inventory, set targets for emissions reductions, and use their inventory to identify threats and opportunities across their entire value chain, are well on their way to being the successful businesses of the carbon constrained world of the future.

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