New Zealand Carbon

Presented by Nigel Brunel

- The New Zealand carbon market – Overview
- Review of the ETS
- The European carbon market - Update
- What affects the price of New Zealand carbon?
- NZUs versus CERs – what’s cheapest?
- What emitters want and option structures

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The New Zealand carbon market – Review

- Bought in by the Labour government in late 2008
- Reviewed by the incoming National government
- Intensity based – 2 for 1 - $25 CAP
- Compensation for trade-exposed - EITEs
- Re-launched to start July 1, 2010
- January to December emissions year
- March return and May surrender

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The New Zealand carbon market – Review

- Domestic unit is an NZU – backed by an AAU
- Majority of units are forestry based - exportable
- EITEs units are bankable but not exportable
- CERs – ERUs also acceptable
- Legislated review underway – report expected pre-election
- Downstream are actively passing units upstream

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Review of the ETS – OMF Picks

- Removal of the $25 CAP
- Keep the 2 for 1
- Delay agriculture
- Ban Industrial Gas CERs from 2013

The European Carbon Market

- The European market is under pressure
- It’s mainly about PIIGS
- Fear not fundamentals main driver
- Oversupply of permits
- CER projects marginal at €10
What affects New Zealand Carbon prices?

- Demand & Supply
- European Carbon
- Energy Markets
- NZ$ versus €
- The NZ$25 CAP
- Politics
NZU Monthly averages through OMF

<table>
<thead>
<tr>
<th>Month</th>
<th>Price</th>
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Demand and Supply

- Annual emissions about 30 Mt (excluding Ag)
- Demand is about 15 Mt per annum
- View that there is an oversupply of carbon in CP1
- Demand is constant whereas supply is lumpy
- Supply comes from NZUs and CERs/ERUs
- Demand is virtually all local

European Carbon - EUAs

EUA

[Graph showing EUA prices from 2005 to 2011]
NZ$ versus €

NZD/EUR

NZUs and CERs in NZ$
NZD CER versus NZD EUR

NZUs versus CERs versus Oil
### The NZ$25 CAP

#### 2012 CAP
- **Today:** 4/07/2011
- **Due date:** 31/05/2012
- **Days:** 332
- **Interest rate:** 6.00%
- **Amount Due:** $25
- **NPV:** $23.71

#### 2013 CAP
- **Today:** 4/07/2011
- **Due date:** 31/05/2013
- **Days:** 697
- **Interest rate:** 6.00%
- **Amount Due:** $25
- **NPV:** $22.43

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### What’s cheaper – NZUs or CERs?

![Graph showing comparison of NZUs and CERs over time](https://www.omf.co.nz)
Spot NZUs vs. Forward CERs in NZ$:

Buy Spot NZU today at NZ$17.50
Fund until May 31 – cost of carry $1
Total cost NZ$18.50

Buy March 12 CERs today – convert to NZ$:
€10 converted to NZ$ at .5770 = $17.35
Cost of carry to May 31st – 20 cents
Total cost NZ$17.55
Cost of carry is about 10 cents per month

Forward NZUs versus Forward CERs in NZ$:

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<tr>
<th>Date</th>
<th>Spot</th>
<th>EUR/NZD</th>
<th>Cost of Funds</th>
<th>NZU Forward</th>
<th>CER Forward</th>
<th>CER Forward in NZD</th>
<th>NZU/CER/NZU Spread</th>
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What do emitters want?

- Ease of dealing
- Not always the cheapest – often the most reliable source
- Forwards over Spot – it’s all about cash flow
- Transparency of pricing
- Regular flow of carbon
- Long term off-takes have “some” appeal
- Delivery before payment if buying

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Options

- Call options
- March expiry
- $20 strike
- $1.25 Premium paid upfront

If exercised – you have sold for $21.25
If not exercised – you make $1.25

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OMFinancial

- Members “of and regulated by” the NZX
- Standard & Poor’s BB+ Credit Rating - $10 million capital
- Locally owned and operated - global connections
- Commodities – Foreign Exchange – Equities
- Traded 9 million tonnes of carbon since 2009

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