Policy options for land use land-use change and forestry in New Zealand

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Some features of NZ

- 27 Mha total area
- Agriculture 51% (pasture declining)
- Natural forest 24% (conservation)
- Plantations 6% (increasing)

- >80% electricity from hydro
- new power: natural gas and renewables

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NZ situation

- NZ Govt stated they aim to ratify Kyoto by September 2002
  - ‘ratifiable’
  - show international leadership
- Emission reduction target - 1990 levels over 1st CP
  - gross emission increase of 14%

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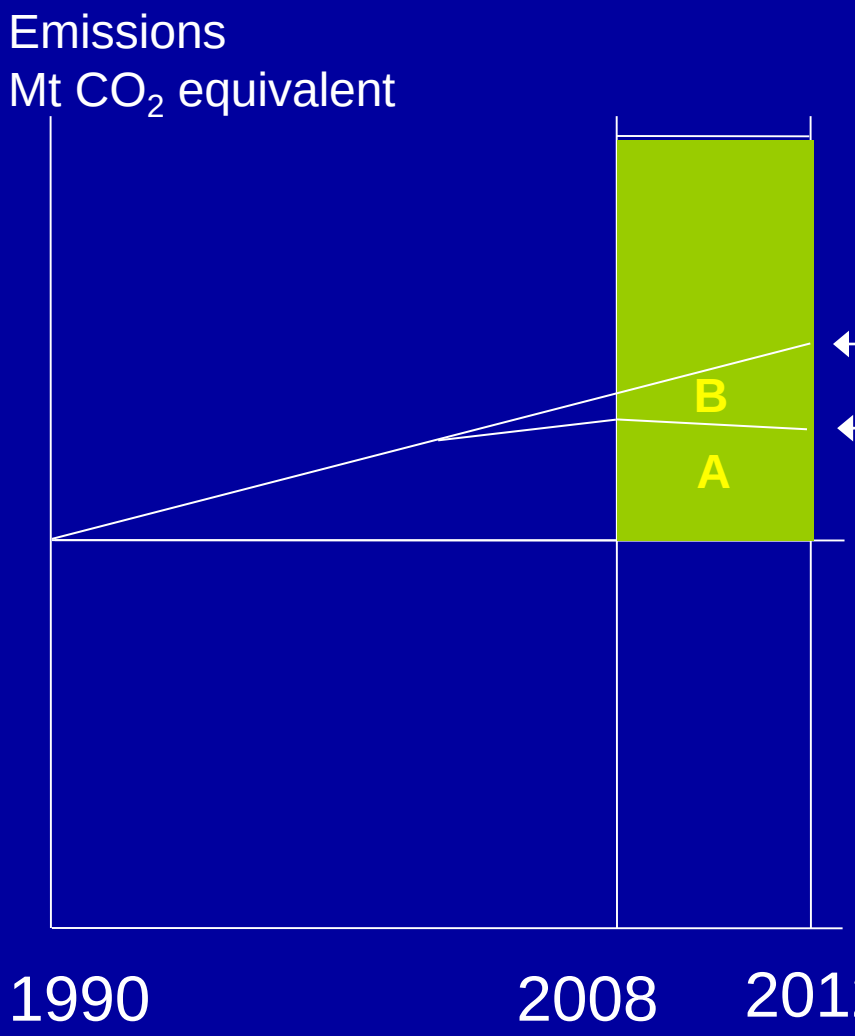
110 - 50 = 60 $MtCO_2$ @ \$10/tCO_2 = \$600 million



Emissions increase A+B = 50

with measures A = 40

Potential additional Assigned Amount Sinks = 110

NZ initial Assigned Amount = 363

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Domestic policy

- Consultation process
- Projects, NGAS, levies
- Domestic emission trading
- Emission charges
- Legislation to ratify
- Sinks

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Sinks

- Essential to NZ meeting obligations
- Least cost option for NZ
- Government decisions
  - Not a shield for emitters
  - Credits internationally tradeable
  - Some benefit to those with sinks
- Current thinking: sinks and sources separate

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Domestic policy options (sinks)

1. Government retention of all emissions and related responsibilities from forests
2. Devolve proportion of emission units and obligations to land/forestry owners
3. Land/forestry owners could receive all emission units and related obligations

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Criteria for policy decisions

- Economic efficiency
  - minimise costs, maximise benefits
  - whole economy
- Equity
  - between different stakeholder groups
- Feasibility
  - practical and cost effective

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Criteria for policy decisions

- Environmental Integrity
  - reduction in global emissions
- Competitiveness
  - maintain international competitivness for NZ industry

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Potential Issues

- Compliance costs
- Pre/post 1990 distortion
- Land values
- Overseas forest ownership
- Permanence
- Incentives/disincentives for particular behaviors

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Compliance costs

- At project level likely to require detailed monitoring over time
- Cost varies
  - Monitoring system (annual, 5 yearly, LTA, or in conjunction with normal inventory)
  - Forest components included
  - Precision of C estimates

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Compliance costs

- At national level monitoring using a high level approach
  - better info
  - scenario analysis/forecasting
  - provide reserve or buffer
  - confidentiality
- Reduced cost compared to landowner/forest owner level

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Pre/post 1990 distortion

- Liability of pre 1990 forests
- Subsidy for post 1990 forests
- Wood processing industry owned by pre 1990 forest owners - leakage
- Regimes: impact on NZ wood processing strategy
- Maori land claims on pre 1990 forest land

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Proposed Integrated Approach

- Sinks/sources in forestry retained by government agency
  - International Emissions Trading (A17)
- Sink revenues in Carbon Reduction Fund
  - compliance costs
  - gross emissions reduction
  - deforestation (underpinned by domestic policy
  - other environmental objectives? (erosion, riparian)
- NGAs to continue to reduce emissions

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Carbon Reduction Fund

- Cover compliance costs
  - Monitoring, reporting, transaction etc
- Aid transition to sustainable energy future (loans, grants, etc)
  - energy efficiency and conservation
  - renewable energy
  - industrial and domestic sectors
- Temporary benefit of sinks used for long term goals (gross reductions)

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Negotiated Greenhouse Agreements

- Enable appropriate emissions reductions and timeframe for sectors/companies
- Aim for ‘best practice’ (emissions/unit)
- Use of sink credits for ‘justifiable’ increases
- Encourage use of Carbon Reduction Fund to achieve targets
- Carbon charge or (domestic) emissions trading for excess

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Potential impacts avoided

- Distortion between forest owners
- Impact on land values
- ‘repatriation’ of sink credits
- Need for baselines/additionality (projects)
- High compliance costs (sinks)
- Indiscriminate carbon charge
  - increase all energy costs
  - loss of competitiveness

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Potential benefits

- meet international obligations
- better sink/emission data
- movement towards sustainable energy
  - addressing permanence
- enhanced rural industry
- economic efficiency; equity; feasibility; environmental integrity; competitiveness.

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