

The Low Carbon Economy SEMINAR

*Risks and Opportunities
for the Financial
Services Industry*



Institute of Actuaries of Australia



Thursday 9 October 2008 – Sydney

Carbon Pollution Reduction Scheme – Issues for investors

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ETS – Update of where its at

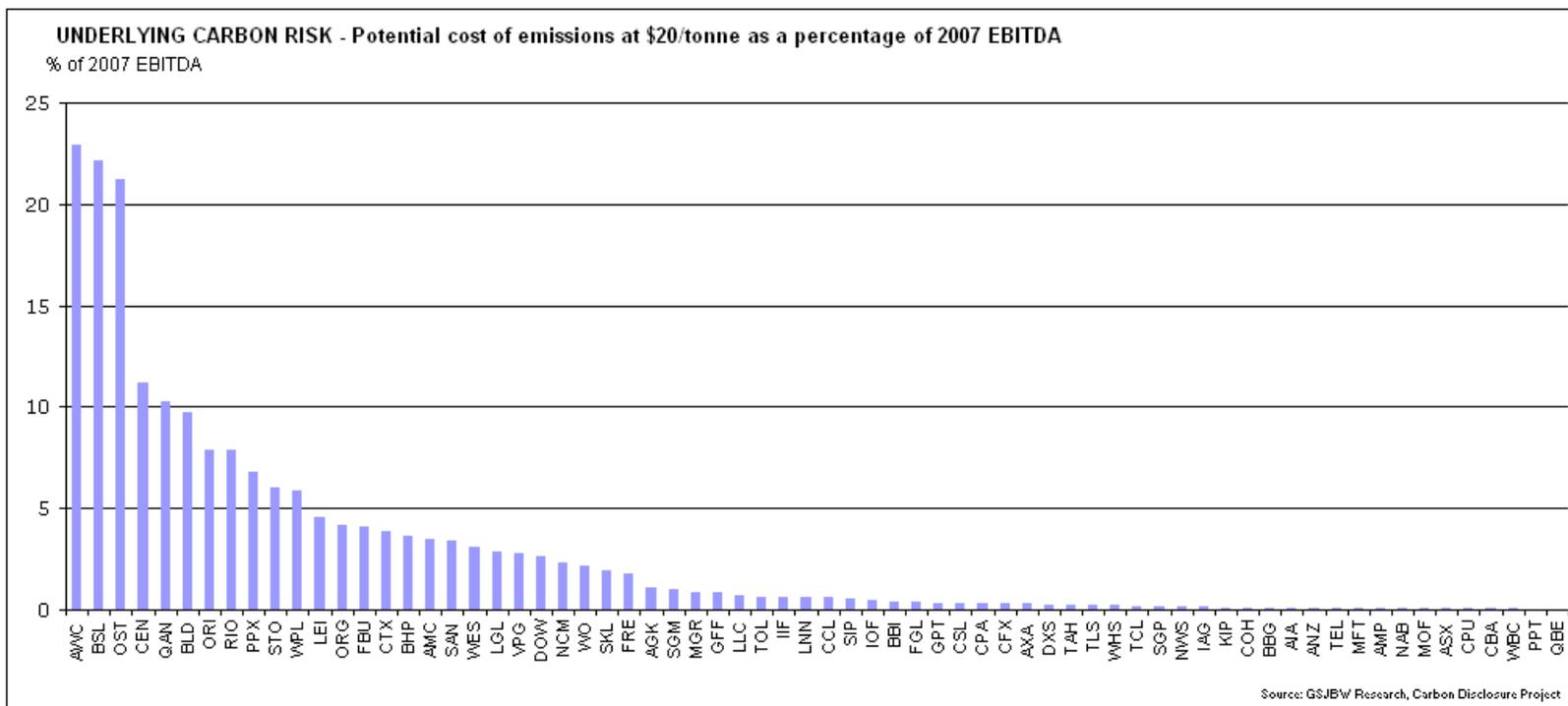
- So far
 - Garnaut Review
 - Green Paper

The above confirms broad expectations around approach and timing, but details allowing analysis of outcomes not yet known

- Next key event
 - Government White Paper – December 2008

ETS Valuation outcomes – A starting point

- Using data from the Carbon Disclosure Project (CDP) and a \$20/tonne price of carbon, the following is a starting point in estimating potential carbon liabilities



ETS modelling framework

- The following framework moves from this starting point to estimation of actual financial impacts

Prima-facie carbon liability

- Issues
 - What is the carbon price? Will be driven by the trajectory of emissions caps
 - Low phase-in?
 - 2020 emissions target crucial
 - Disclosure of emissions data

Compensation

- Issues
 - Emissions Intensive Trade Exposed industries (EITE)
 - 90% or 60% compensation level
 - Direct assistance for electricity generators

Cost pass through

- Issues
 - We expect likely full cost pass through for electricity generators
 - Otherwise depends on industry structure
 - Point of obligation

Compensation – A key issue for investors

- Needed to stop “carbon leakage”?
- Green Paper proposes compensation from Emissions Intensive Trade Exposed industries (EITE’s).
- Up to 20% of permits issued under the scheme could be allocated for free to EITE’s (30% post agriculture sector inclusion)
- Assistance scaled by carbon intensity relative to revenues - >2,000 tonnes CO₂/\$Mil revenue = 90%, between 1,500 and 2,000 tonnes CO₂/\$Mil revenue = 60%

But

- Difficult issue – Garnaut Review described it as a “truly dreadful” problem

Also

- Direct assistance for electricity generators is proposed (assistance for “strongly affected industries”)

The carbon price – A key issue for investors

- A key determinant is the trajectory of the emissions cap
- Our expectation is for
 - a low carbon price in the initial period of the scheme (FY2011 – FY2013)
 - 2020 emissions target is crucial to determine the materiality of the price beyond that
- Green Paper suggested the following timeline for trajectory information release
 - Late 2008 – Announce indicative trajectory for FY2011 – FY2013 and medium term (2020) emissions target range
 - During 2010 – Announce trajectory for 2 more years (ie up to 2015) and “emissions gateways” for a further 10 years
 - Ongoing thereafter – Trajectory rolled out year by year to maintain a minimum rolling 5 yr “national emissions trajectory”. 10 year gateways rolled over every 5 years

Other issues for investors around the ETS

- Industry coverage and threshold for inclusion
- Usage of permit revenue
- CPI Impact at \$20/tonne carbon price = 0.9% on scheme implementation
- Point of obligation
- Linkages to international schemes
- What is the role of carbon capture & storage (CCS)?
- Climate Change Action Fund
- Timing

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Investment decisions

- Just by its existence, an ETS inherently implies a long term investment theme that is negative for fossil fuels and carbon intensive industries, particularly those with few abatement/energy efficiency opportunities, and positive for low carbon emissions technologies and companies with higher abatement and energy efficiency opportunities
- However, for investors, key design details of the scheme such as the carbon price (level and trajectory) and the levels of compensation are not yet known. The White Paper in December 2008 is the next crucial milestone

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