THEMATIC

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Goldman Sachs JBWere

Carbon Pollution Reduction Scheme White Paper

Generous Compensation And A $25/tonne Carbon Price At Scheme Start Date On 1 July 2010; At Least 5% Emission Reduction By 2020

ESG | Australia

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- The Australian Government today released its White Paper on the proposed emissions trading scheme (ETS), officially referred to as the "Carbon Pollution Reduction Scheme". The report reveals higher compensation levels than proposed in the Green Paper, a likely starting carbon price of around $25/tonne and a start date of 1 July 2010. An "unconditional" targeted emissions reduction of 5% at 2020 (versus 2000 base year) has been recommended.
- The paper sets out the key design elements of the scheme:
  - (i) around 1,000 entities and will be covered, representing 75% of Australia's total emissions.
  - (ii) maximum sector coverage. Agriculture, however, will not be included until possibly 2015 due to the complexity of doing so.
  - (iii) significant assistance package for households to compensate for the carbon cost that will become embedded in the prices of goods and services. This assistance package will total $6.0 billion in 2011-12.
  - (iv) 25% of carbon permits will be allocated for free to assist emissions-intensive, trade-exposed industries (EITEs). Assuming EITEs grow at the same rate as the rest of the economy this level of assistance will rise to 45% by 2020. These industries will be assisted up to 90% of their emissions liability depending on carbon intensity relative to revenues or a measure of "value-add".
  - (v) electricity generators will receive direct assistance via a new mechanism called the Electricity Sector Adjustment Scheme (refer accompanying note in today's *Daily Cable* by Utilities analyst Kynwynn Strong discussing the issues in the White Paper for the Utilities sector).
- In general terms, the compensation offered by the White Paper (to both business and households) is generous. In particular, the move to offer EITEs compensation based on value-add (as well as revenue) is likely to mean more companies will qualify for 90% compensation than would have been the case had only a revenue-based measure, as originally proposed by the Green Paper, been used (as will the lowering of the threshold for 60% compensation).
- Similarly, the emissions-reduction targets of 5% by 2020 are likely to be generally viewed as conservative. The clear message from the White Paper is that more stringent targets will only be pursued in the event of a comprehensive global agreement (ie the post Kyoto framework to be negotiated in Copenhagen in 2009).
- With regard to specific company level outcomes, it is still difficult for investors to model this precisely given it is highly dependent on compensation outcomes. This, in turn is dependent on emissions data over 4.5 years from 1 July 2004 to 31 December 2008 on an activity-by-activity basis (because an average measure of emissions intensity over this period will be the basis of determining the compensation). Also value-add measures are required for modelling as this is an option for the basis for compensation. We highlight **AWC, BSL, OST, CEN, QAN, BLD, ORI, RIO, PPX, STO, LEI, ORG, FBU** from our modelling work with the Carbon Disclosure Project (CDP) as having high underlying carbon exposure at the indicated $25 per tonne price, but note that final compensation outcomes, once they are determined, are likely to mean that the final carbon cost is not material for the majority of these companies.

Important disclosures and the Reg AC Certification appear at the back of this report

The investor perspective on the White Paper

As we have previously highlighted (refer Green Paper article, *Daily Cable* 16 July), it is (i) the carbon price (ii) the level of compensation paid back to companies and (iii) the industry coverage of the scheme that are the crucial factors determining company valuation impacts from the Carbon Pollution Reduction Scheme (CPRS).

Today's White Paper sets out the framework for these key issues for when the CPRS starts on 1 July 2010

We discuss each of the three key issues in the light of today's report from an investor's perspective:

1. Carbon price

Under the scheme, the carbon price will be determined by the market based on the balance of supply and demand for permits.

Accordingly, the carbon price is not yet known with certainty, but the White Paper states that it, and other Treasury modelling assumes a price of $25 per tonne of CO2.

It further notes that Treasury modelling suggests that a 550ppm carbon concentration trajectory implies a $23 per tonne carbon price; to achieve a $450ppm trajectory - ie the more aggressive trajectory that may be aimed for in the event of a comprehensive global agreement (for example the post Kyoto framework to be negotiated in Copenhagen in 2009) - the price would need to be 110% higher (ie $48 per tonne).

A five-year price cap has been set in the scheme of $40 per tonne.

Over the longer term, a price of $35/$40 tonne may be expected and is consistent with the trends in the carbon price in the European scheme.

Our view is that $25 per tonne represents a reasonable estimate for the carbon price as a basis for modelling the impacts of the scheme. The key risk to the price being different to this appears to be if a comprehensive global agreement is reach at Copenhagen, which could imply the price cap of $40 would be reached (and an underlying supply and demand pressure according to Treasury modelling of $48).

The carbon price will be driven by the scheme caps on an ongoing basis: The White Paper states that the Government will specify Scheme caps for at least 5 years in advance. Also, up to 10 years of guidance will be provided through the establishment of "gateways" within which future Scheme caps will sit.

Scheme caps will be extended by one year each year, with gateways extended by 5 years every 5 years.

The first five years of scheme caps will be announced in 2010 prior to commencement of the scheme but after the Copenhagen negotiations for a global agreement. We suggest Copenhagen, and the resulting announcement on scheme caps, will be crucial to determining the likely carbon price throughout the first 5 years of the scheme.

The White Paper also reaffirmed the longer term government policy emissions target of a 60% reduction from 2000 levels by 2050, which agrees with the previous statements in the Green Paper and by the Garnaut review which stated that this is consistent with the requirement that Australia makes a similar emissions adjustment effort to that being made by other developed countries.

2. Compensation to companies/industries

The NET carbon cost – i.e. carbon liability less any compensation – is the driver of valuation outcomes for companies. The key message in today's report is that compensation for Emissions Intensive Trade Exposed (EITE) companies has been widened. In fact, the White Paper itself states that compensation to EITEs has been "significantly increased to further smooth the transition". This has been achieved via the inclusion of a value-added-based measure as a means to determine the level of emissions intensity of an activity and therefore its eligibility for compensation. This is in addition to the previously proposed revenue-based

measure. Our modelling suggests this has will have an impact in allowing more companies to qualify for 90% compensation.

Continuing the theme of widening compensation in the White Paper, in addition to the value-add measure, levels of compensation have been expanded by reducing the threshold for which lower-emissions-intensive companies can now qualify for compensation (ie an expansion of the 60% assistance category)

In general terms, providing compensation is consistent with the advice provided by the Garnaut Review that EITE industries are likely to require compensation due to the impact that imposing a carbon cost will have on their ability to compete with companies from countries which do not impose such a cost. Lack of assistance can effectively result in exporting production and the perverse outcome that carbon emissions are simply moved outside of Australia rather than reduced at all ("carbon leakage").

Also reflecting, however, what the Garnaut Review described as a "truly dreadful problem", offering compensation is not without controversy because while assistance may be required for competitiveness on one hand (and to prevent carbon leakage), on the other hand these sectors should also contribute to the cost of emissions abatement alongside other sectors and households. Excessive compensation can place too significant a burden on these other parts of the economy and potentially water down the signal to EITEs to move away from carbon-intensive technologies.

The increased compensation proposed in the White Paper is no doubt the result of intense industry lobbying since the release of the Green Paper. It proposes to allocate 25% of carbon permits for free to EITEs. Further, the White Paper forecasts that if EITEs grow in line with the rest of the economy, EITE assistance could grow to as much as 45% of the permits allocated by the scheme by 2020.

Consistent with the Green Paper, the White Paper proposes that the level of assistance will be scaled, based on carbon intensity relative to revenues or a new measure of value-add as chosen by the emitting entity. The compensation thresholds are:

- 90% for activities with emissions intensity of at least 2000t CO2-e/$m revenue or 6000t CO2-e/$m value-added;
- 60% for activities with emissions intensity between 1000t CO2–e/$m and 1999t CO2-e/$m revenue or between 3000t and 5999t CO2-e/$m value-added.

EITE assistance will decline at the rate of 1.3% per year.

In addition, the White Paper proposes assistance for "strongly affected industries". These are industries that are non trade exposed, are emissions intensive, have significant sunk capital costs and do not have economically viable abatement opportunities. The paper identifies that coal-fired electricity generators are to receive direct assistance via a fixed administrative allocation of permits equating to around $3.9 billion to the most emissions-intensive coal-fired generators based on an initial carbon price of $25 per tonne. The Paper states that as not all coal-fired generators are likely to experience "significantly adverse effects", not all will receive assistance.

The White Paper describes that "assistance will be determined in relation to the historical energy output of the power station between 1 July 2004 and 30 June 2007, and the extent to which the generator's emissions-intensity exceeds the ‘threshold' level of emissions-intensity of 0.86 t CO2–e/MWh generated, which is the average emissions intensity of all fossil-fuel-based generation".

Further, the White Paper states that the quantum and targeting of assistance has been to avoid a key concern regarding this issue, providing generators with windfall profits. Also a review has been set for 2013, and the final 2 years of assistance will be withheld if this is seen to be the case.

For further detail regarding the implications of the Scheme on the Utilities sector, refer accompanying article in today's *Daily Cable* by Utilities analyst, Kynwynn Strong.

3. Industry coverage

The White Paper confirmed the expected stance that the CPRS should have maximum industry coverage with the rationale that this will reduce the overall cost of abatement and ensure the burden is spread across the economy.

Accordingly, the scheme will cover around 1000 firms, representing approximately 75% of Australia's emissions.

Agriculture will be the key exclusion from the scheme, at least initially. This is due to the complexity of covering this sector which is characterised by a large number of small emitters with a complex calculation of emissions. The White Paper states that the inclusion of this sector is desirable and the Government will undertake a project to determine if it is viable to include this sector from 2015.

Deforestation will also not be included in the scheme.

Other issues investors will need to consider around the CPRS

Consideration of cost pass-through
Ultimately, the financial outcome from the pricing of carbon will be a function not only of the net carbon cost (carbon liability less compensation) incurred by each company, but also the ability that each one has to pass this cost down through the supply chain and to their customers. Hence we believe an analysis of industry structure and pricing power is integral to assessing the overall impact for investors of an emissions trading scheme.

This is relevant from both the perspective of passing on higher costs that a company may face from incurring direct carbon liabilities and also pass through of potentially higher energy prices that a company is facing due to carbon liabilities being incurred upstream.

Assistance for Households
The White Paper proposes a significant assistance package for Households to compensate for the cost of carbon that will become embedded in the price of goods and services. The White Paper estimates that consumers will face in increase in electricity cost of $4 per week and an increase of $2 per week on gas and other household fuels. The total size of the assistance package is estimated by the White Paper to be $6.0 billion in 2011-12.
Fuel taxes will be adjusted cent for cent to offset the initial price impact on fuel due to the introduction of the scheme.

Will there be linkages to international schemes?
This has the potential to impact the carbon price (if the Australian price becomes linked to the international price) and the underlying liquidity in the carbon market. Theoretically, international linkages will provide scope for lowest cost abatement. The White Paper states that the scheme will be designed so that it can link with international schemes.

What is the role of carbon capture and storage?
The Green Paper advocated the potential benefits in developing carbon capture and storage (CCS). This is from the perspectives of helping current coal-dependent regions to continue to grow and also because Australia is a major coal exporter and it therefore has an interest in enhancing the ongoing viability of coal.

This is consistent with the recommendation of the Garnaut review which recommended it would be in Australia’s interests to find out as soon as possible whether there can be a low-emissions future for coal, and to support rapid deployment of commercially-promising technologies.

Climate Change Action Fund
The White Paper announced that a $2.15 billion fund be will be established to assist, over a 5-year period, a smooth transition for various participants in the economy to an environment that has a price on carbon. It will have four streams of activity 1) Information, 2) Investment in Energy Efficiency and Low Emissions Technologies, 3) Structural Adjustment Provision for Workers and Communities and 4) Coal Sector Adjustment.

What is the timing?

The White Paper identifies 1 July 2010 as the expected Scheme start date. An Exposure Draft of the proposed legislation will be released for public comment in late February 2009. The legislation is expected to be introduced into Parliament in winter 2009.

Modelling company earnings outcomes

As we have highlighted previously, the Carbon Disclosure Project (CDP) provides a database of company level carbon emissions data for responding companies. From this we have identified companies that are potentially exposed to carbon liabilities based on the carbon price of $25 per tonne as implied by the White Paper. These companies whose carbon footprint at $25 per tonne represents more than 5% of their 2007 EBITDA are: **AWC, BSL, OST, CEN, QAN, BLD, ORI, RIO, PPX, STO, LEI, ORG, FBU** (refer chart overleaf for full list of CDP responding companies).

However, we emphasise that this is before compensation and we expect that the majority of these emissions-exposed companies will obtain compensation under the scheme, particularly given the new proposal in the White Paper that the determination for compensation can now also be based on value-add as well as revenue. Hence the above list simply identifies stocks with "underlying carbon risk" as opposed to the likely final outcome.

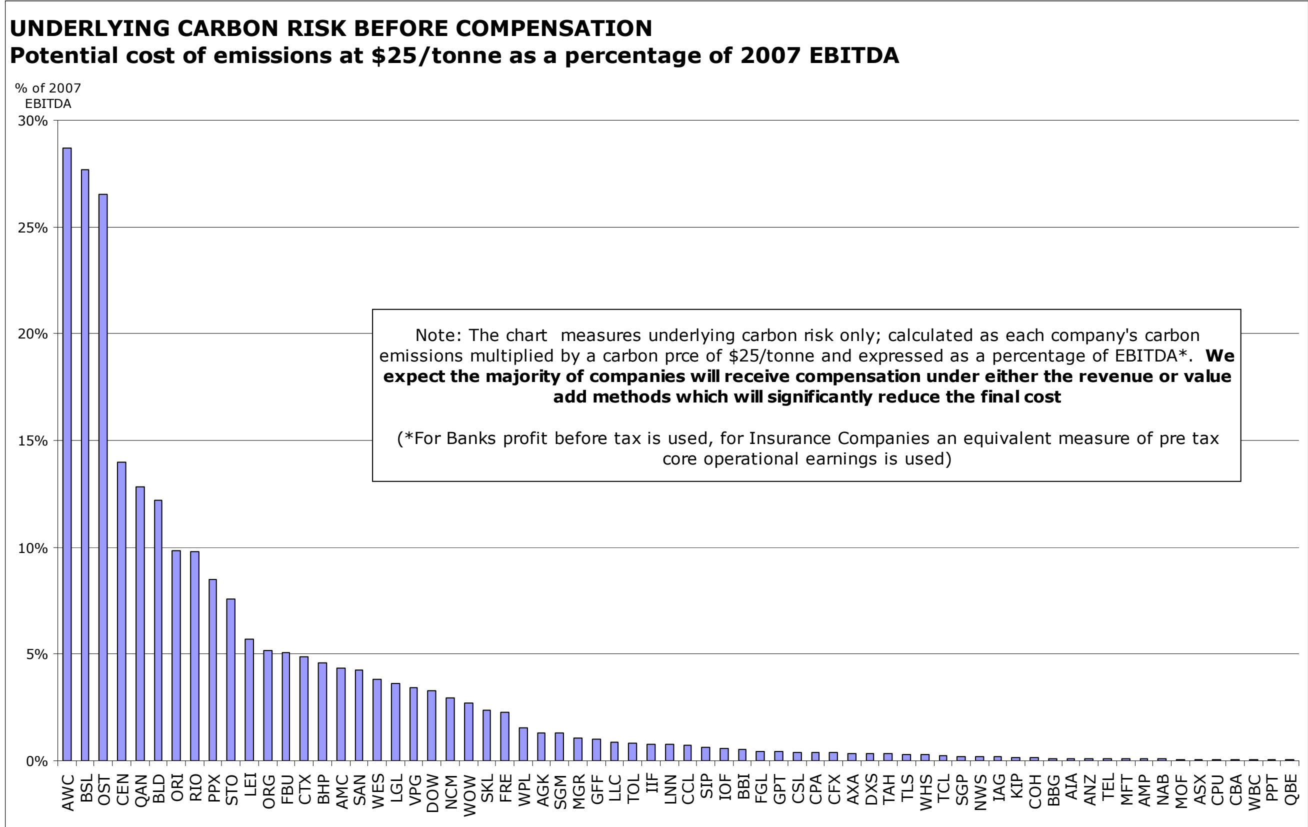
As noted above, compensation will be determined according to the following thresholds:

- 90% for activities with emissions intensity of at least 2000t CO2-e/$m revenue or 6000t CO2-e/$m value-added.
- 60% for activities with emissions intensity between 1000t CO2–e/$m and 1999t CO2-e/$m revenue or between 3000t and 5999t CO2-e/$m value-added.

Therefore calculating the compensation means investors require the following additional information:

- **Emissions profile over a 4.5 year period** from 1 July 2004 - 31 December 2008 as the compensations thresholds will be based on an average over this period.
- **Revenue or Value-Add** where "value-add" is noted in the White Paper to be a measure of revenues less costs excluding non-labour and non-capital inputs. We are aware that a number of companies argued in favour of a value-add basis in response to the Green Paper and expect that the inclusion of this option will allow a number of companies to achieve the higher 90% compensation level than may have otherwise been the case.
- **The above information on an "activity" basis** as opposed to a company-wide basis.

To this end there remains a significant information gap between what is currently disclosed and what investors require to model actual emissions liabilities, post compensation, with certainty.



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[1] *EVA™ is a registered trademark of the U.S. consultancy firm Stern Stewart*

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