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New Zealand Agricultural and
Resource Economics Society (Inc.)

The path to an NZETS

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Paper presented at the 2008 NZARES Conference

Tahuna Conference Centre – Nelson, New Zealand. August 28-29, 2008.

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The path to an NZETS

NZARES
29 August 2008

Julie Collins
Manager Climate Change
Ministry of Agriculture and Forestry



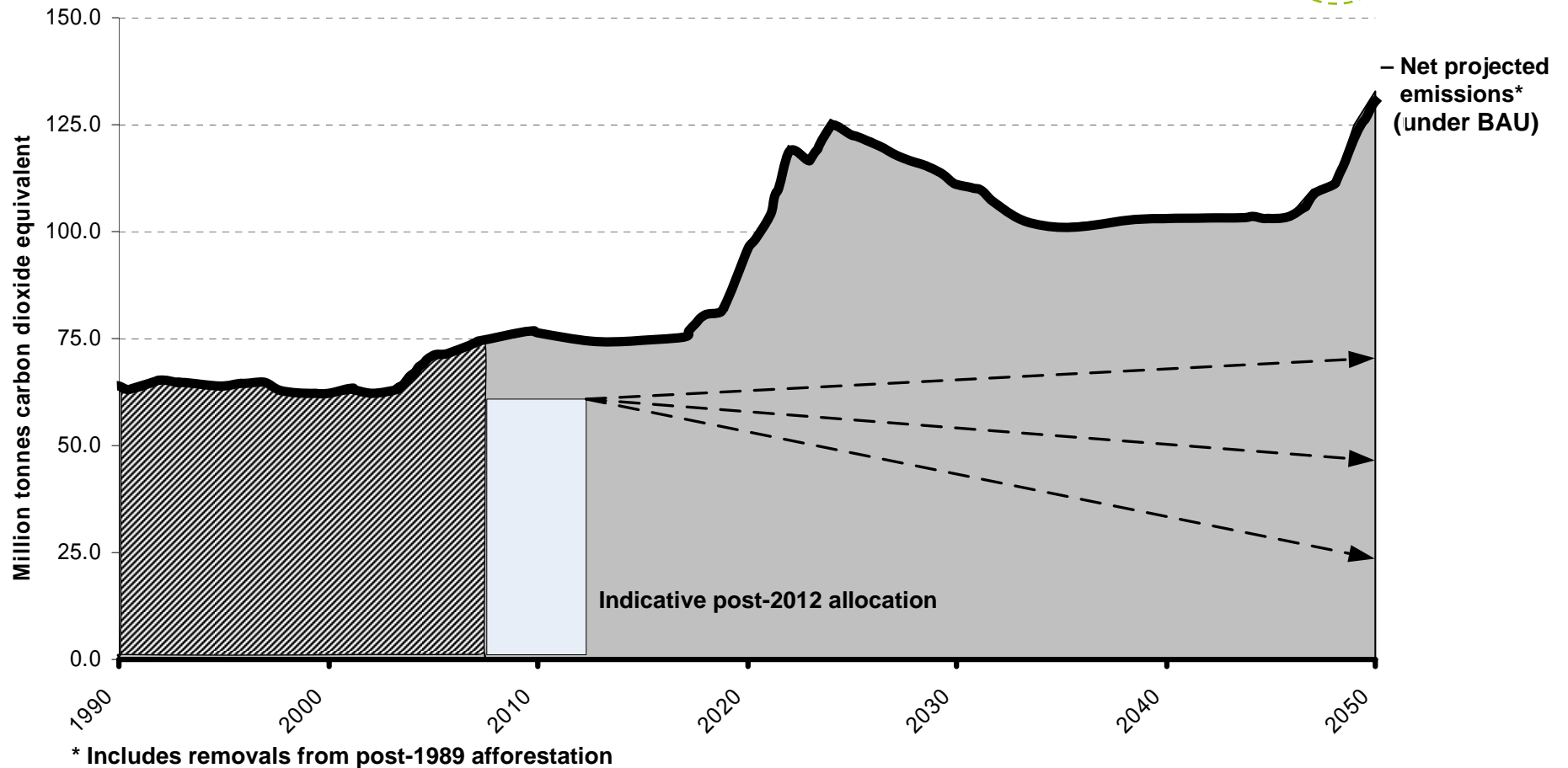
Presentation overview

1. Background to the development of the NZETS
2. ETS in summary
3. ETS developments in other countries

Climate change challenge – reducing emissions in NZ and globally



Projected greenhouse gas emissions in the context of international agreements



The Challenge

- NZ target under the Kyoto Protocol is to reduce our GHG emissions between 2008-2012 to 1990 levels or take responsibility for them
- NZ emissions under BAU scenario projected to be 45.5Mt CO₂e over this period
- This represents a cost to the NZ economy of \$1 billion @ 22 tonne
- The Challenge
 - Control our own emissions
 - Support international action
 - Prepare for the impacts of climate change
 - At the lowest long-term cost to the NZ economy

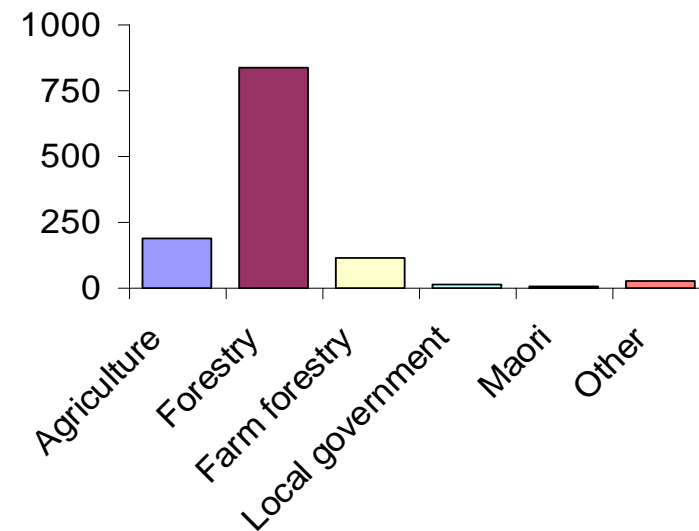
Process to date

- Consultation in 2002 on climate change policies (included agriculture and forestry)
 - Deforestation cap
 - Agriculture not to face price measures before 2013, provided adequate research
- 2005 major review of policies
- December 2006 – March 2007 consultation on *Sustainable Land Management and Climate Change, NZ Energy Strategy, NZEECS, Post 2012*
- In September 2007 Government proposed an economy-wide ETS

2007 Consultation – what people said

- **Agriculture**
 - support for research, technology transfer, and incentives
 - opposed nitrogen charge and regulations BUT some support for trading regimes in long-term

Submissions on Sustainable Land Management and Climate Change

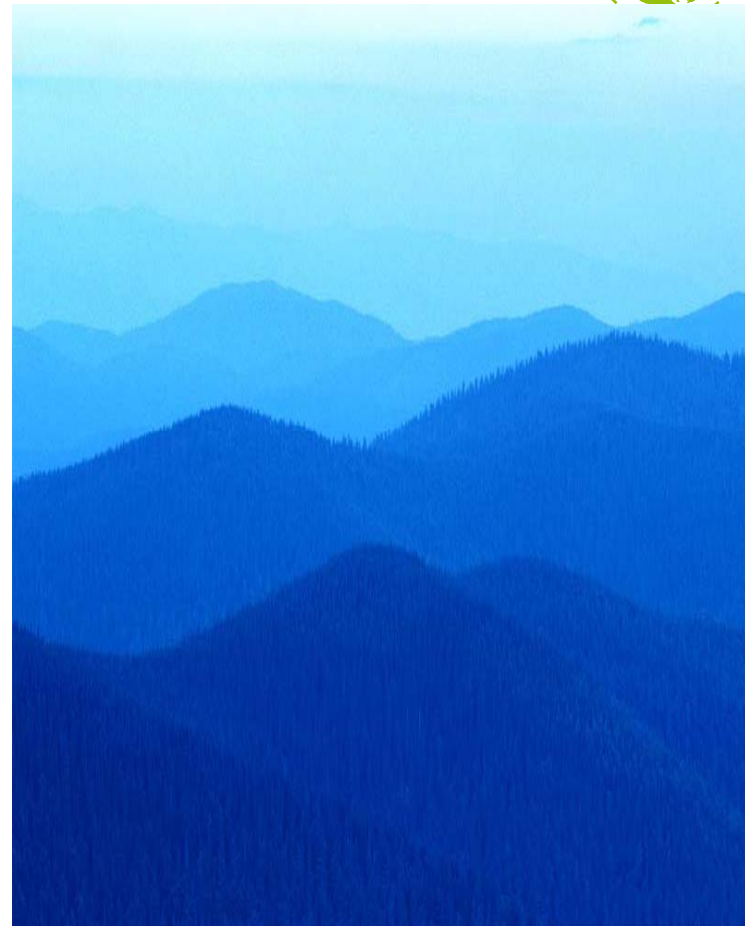


Overall farmers and foresters wanted more incentives and land use flexibility

Why emissions trading?



- Least cost
- Flexible
- Effective
- Businesses' most preferred option
- Consistent with international developments



NZETS Overview



Objective of the NZ ETS

That a New Zealand ETS support and encourage global efforts to reduce greenhouse gas emissions by:

- *reducing New Zealand's net emissions below business-as-usual levels; and*
- *complying with our international obligations, including our Kyoto Protocol obligations;*

while maintaining economic flexibility, equity, and environmental integrity at least cost in the long term.

Core design features of the NZETS

- All sectors - all gases over time
- Obligation on absolute emission levels
- The units of trade - New Zealand Unit (NZU)
- Each NZU to be backed by a Kyoto unit
- NZUs convertible to Kyoto Protocol units (with some limits) and Kyoto units may be used to meet NZETS obligations
- Self-reporting system with severe penalties

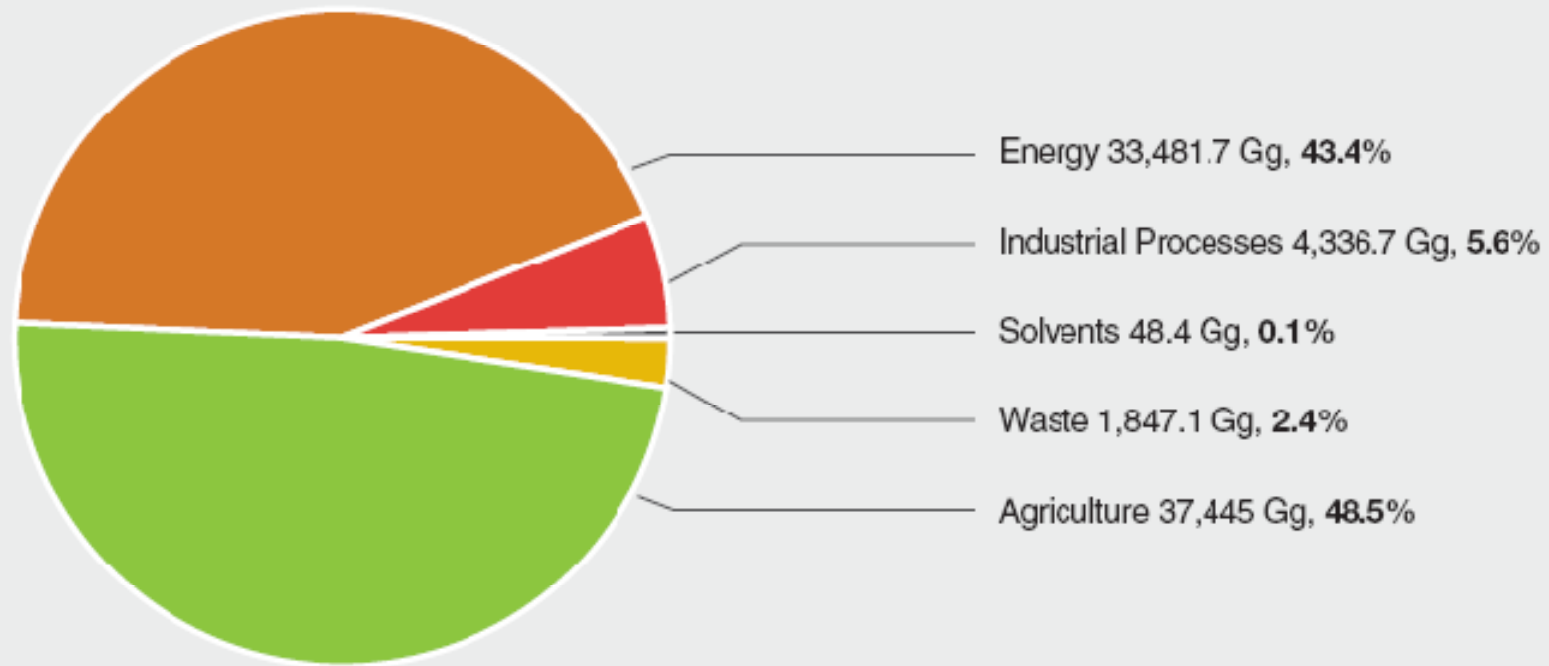
Entry to the ETS by sector

Sector	Commencement of obligations	End of initial compliance period
Forestry (includes deforestation of pre-1990 forest land and afforestation post-1989)	1 January 2008	31 December 2009 (first compliance period for deforestation two years)
Stationary energy (includes coal, natural gas and geothermal)	1 January 2010	31 December 2010
Industrial process (non-energy) emissions	1 January 2010	31 December 2010
Liquid fossil fuels (mainly transport)	1 January 2011*	31 December 2011
Agriculture (includes pastoral and arable farming and horticulture)	1 January 2013	31 December 2013
Waste and synthetic gases (HFCs, PFCs)	1 January 2013	31 December 2013

Managing the Transition

- Staggering the entry of different sectors into the scheme
- Allocation of free NZUs to forestry, agriculture and industry
 - Pre-1990 forests: one off allocation of 55 million units
 - Industry and agriculture: annual allocation equivalent to 90% 2005 emissions up to 2018, phase out to zero by 2030
- Review prior to 2013 to consider action of trading partners and mitigation potential

Current greenhouse gas emissions by sector



Agriculture – January 2013



- Methane and nitrous oxide from livestock and synthetic fertiliser
- Bill provides options for points of obligation
 - Company, farmer, hybrid
- Free allocation to sector for non-CO₂ emissions – 90% 2005 emissions
- Voluntary reporting from 2011
- Mandatory reporting from 2012

Timelines

- Second Reading – yesterday
- Progresses to the Committee of the Whole – next week
- Administration, and forestry enacted
- Agriculture Technical Advisory Group reports back October 2008
- Development of Allocation Plans 2008-2010
- Development of Regulations for other sectors 2009

NZETS Overview



ETS developments in other countries

- NZ and Australia part of a leading group of countries developing ETSs:
 - European Union (27 countries)
 - Switzerland
 - Norway
 - USA
 - Japan

Australian Carbon Pollution Reduction Scheme

- Core coverage begins in 2010 – covers 75% of Australia's emissions
- The scheme is an absolute, rather than an intensity-based approach
- Includes all 6 Kyoto Protocol gases from commencement
- Includes emissions from transport, stationary energy industrial processes, waste and fugitive emissions from oil, gas and coal production

Australian Carbon Pollution Reduction Scheme

- Afforestation is included on a voluntary basis
- Deforestation is excluded
- Deferral of a decision on agricultural emissions until 2013, with any coverage starting no earlier than 2015
- Earlier liabilities for the transport, waste and synthetic gas sectors relative to NZ

USA

- Federal Cap and Trade Legislation
 - Both Presidential candidates support an ETS
 - The Lieberman – Warner Bill failed to progress to pass a vote in the Senate
 - The Democrats have announced that the legislation will be reintroduced in 2009.
- Regional Schemes
 - Chicago Climate Exchange
 - Regional Greenhouse Gas Initiative - 1 Jan 2009
 - Western Climate Initiative - 1 Jan 2012

EU ETS description

- The EU ETS is a classic cap-and-trade system but with a decentralised structure
- It has only partial coverage: CO₂ only for power and industrial sectors (recently expanded to include aviation and will include additional GHGs in phase 3)
- Sequential trading periods out to 2020
- CDM / JI Units allowed up to a limit

EU ETS Pew Centre Review

- Not all the details of the scheme were perfect from the beginning and this did not hamper its effectiveness
- Emergence of a transparent and widely accepted price for CO₂ in Europe
- A price of CO₂ affects business decisions
- No evidence of leakage
- A mechanism for long-term control of GHG emissions
- Abatement in line with modest initial ambition

Questions?

