Howdy All,

The Carbon Debate has been all the rage as of late and while we are the first to admit that we are no experts in the science of climate change, we thought it would be remiss of us to not at least provide you with a summary of the current state of play.

In building this paper we would acknowledge the assistance of Alex Dore, a research associate of Van Eyk for his input and contribution in helping to dissect the current proposal and to explore the impacts of carbon tax on the economy and investment.

Key Points:

- The scheme will begin with a "fixed price" phase that "could be of between three and five years, with the price increasing annually at a pre-determined rate". In this phase, international emission units "may not" be used", but a price per unit of carbon would be applied.
- A scheme "could commence as early as 1 July 2012", and a "fixed price" scheme would eventually "convert to a flexible price cap-and-trade emissions trading scheme".
- The aim of this carbon price is to facilitate reduced carbon dioxide emissions by pricing carbon-intensive products out of the market in relative terms, and would be applied only to goods produced in Australia.
- At $40 per tonne, the scheme will add 1.97% to overall CPI.
- This will dampen the already weak consumer sector.
- Without compensation, many industries will be either unviable or forced to consolidate.

Moves by the Federal Government to implement a Carbon Price Framework have heralded intense political debate over the potential cost-implications for industry and households.

Household Impact

The household impact of a carbon tax will depend largely on the per-tonne price of carbon, and the extent of the household compensation package, but clearly there will be a cost to households.

At $20 per tonne, (which seems to be where the Federal Government is heading) the carbon tax would cost up to $405.8 a year and add 0.70% to the CPI, rising to $577 a year if petrol is included with a 0.98% impact on overall CPI (see Table 1).

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The Greens in contrast are calling for $40 per tonne which would see to it that average household costs would rise by $811 per year. This would also add 1.39% to the CPI, rising further to $1,149 a year if petrol is included with a 1.97% impact on overall CPI.

Table 1: Cost of a Carbon Tax on Households

With fuel tax concessions	$10	$20	$30	$40
Weekly impact	$5.50	$11.10	$16.60	$22.10
Yearly impact	$286	$577	$863	$1149
CPI impact	0.49%	0.98%	1.48%	1.97%
Without fuel concessions	**$10**	**$20**	**$30**	**$40**
Weekly impact	$3.90	$7.80	$11.70	$15.60
Yearly impact	$202.8	$405.6	$608.4	$811
CPI impact	0.35 %	0.70%	1.04%	1.39%

The Minister for Climate Change, Greg Combet, has suggested that the carbon price will be set at $20-a-tonne with at least half of the tax revenue to be funnelled directly into household compensation. This compensation, it would seem, will only be available to “low to middle” income earners.

Naturally this household impact will depend heavily upon the per tonne weighting with modelling exploring the ramifications of a $10-a-tonne, $20-a-tonne, $30-atonne, and $40-a-tonne carbon price to be released in July.

Modelling aside, the proposed carbon tax represents a significant increase to the current cost of living for many households already struggling with increased cost pressures. In fact many households already feel that their real wealth level is falling and this is being reflected in depressed consumer demand and retail sales.

Industry Impact

The ramifications of the Carbon Price Framework will not be evenly felt across industries. While transitional compensation will be included under any scheme, those carbon-intensive industries will gradually pay increased costs under any pricing framework. With the purpose of shifting demand patterns from high to low-carbon goods, some industries will eventually become unviable.

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Applying only to goods produced in Australia, the impact will depend upon industry competitiveness and the underlying profit margin, noting that the carbon tax would likely be taken from taxable income. It risks significantly disadvantaging domestic industry (see Table 2).

Table 2: Cost of a Carbon Price by Industry

Industry	Tonnes of CO_2/\$M revenue	Cost of \$20 Carbon Price/\$M revenue	Cost of \$30 Carbon Price/\$M revenue
Electricity supply	9,945	$198,900	$298,350
Aluminium	7,357	$147,140	$220,710
Beef cattle	6,687	$33,740	$200,610
Cement and lime	5,538	$110,760	$166,140
Sheep	3,513	$70,260	$105,390
Dairy cattle	3,240	$64,800	$97,200
Coal	2,684	$53,680	$80,520
Pigs	1,958	$39,160	$58,740
Agriculture	1,889	$37,780	$56,670
Ceramic products	1,675	$33,500	$50,250
Alumina	1,649	$32,980	$49,470
Gas supply	1,578	$31,560	$47,340
Iron and steel	1,568	$31,360	$47,040
Basic chemicals	1,288	$25,760	$38,640
Other non-metallic mineral products	1,260	$25,200	$37,800
Oil and gas	1,186	$23,720	$35,580

The electricity supply, aluminium, and cement / lime industries would be the most heavily affected three industries, with the industry-wide cost of a $20-a-tonne carbon price standing at 19.8%, 14.7% and 11.1% of revenue in each, respectively.

Naturally the prevailing price changes are likely to affect demand for less carbon-intensive products, thereby bolstering competitiveness in so-called green industries - particularly green renewable energy and carbon abatement specialists.

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Stock Impact

Minister Combet has suggested that the 50 largest emitting companies, including BlueScope Steel, Delta Electricity, Rio Tinto, BHP Billiton, Qantas Airways, Wesfarmers, Caltex Australia and Shell Australia, would bear around two-thirds of carbon liabilities under the scheme (see Table 3).

If past practice is an indication, these liabilities will likely be passed through directly to consumers. For example, five times in the past 12 months Qantas Airways has raised its fuel surcharge to consumers. Yet under a raw $20-a-tonne carbon price these price constraints would be compounded with Qantas Airways standing to lose over $79,121,220 per annum in primary costs. Under a $30-a-tonne carbon price, this direct cost would increase to over $118,681,830.

Table 3: Effect on the Top ASX Listed CO_2 Emitters

Registered Corporations	Total Direct Emissions (tonnes)	Cost of $20/t Carbon Price
BlueScope Steel	10,791,351	$215,827,020
Woodside Petroleum	8,391,652	$167,833,040
Rio Tinto	7,701,301	$154,026,020
Alcoa Australia	6,757,567	$135,151,340
BHP Billiton	5,150,942	$103,018,840
Qantas Airways	3,956,061	$ 79,121,220
Santos	3,571,231	$ 71,424,620
Xstrata Holdings	2,692,486	$ 53,849,720
OneSteel	2,583,496	$ 51,669,920
Wesfarmers	2,403,609	$ 48,072,180
Boral	2,328,307	$46,566,140
Orica	2,113,590	$42,271,800
Transfield / Worley Power	2,052,048	$41,040,960
Origin Energy	1,873,394	$37,467,880
Caltex Australia	1,817,628	$36,352,560
Virgin Blue Holdings	1,730,209	$34,604,180
AGL Energy	1,435,808	$28,716,160

These costs are calculated before compensation, but would be exacerbated by the secondary flow-on costs from other affected industries, such as any fuel supplier which might be included under the pricing arrangements.

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With a net profit after tax of $116 million in FY 2010 and $123 million in FY 2009, Qantas would have little capacity to buffer the price increases. The overall revenue impact will depend on the elasticity of yield faced with marginally higher ticket prices.

In the case of BlueScope Steel, without the permits offered under the Carbon Pollution Reduction Scheme (CPRS), the cost of a raw $20-a-tonne carbon price would cost BlueScope Steel over $215,827,020, which would increase to $323,740,530 under a $30-a-tonne carbon price.

Even with a permit allocation of 94.5% with a 1.3% annual decay, BlueScope Steel estimates a cost of over $450 million in the first eight years of the scheme, with a cost as high as $1.2 billion if "fugitive emissions of methane" and mines for "coking coal" were passed on. These figures were released by Vice-President of BSL, Andrew Purvis.

These costs would hit revenue and global competitiveness with 81% of global steel production emerging from those countries without a mandatory carbon price.

International Backdrop

Since the 2009 Copenhagen Conference, international momentum on a carbon-reduction agreement has weakened significantly - with the exception of various countries including New Zealand - fuelled by domestic economic concerns by the largest emitters.

In New Zealand, a fixed carbon price is already in place. Within the scheme are a number of industry exemptions based on three bands, as well as $25-per tonne price for every two tonnes emitted as a transitional arrangement.

In the US, on the other hand, the Mid-term Congressional Election in November 2010 has forced a reprioritisation of policy towards debt amelioration and employment – the recent budget impasse resulting in cuts of around $39 billion in spending.

With unemployment at 8.8%, the annual budget deficit at US$1.5 trillion and public debt in excess of US$14.2 trillion, the political mood has been shifting away from emissions-reduction concerns since the Sub-Prime Mortgage Crisis of 2007/08. These changes have led President Barack Obama to indicate that the US would abandon a cap-and-trade scheme.

UK austerity measures have been met with violent protest with an unemployment rate of 7.8% and public debt in excess of £2,250 billion, bringing economic matters to the fore of the political debate. The Cameron-Clegg coalition has focused on capitalization of its Green Investment Bank to leverage private sector investment in green projects, and a "floor-price" on CO2 for energy producers.

However an Ipsos MORI poll this month showed a sharp decline in concern for climate change action with just 25% of Britons considering it to be the most pressing environmental issue, with 48% more worried about rubbish collections.

Against this backdrop it appears unlikely that an international carbon-reduction agreement will emerge in the short- to medium-term.

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Support for the legislation - lukewarm at best

The substantial multi-stakeholder opposition to the carbon tax will exert significant pressure on the Federal Government to opt for a low per tonne price on carbon.

A number of industry leaders have last month attacked the carbon tax with the Australian Food and Grocery Council warning that a tax would make Australian products “less competitive”, and that it “will of course cost jobs”. At least 44 mining, energy, agriculture and food firms have also written to the Prime Minister to warn that a carbon tax might move production offshore – a fear echoed by the Business Council, Bluescope Steel, and BHP Billiton.

Santos chairman, Peter Coates, has warned that without recognising “international trade exposure” its liquefied natural gas projects would be placed “at a competitive disadvantage”, with Rio Tinto chairman, Jan du Plessis, warning that “the government needs to be careful not to penalise energy-intensive export businesses in Australia”.

These calls contrast with a joint media release last month by twenty-one businesses including AGL, BP, Fujitsu, GE, IKEA, Linfox, Local Government Super, and Pottinger, stating their strong support for a “well designed carbon price to support the transition to a low-carbon economy”. However just one of these businesses appears on the top fifty emitters list with those producing goods offshore exempt from primary price impacts.

Following a grassroots revolt last month, the Australian Workers Union (AWU), a traditional ally of the Labor Party, has also warned the Government that “if one job is gone, our support is gone.” This message was paralleled by the Construction, Forestry, Mining, and Energy Union (CFMEU), and the Transport Workers Union (TWU).

These duel pressures come off the back of a Herald/Nielson poll in April which shows 59% of voters are opposed to the plan, a 15-year-low Labor primary vote of 31%, and a two-party preferred vote of 56-44 in the Coalition’s favour. An April Newspoll survey substantiates these figures, finding that 60% of voters are opposed to the scheme, with just 30% in favour.

This domestic opposition will exert significant price down pressure on the Federal Government, and has the potential to shape the carbon price. However coupled with the likely price-up pressure from Greens Senators when they control the balance of power in the Senate from 1 July 2012, it is unlikely that the government will abandon a carbon price altogether.

RetireCare Personal Wealth Management View

As mentioned from the outset we are not climate change experts, however, it would be remiss of us to say that we are not concerned about the current state of play.

Yes our planet is precious and yes each and every one of us has a moral obligation to ensure we protect it as best as we can for future generations.

That being said, the key with any reform is to ensure that we do not inadvertently cripple industry and punish households for what ultimately remains a global problem.

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From where we sit, climate change is very much a “global problem” and as such it does require a “global solution”. Making an individual stance whilst commendable also gives rise to significant risk.

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