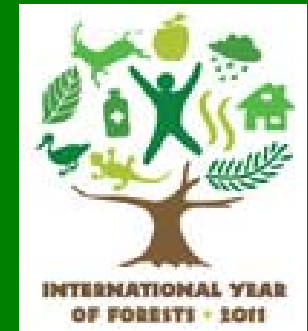




HOW GOOD DOES AUSTRALASIAN CARBON TRADING LOOK?

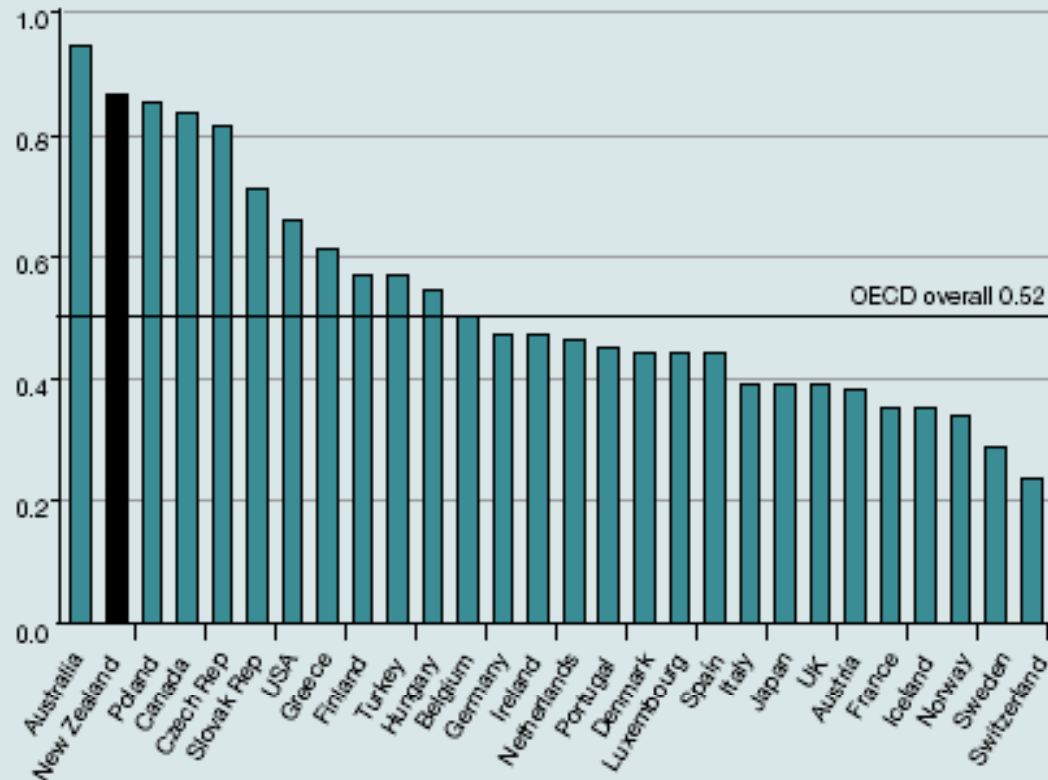
Annual Industry Development Conference
Canberra, Australia.
March 14, 2011

David Rhodes
Chief Executive
NZ Forest Owners Association



GHG Emissions per unit of GDP

FIGURE 6: GREENHOUSE GAS EMISSIONS PER UNIT OF GDP, 2004



Note: Data not available for Korea or Mexico.

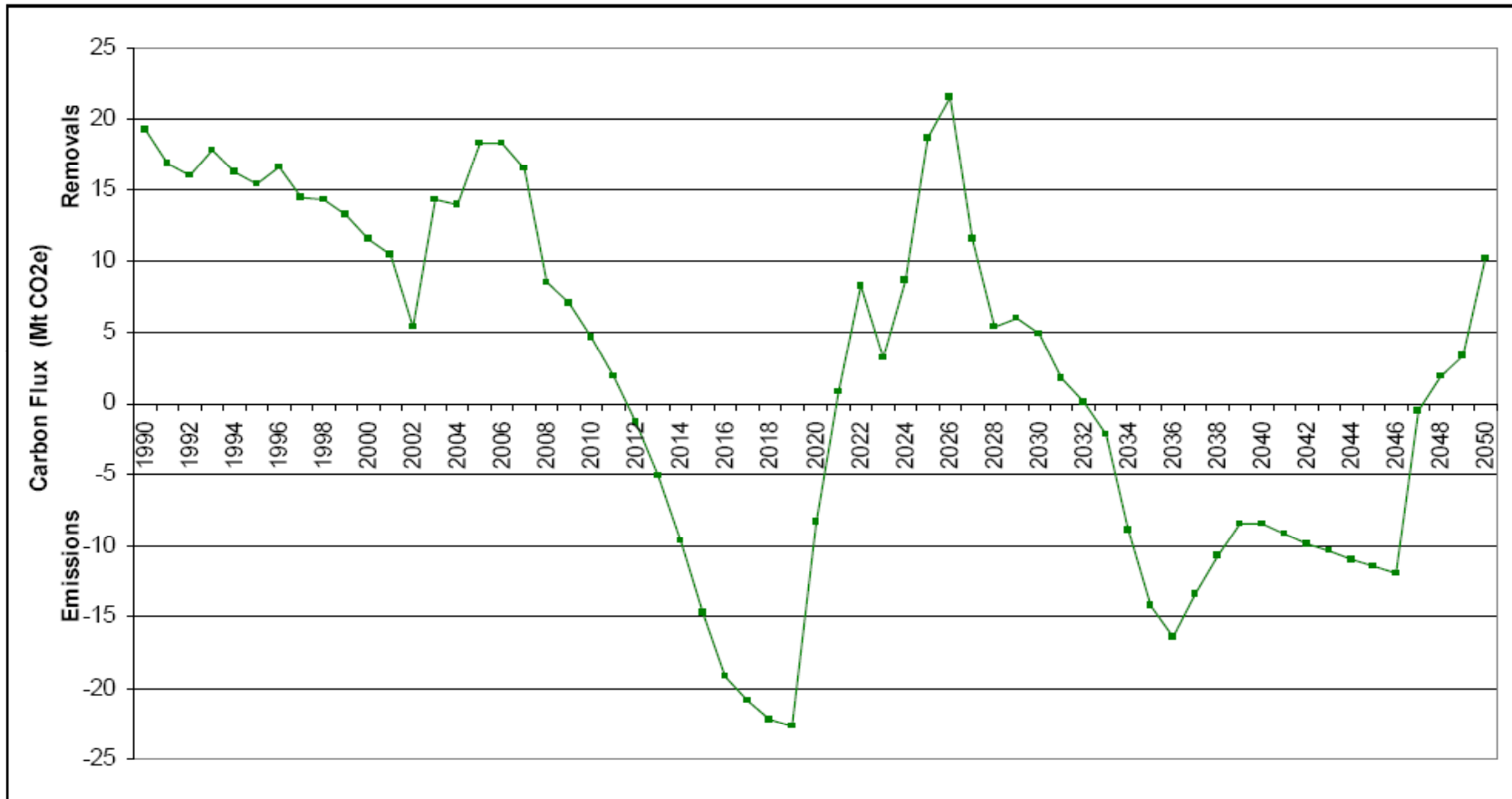
Source: United Nations Framework Convention on Climate Change.

IMPACT ON FORESTRY BUSINESS CASE

Two 2008 MAF-commissioned reports concluded:

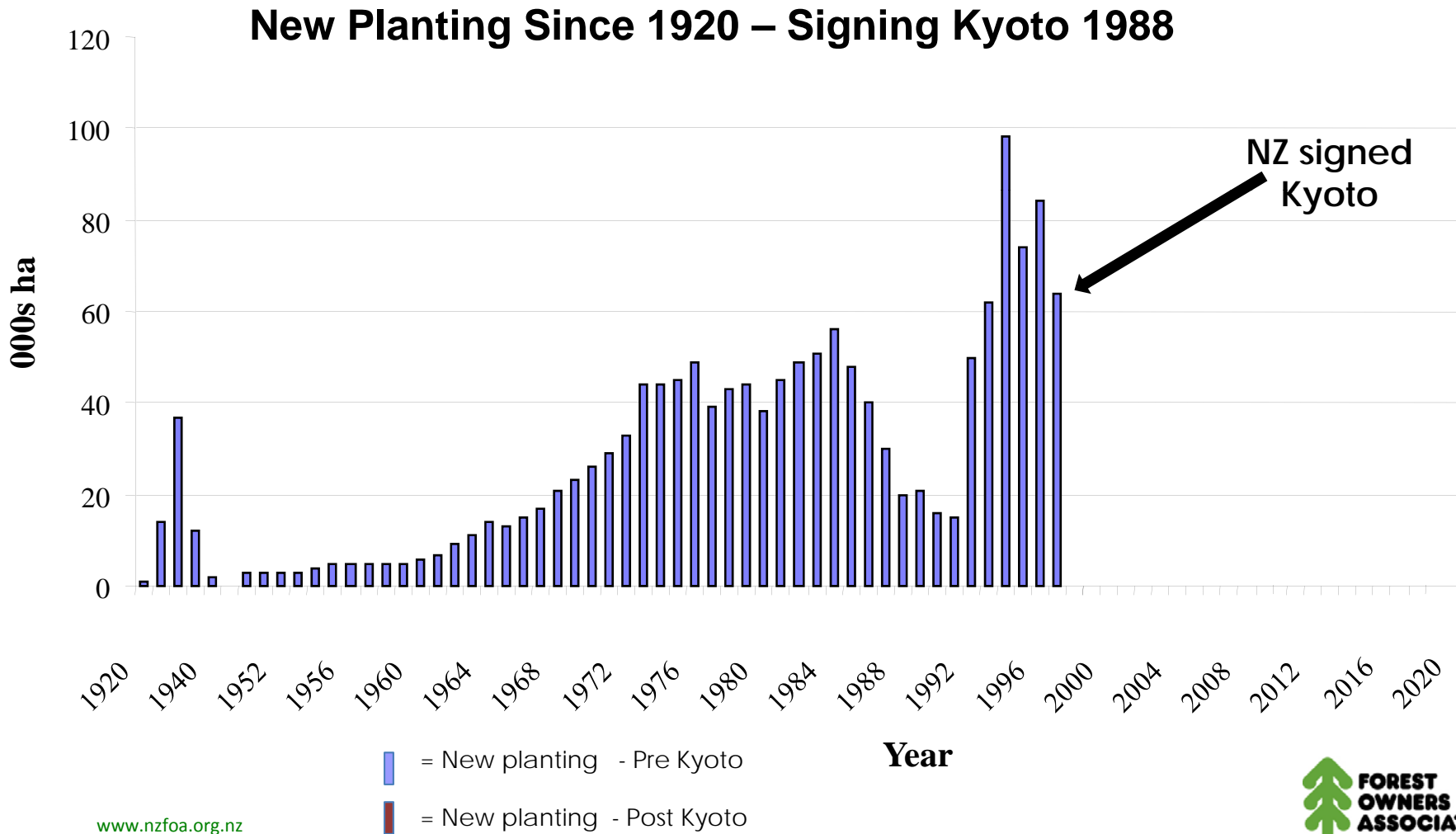
- An increasing C price favours late thinning, high final stocking and no pruning. Radiata nearly always most profitable.
- Carbon values of \$30 t/CO² increased LEV for a pruned pine regime from \$1215/ha to \$6,647 (8% discount rate)
- Moving to a low input radiata pine regime (which still included harvesting) generated an LEV of \$11,038/ha.
- At \$20/tonne MAF estimated IRR increased from 5.4% to 11.0%. It was considered this could drive 90,000 to 100,000ha of new planting/annum.

“Net position” challenge for NZ

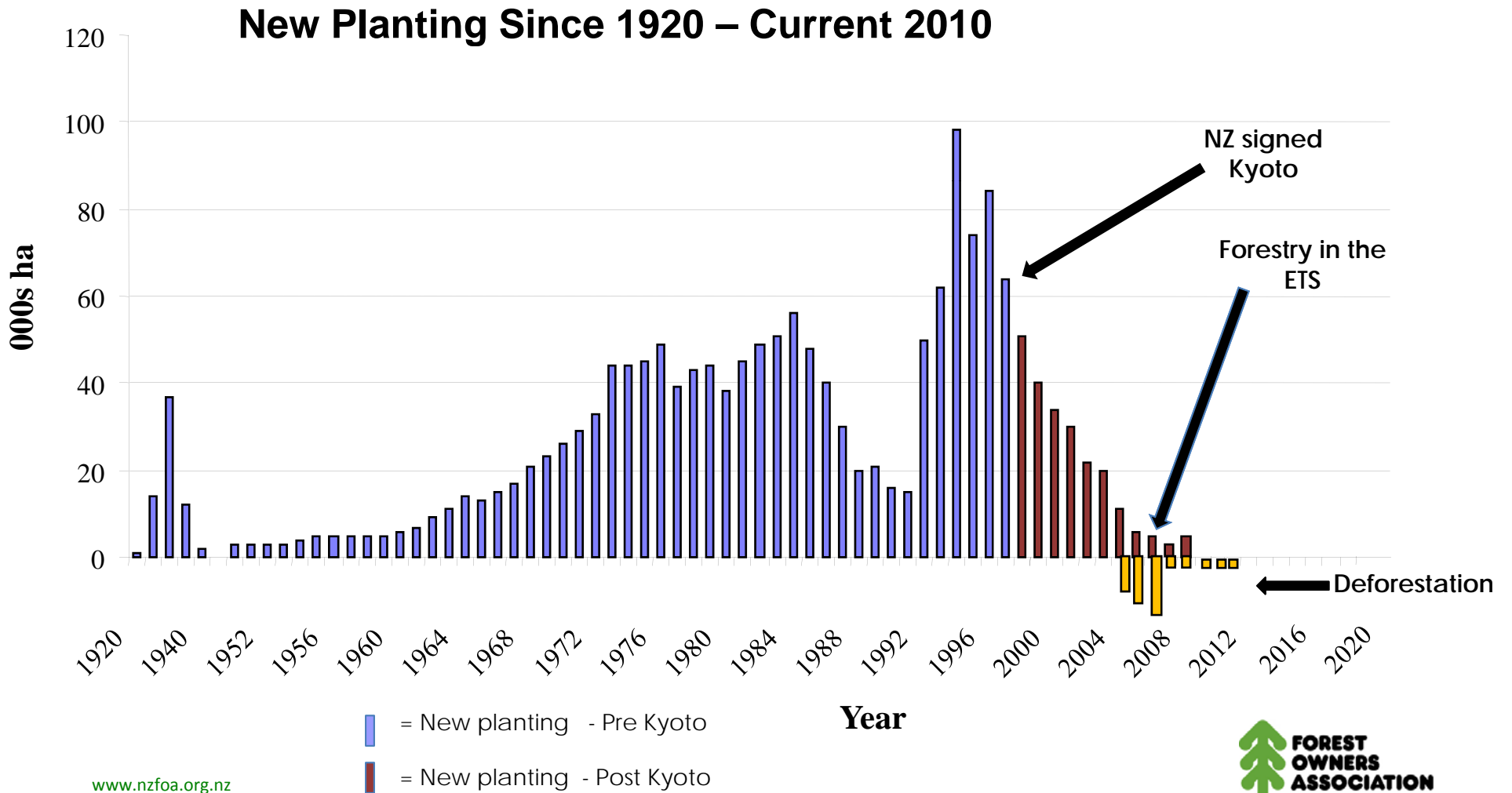


Uneven age classes from earlier planting booms & lows mean pre-1990 plantation forest transitions from “net sink” to a new “source” about now

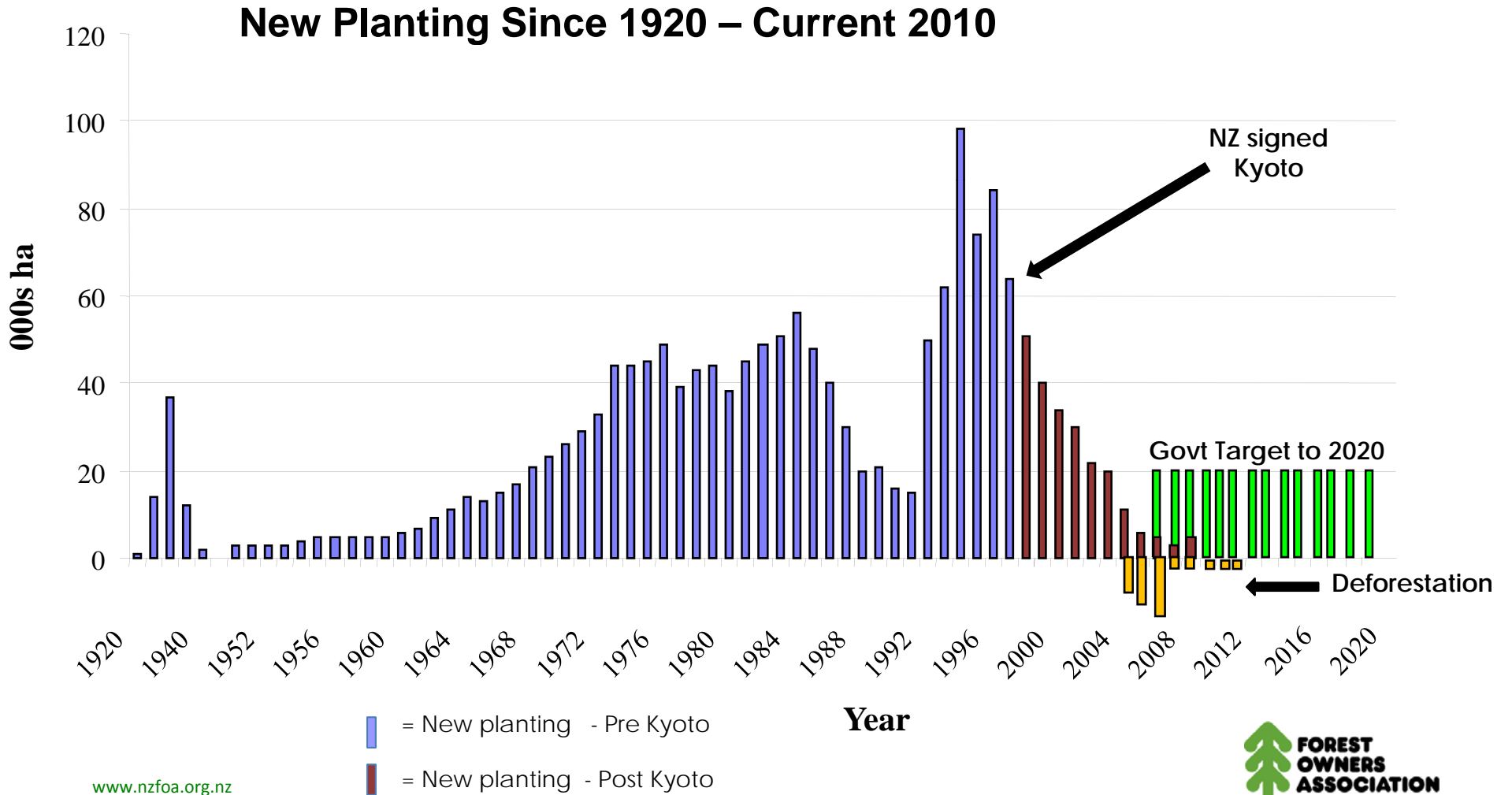
New Planting Rates



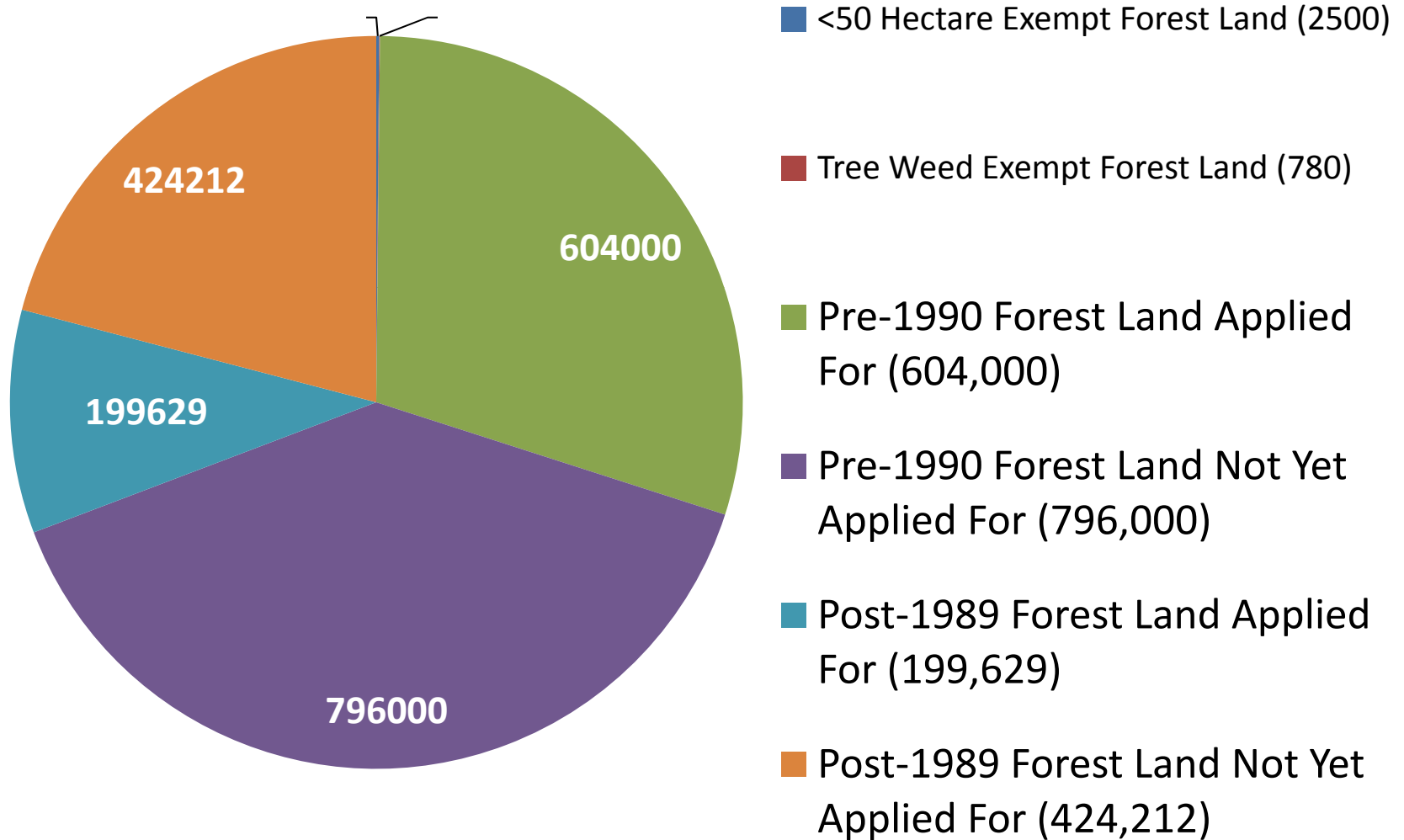
New Planting Rates



New Planting Rates



Forestry Response (by ha) to ETS

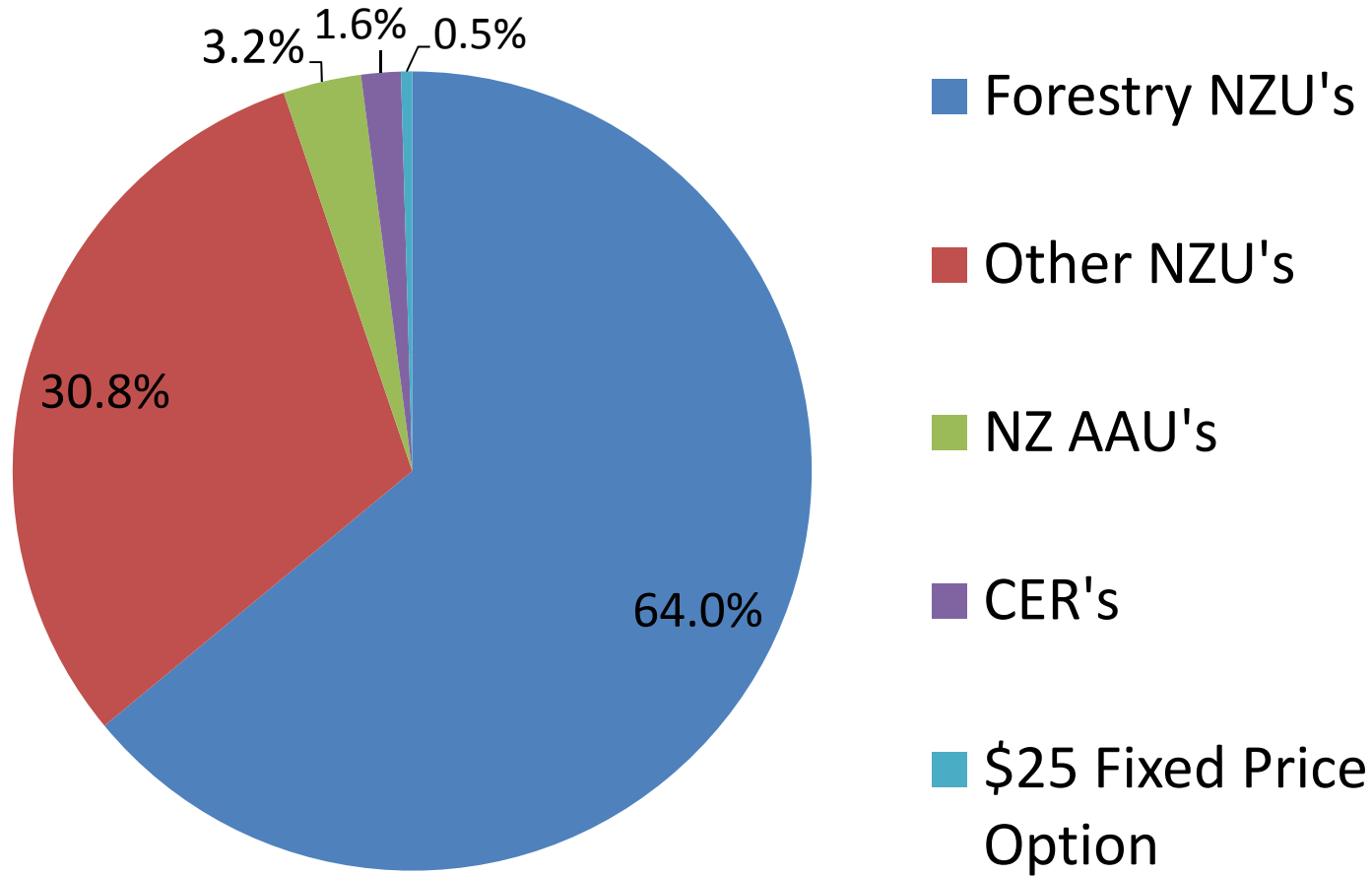


Source: Ministry for the Environment Annual ETS Report

www.nzfoa.org.nz



Types of Units Surrendered for 2010



Source: Ministry for the Environment Annual ETS Report

www.nzfoa.org.nz

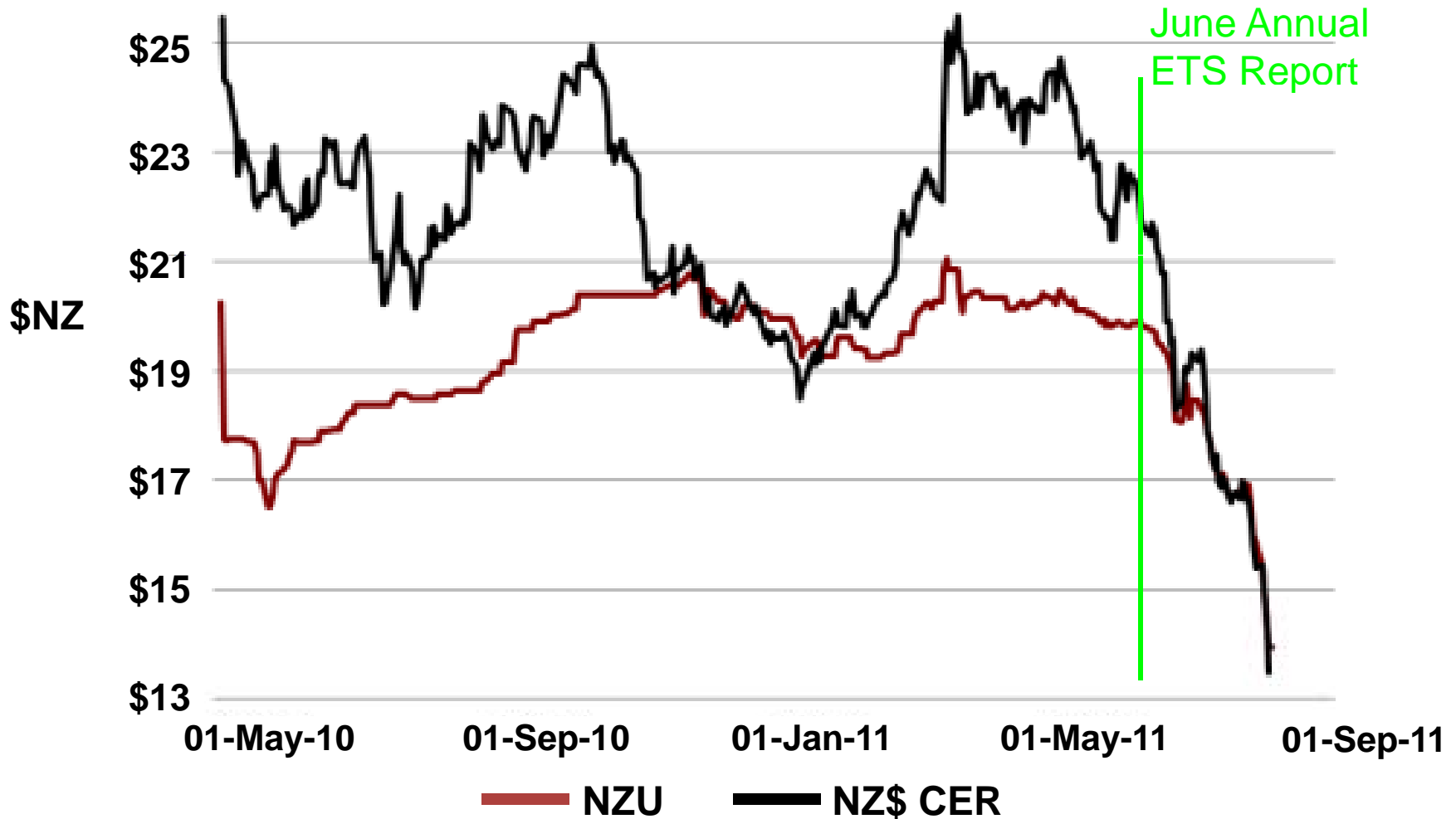


MARKET PERFORMANCE (IN 2010)

SUPPLY AND DEMAND

Demand		
Total Emissions in 2010		33.4 million (tonnes)
Less free allocation	15.9 million	= 16.3 million (tonnes)
Less two for one subsidy		= 8.3 million (units)
Supply		
Forestry NZU's allocated	9.4 million	
Free allocation to EITE's	12.8 million	= 22.2 million (units)
Surplus supply		13.9 million (units)

NZU AND CER PRICE TRENDS



Source of prices - Westpac

www.nzfoa.org.nz



AUSTRALIAN CLEAN ENERGY PATHWAY

Year to 30 June	2013	2014	2015	2016	2017	2018	2019	2020 +
Mechanism	Fixed price period			Flexible price period - - - - ->				
Carbon price	\$23.00	\$24.15	\$25.40	Market determined - - - - ->				
Price ceiling	Not applicable			Expected International Price + \$20 increasing at 5% real/annum			None - - ->	
Price floor	Not applicable			\$15 increasing at 4% real/annum			None - - ->	

Source GS and PA Research

NZ price cap of \$25 = approx A\$20

COMMON FEATURES

- Investment certainty except around transitioning
- Transitional price caps (NZ supposedly by 2012, Aus by 2015 but latter fixed above world price).
- EITEs well compensated at similar levels

Compensation to EITE industries

NZ EITE	% compensation	Australian EITE	% compensation
1600 tonnes of CO ₂ -e/NZ\$1M	90% of the industry average	2,000t Co ₂ -e/\$M revenue or \$6,000 Co ₂ -e/\$M value added	94.5% of the industry average
800 tonnes of CO ₂ -e/NZ\$M	60% of the industry average	Between 1,000t Co ₂ -e/\$M and 1,999t Co ₂ -e/\$M revenue and 3,000t Co ₂ -e/\$M and 5,000t Co ₂ -e/\$M	66.6% of the industry average

In Australia there are also a range of other industry compensation measures and a further \$11 billion in renewable energy support has been provided.

OTHER COMMONALITIES

- Forestry units exportable, other units non exportable until there is an open market
- Permits can be banked
- Sufficiently large penalties exist to discourage evasion
- Some additional options to encourage forestry (ECFP, PFSI, AGS in NZ and land sector assistance in Australia)

DIFFERENCES

NZ ETS	Australian Clean Energy legislation
Bipartisan support for ETS	ETS or no ETS
ETS – intensity based	ETS transitioning to a fixed cap on emissions (cap and trade) + other price measures (renewable)
All gases	CO ² , CH ₄ , N ₂ O (and PFC's from AI)
Households warmer but poorer (around\$3/week)	Households compensated \$10.10/wk versus \$9.90 cost
No floor	Price floor A\$15 (2015) rising 4% real
Either surrender units or pay price cap	Emissions obligations not met by surrender of units incur a penalty
One unit to be surrendered per 2 tonnes of eligible CO ₂ _e emissions	1 unit to be surrendered per tonne of eligible CO ₂ _e emissions
No borrowing from future periods	Limited ability (5%) to borrow

OTHER DIFFERENCES

NZ ETS	Australian Clean Energy legislation
No rules excluding Kyoto units	Significant restrictions on CERs/ERUs until 2016, then conditionally allowed
No restrictions on the amount of international units to meet obligations	International units limited to 50% of obligation to 2020, (50% must be domestic)
Agriculture to be included 2015	Agriculture excluded
Post 1989 forestry participation optional and measured on C sequestration (<u>post 2008</u>)	Criteria other than carbon restrict forestry under the Carbon Farming Initiative (CFI) but biodiversity funding
Forestry NZU the same as any other NZU. Kyoto compliant	Carbon farming units can only make up 5% of emissions in the fixed price period. Only some Kyoto-compliant
Pre-1990 forestry included with permanent liability	Land sector excluded



NEW ZEALAND
FOREST OWNERS ASSOCIATION

PRIVATE FOREST

**IF YOU PLAN TO STEAL CARBON CREDITS,
DO NOT ENTER**

NO KYOTO MONITORING

ANZAC CONVERGENCE

Ministers/officials targeting 2015, NZ review delayed

Commitment options are:

1. Mutual legally binding (eg food regulation)
A single scheme would require a treaty
2. Mutual non-legally binding
3. Unilateral coordination (eg business law)

But

- Internal harmony needed before external
- CFI (ACCU's) to NZ possible but unlikely until NZU's reciprocal in 2015
- Some major differences to be aligned

BEYOND NZ, AUSTRALIA AND THE EU?



India
China
Japan
Republic of Korea

Western Climate Initiative

California

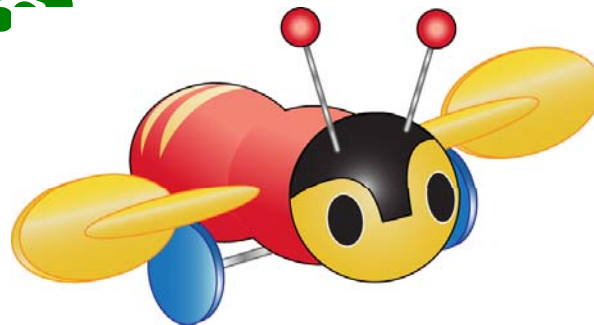


IMPACT OF KYOTO NEGOTIATIONS

- A gap is expected. MRV for all remains contentious. Political appetite is low.
- Likely to see instead:
 - coalitions of the willing (pluri-lateral)
 - LULUCF rules being maintained
 - BTAs? (e.g. EU/UK airline taxes)
- Carbon price likely to remain subdued for medium term

THE WORLD NEEDS FORESTRY

LOOK AFTER
THE MULES AND
THE
HONEYBEES



A photograph of a forest floor with several large, textured tree trunks and a dense carpet of green ferns. The scene is overlaid with a semi-transparent brown rectangle. In the center of this rectangle, the words "Thank you" are written in a white, italicized serif font.

Thank you