New Zealand Agricultural and Resource Economics Society (Inc.)

Climate Change and Emissions Trading

Julie Collins
Ministry of Agriculture and Forestry(MAF)

Paper presented at the 2007 NZARES Workshop, Wellington, New Zealand. August 23, 2007.

A New Zealand Government Initiative on Sustainability

Climate Change and Emissions Trading

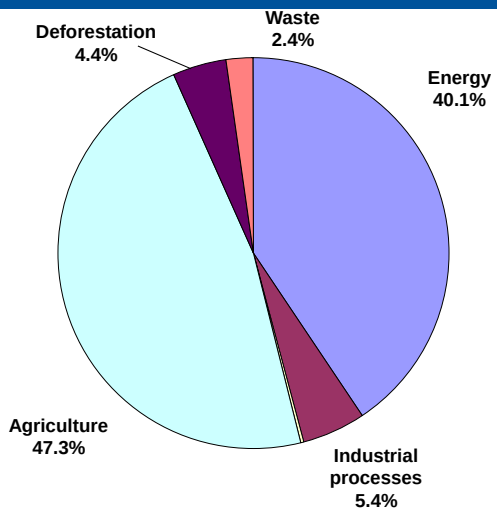
Presentation to
NZARES Workshop
23 August 2007

A New Zealand Government Initiative on Sustainability

Content

- Feedback from consultation
- Possible NZ Emission Trading Scheme
- Sustainable Land Management and Climate Change Plan of Action

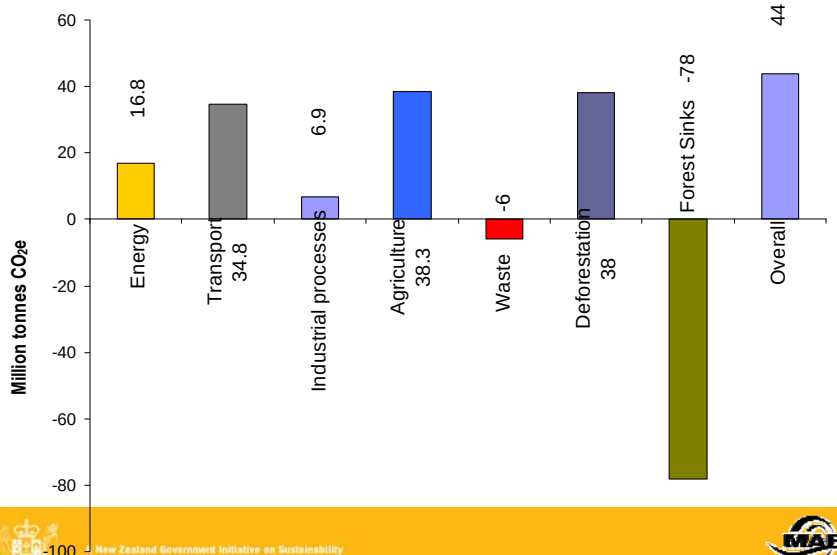
CO_2 Equivalent Emissions by Source, 2004



Source	$MtCO2_e$
Energy	31.6
Industrial processes	4.2
Agriculture	36.9
Deforestation	3.4
Waste	1.8
Total	78.0
Removals	25.6

A New Zealand Government Initiative on Sustainability

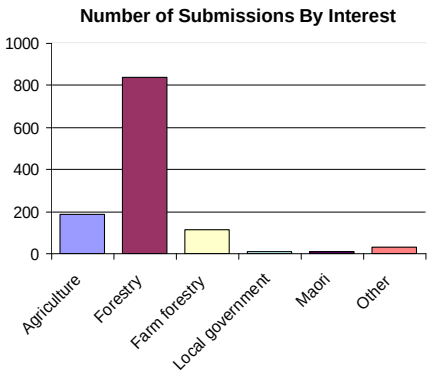
Projected excess emissions from key sectors 2008-2012, under business as usual



A New Zealand Government Initiative on Sustainability

Consultation on Sustainable Land Management and Climate Change

- 16 public forums
- 14 local government meetings (lead by MAF)
- 13 hui (led by the Ministry for the Environment),
- Numerous one-to-one meetings held
- About 3000 people attended the public forums.
- About 1223 written submissions being analysed.



A New Zealand Government Initiative on Sustainability

Key themes from consultation

Commonly held views and concerns included:

- Science and measurement of emissions critical;
- The value of trees on farms should be recognised - uncertainty around credits and liabilities causing a crisis of confidence in forestry and affecting investment;
- Deforestation restrictions are 'retrospective' and can restrict flexibility of land use (critical for Maori);
- Agriculture is a price-taker and thus competitiveness-at-risk;
- Agriculture policies will restrict production and profitability, have high compliance costs and be bureaucratic;
- Horticulture could be disadvantaged as the policies are driven by emissions from animal agriculture;

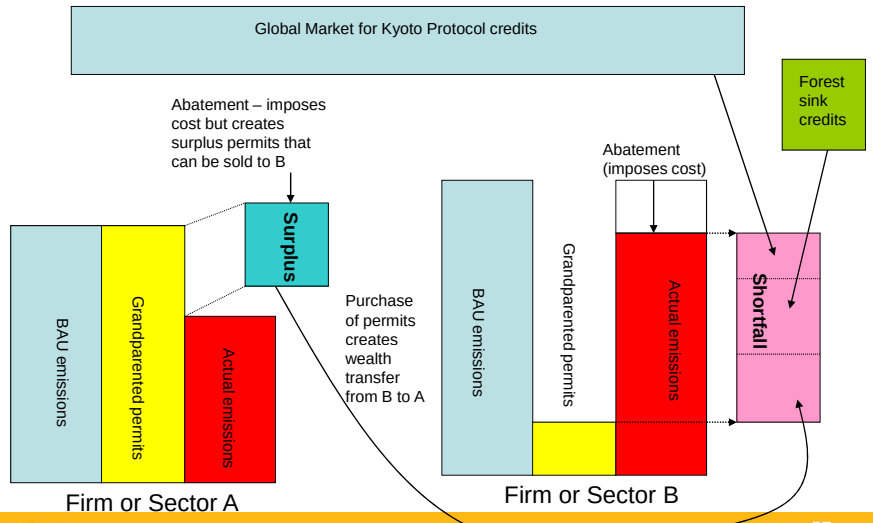
Government's wider climate change policy

- Action on climate change integral to Sustainability and Economic Transformation
- A wide number of initiatives already announced e.g. PFSI, new building code, biofuels obligation.
- A focus on design of a Potential NZ Emissions Trading Regime – places a price on carbon across the economy
- Further sector based action on mitigation depends on decisions around Emissions Trading
- Local government has a key role to play in both adaptation and mitigation

Why an Emissions Trading System

- Taxes and Emissions Trading are the principal price-based approaches to address environmental externalities
- Emissions Trading schemes increasingly favoured e.g. Kyoto, EU ETS, Australia, Stern.
- The fundamental difference between tax and ET is:
  - tax regimes - government sets a cost of emissions and the market determines the level of emissions at that cost
  - ET – government sets level of allowable emissions and market determines the cost of emissions to achieve that level

How ET might work



A New Zealand Government Initiative on Sustainability

Design parameters of NZ ETS

- Coverage – which gases and sectors?
- Overall cap or target level of emissions?
- Points of obligation – which firms/entities will need to buy, sell and retire units?
- Timing – scheme/sectors
- Offsets – allowed or not, if so which ones?
- Trading period duration – tradeoff between lack of knowledge about the future (suggesting shorter periods) vs businesses needing certainty and time to adapt (suggesting longer periods)

A New Zealand Government Initiative on Sustainability

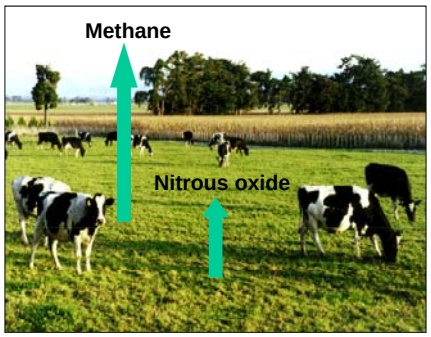
Design parameters of NZ ETS

- Banking and borrowing – can permits be carried forward?
- Competitiveness – relevant as many competitors not in Kyoto
- International linkages – can permits be bought in and sold out of ET?
- Market ownership and governance – transactions costs as low as possible, must be credible and ownership rights enforceable
- Treaty of Waitangi issues – e.g. are their any Maori specific issues to address, can Maori participate equally?

A New Zealand Government Initiative on Sustainability

Challenges for Agriculture in ET

- Agriculture – complex and many challenging issues:
  - Emissions measurement
  - Point of obligation – farm level or processors?
  - Timing
  - Mitigation



Challenges for Forestry in ET

- Forestry –how existing forestry programmes will be handled (PFSI)
- Carbon accounting, monitoring and verification
- Allocation of deforestation permits
- Exemptions

Sustainable Land Management and Climate Change Plan of Action

- ET focus on mitigation - Government recognises the need for complementary measures:
  - Research and technology transfer
  - Adaptation
  - Business opportunities
  - Communication and Engagement

- Need to develop these in partnership with sectors to have relevant, well informed and enduring policies

A New Zealand Government Initiative on Sustainability

Climate Change and Emissions Trading

Presentation to
NZARES Workshop
23 August 2007

A New Zealand Government Initiative on Sustainability