

ELECTRICITY SECTOR



Some Insights from New Zealand and Australian Experiences



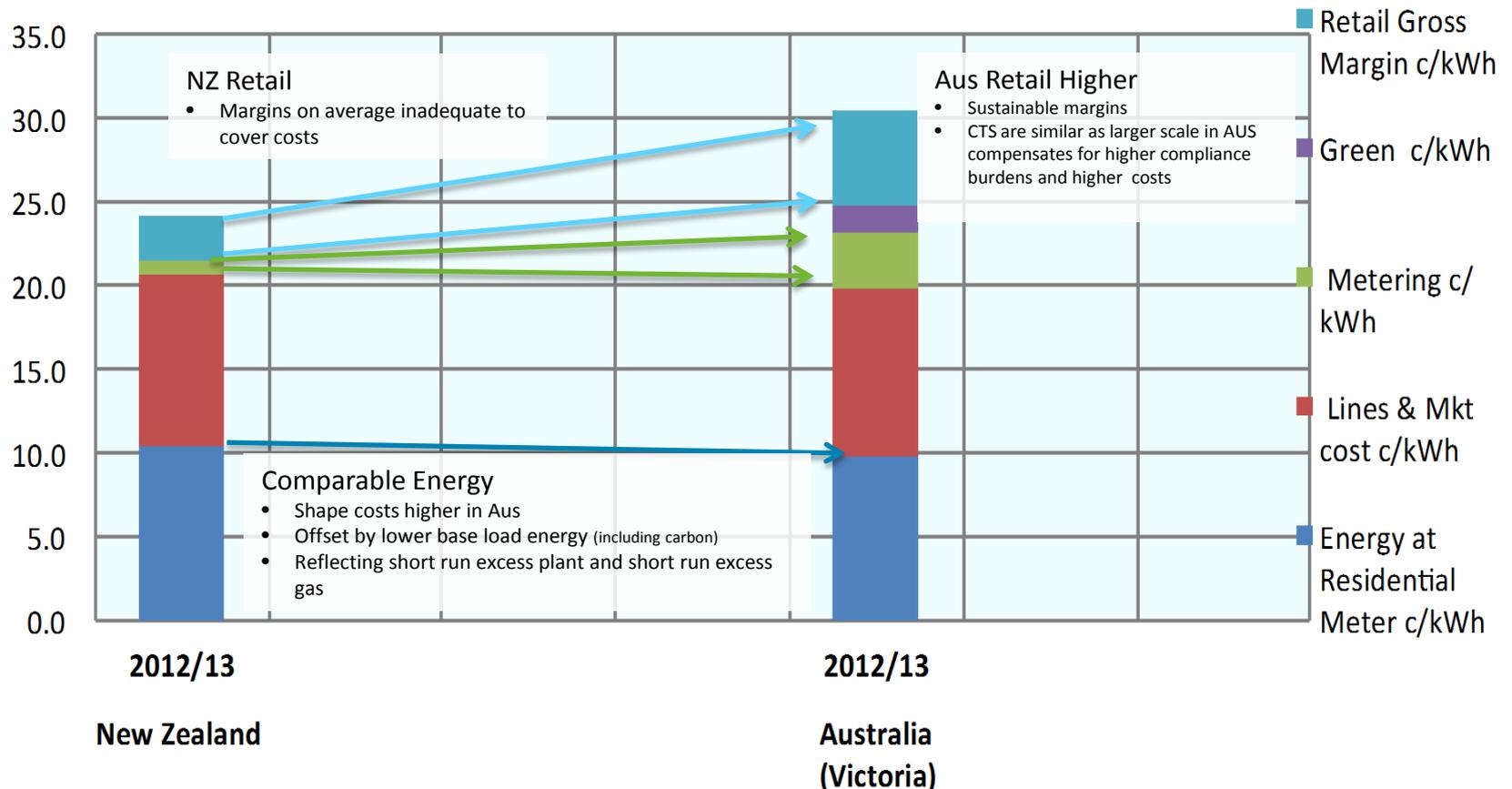
- Infratil has deep operational experience in electricity in New Zealand and Australia
 - also in the CEOs of the businesses
- These markets are superficially similar
- Retail evolution is well ahead in Australia and there are useful insights for New Zealand as we look forward
- The approaches to carbon are different driven by real structural differences in relative fuel costs, relative wind costs and also in the existing assets bases
 - It is more challenging for Australia
 - There will be a different and slower evolution to primary reliance on carbon pricing
- Australian experience with smart meters provides useful learnings

Residential Electricity Price Comparison



NZ c/kWh
(Real)

New Zealand and Victoria Domestic Retail Costs



Source: MeD Nov 2011 Quarterly Survey of Residential Electricity Prices, Australian Electricity Market Commission & Morrison and Co

Two Myths (An Interesting and Relevant Digression to My Story) MYTH 1



Retail is a good hedge for Generation Investment

- Probably the biggest myth in the industry
- Mass market retailing is a 1-3 year forward price lock in for generation, generation netback follows a smoothed raw wholesale
- This is inferior to 3 year contracted TOU in respect to hedging
- The futures market actually provides a lower risk and more price certainty for selling kWh than mass market retail
- Remember one of the reasons we created a competitive market – to get consumers and tax payers out of the role of underwriting generation investments – structurally this has been achieved (but it requires privatisation for completeness)

Vertical Integration

- Provides minor advantages in working capital management
- Lessens strategic risks that hedge cover may not be available at some future time (a very low risk in Australia, nonetheless IFT has secured strategic physical options – but we will always buy if its cheaper)
- But it doesn't in itself, change medium to long term price risks for generation investments

Transitional Issues

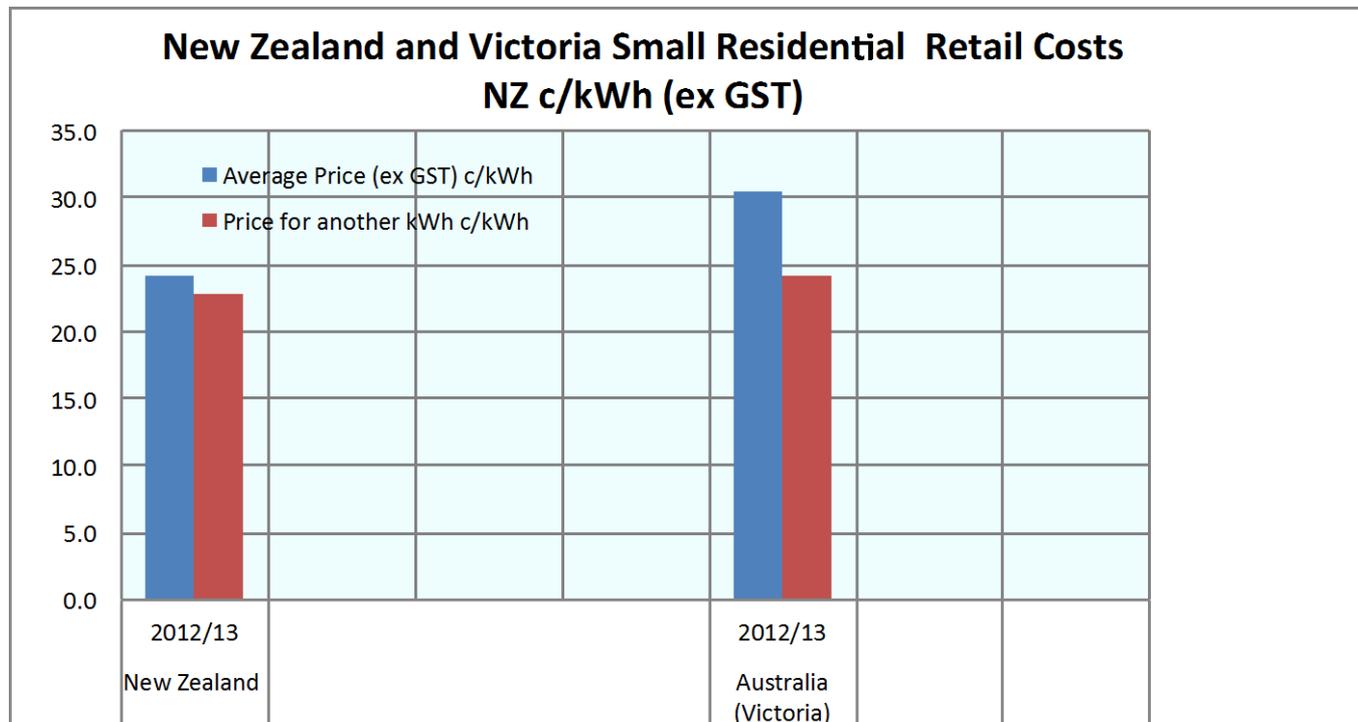
The main problem arising from vertical integration is transitional – and that is because the industry is still learning about the costs and risks of retailing and this learning can be slow when things are hidden in vertically integrated businesses – Australia is well ahead of NZ in these learnings

Back to the Story - New Zealand vs Australia

Residential Pricing - The Cost of Another KWh



- So far, we have looked at average prices for small customers (8 MWh NZ, 4.75 MWh Victoria)
- Be reassured our price comparison is not distorted customer size or price structure
- The cost of another kWh is lower in NZ, even for this low user tariff
 - Viable price is lower still in NZ for larger NZ residential customers on other structures



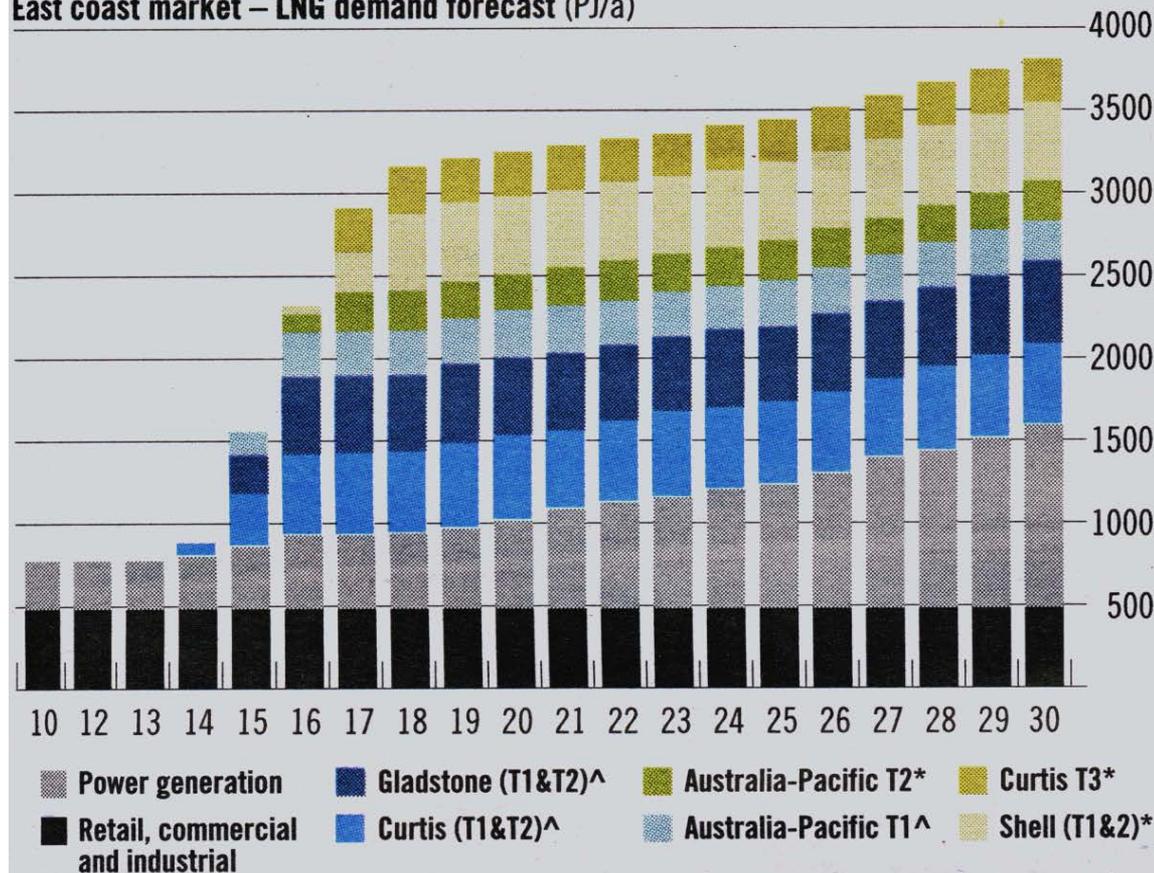
Looking Forward – Australia

Australian East Coasts Gas Prices



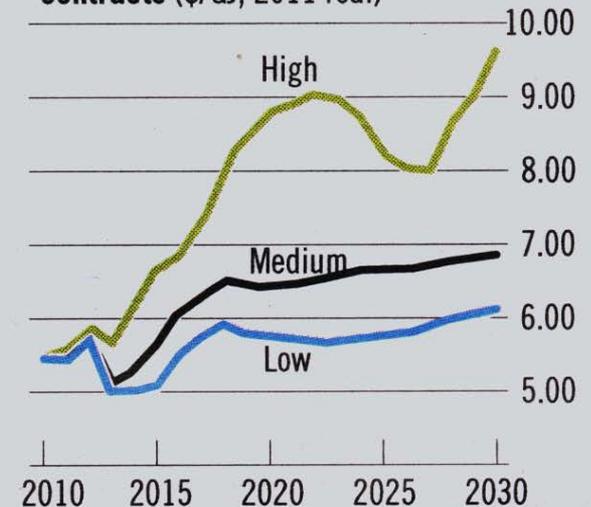
Taking a long look

East coast market – LNG demand forecast (PJ/a)



^Sanctioned *Proposed

Forecast pricing for new contracts (\$/GJ, 2011 real)



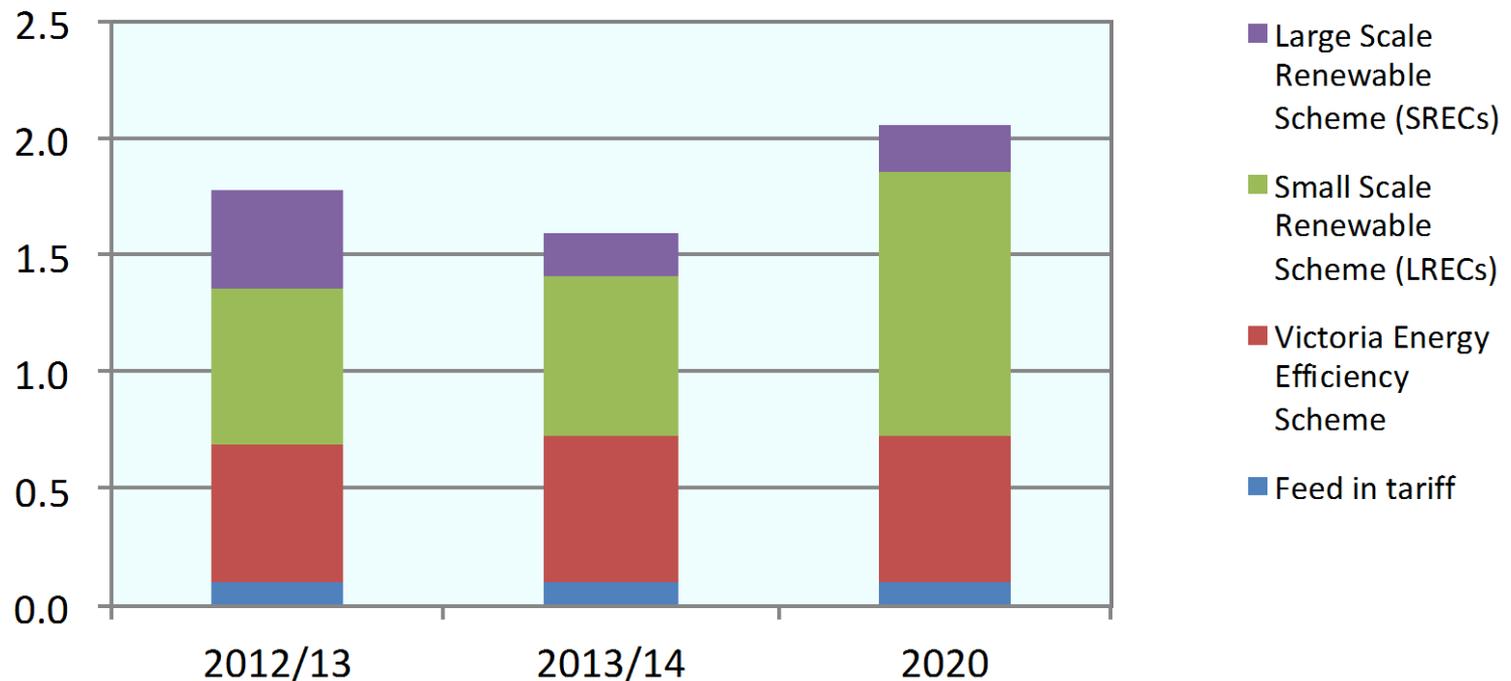
“We believe gas prices are likely to strengthen over the medium term due to material increases in the gas demand outlook.” **CBA**

Looking Forward – Australia (Complicated and Challenging)

- Coal and gas prices for power generation increasingly internationally linked
 - Falling \$A places upward pressure on both plant and fuel costs
- Carbon prices A\$23/tonne rising in 2.5% pa real terms until planned international linkage
 - No trading from 'fixed price' (ends 1 July 2015) to future periods
 - Floor price of A\$15/tonne beyond fixed price period
- Carbon price unlikely to be high enough to either close existing coal plant or drive new baseload CCGT as long term gas prices are high
- Carbon prices will increase energy costs to users and drive ongoing user efficiency improvements but unlikely to drive generation mix changes
- Other ad hoc interventions (eg tender to close inefficient coal)
- Large scale REC scheme with hard GWh target will drive wind new entry – an important and effective means to give Australia more space to manage the transition to a lower carbon future

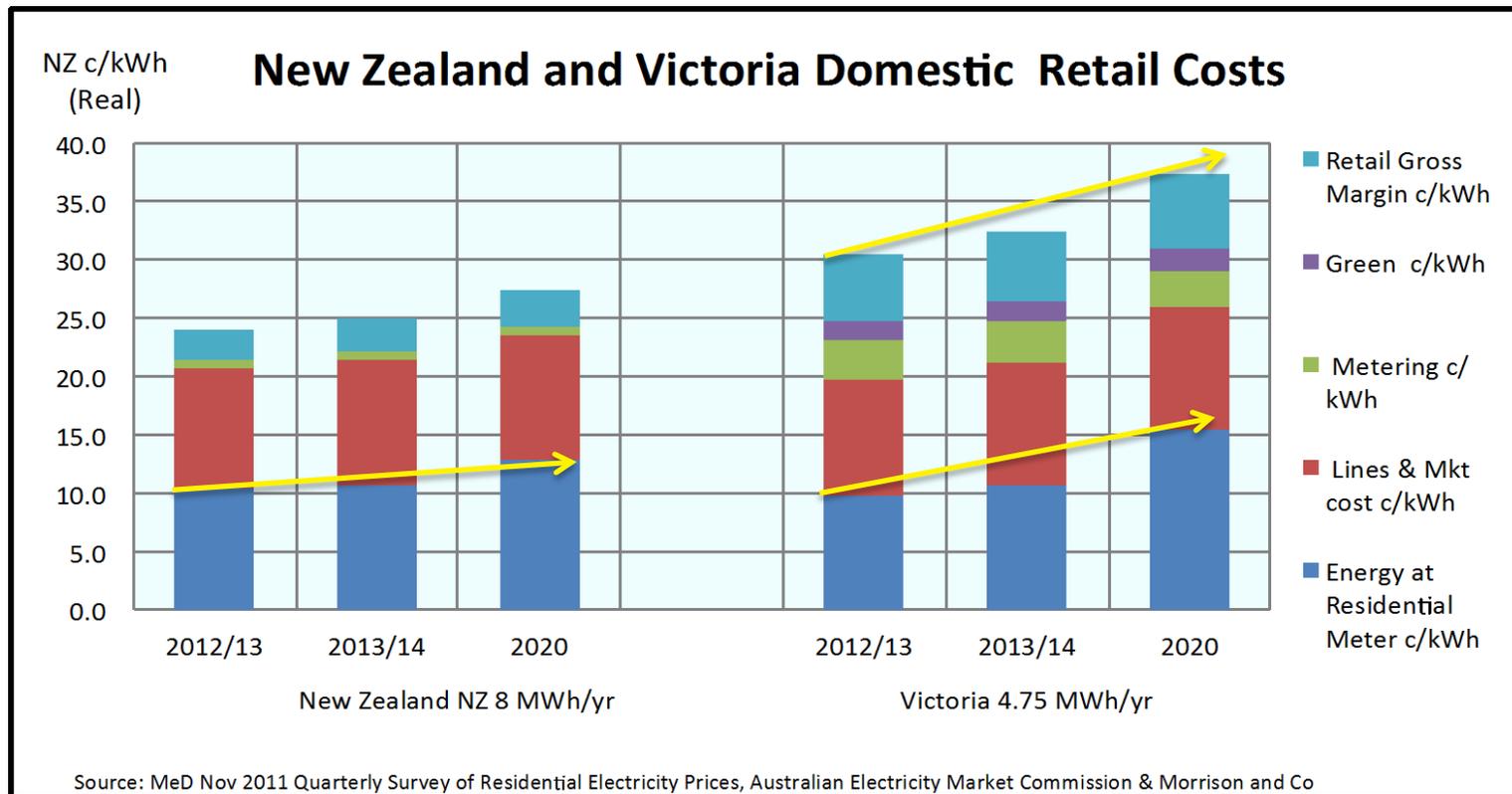
Green costs on top of carbon pricing ...

Victoria Green Retail Costs



Putting all this together...

Expected Real Price Outlooks

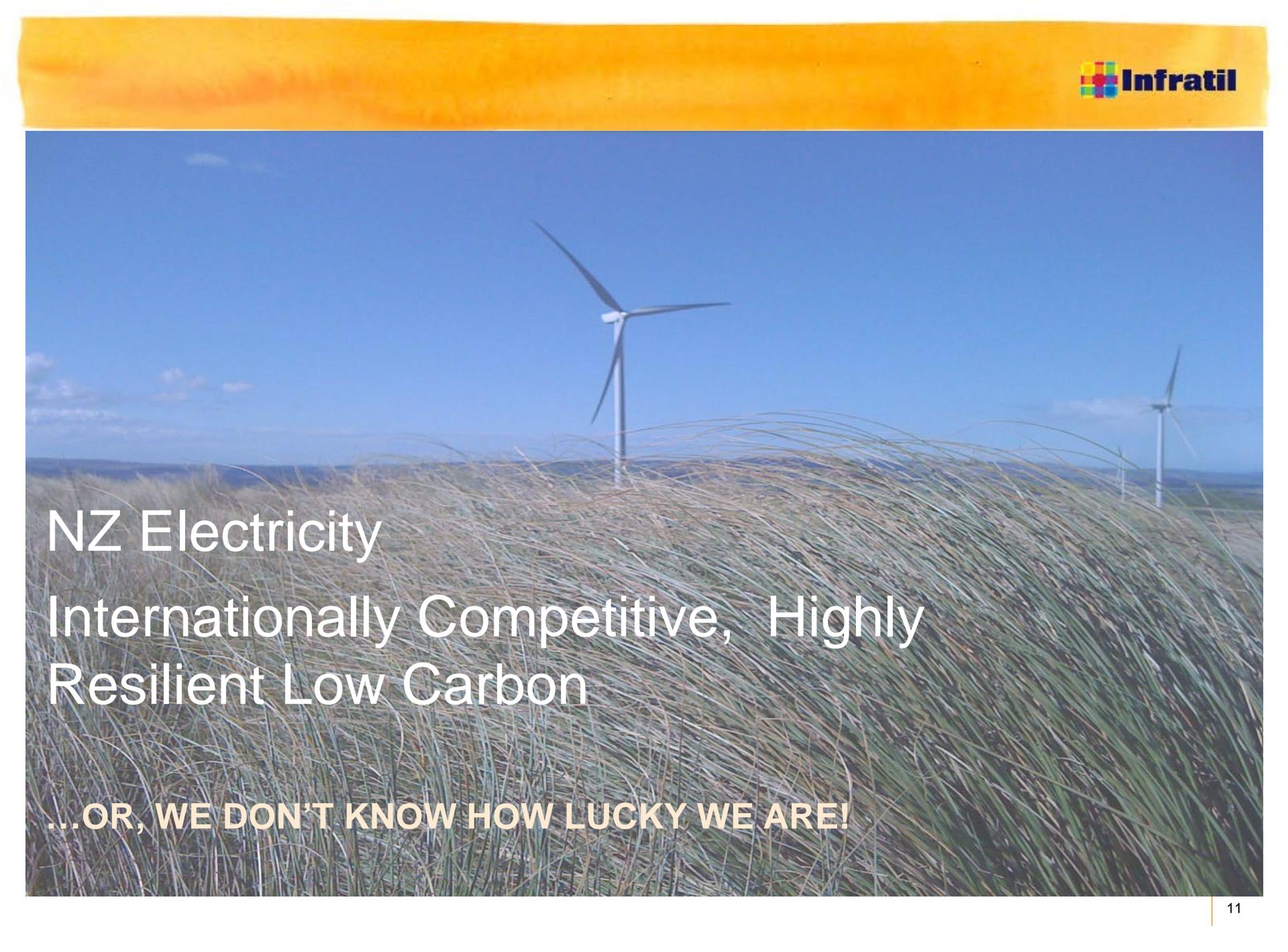


New Zealand

- Small real price rises
- Retail margin improvement to cover costs
- Low carbon wind, geothermal energy
- Hydro/gas peaking

Australia

- Significant real price rises
- Rising gas prices
- Rising carbon taxes to support gas over cheap coal
- Wind energy still subsidy dependent

A photograph of a wind farm in a rural landscape. In the foreground, there is a dense field of tall, thin grasses that are blowing in the wind. In the middle ground, several white wind turbines are visible against a clear blue sky. The turbines are spaced out across the landscape, with one prominent in the center and others further away. The overall scene is bright and clear, suggesting a sunny day.

NZ Electricity
Internationally Competitive, Highly
Resilient Low Carbon

...OR, WE DON'T KNOW HOW LUCKY WE ARE!