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# New Zealand Agricultural and Resource Economics Society (Inc.)

## **The path to an NZETS**

**Julie Collins**

Manager Climate Change, Ministry of Agriculture and Forestry

**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

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**NZARES**  
29 August 2008

**Julie Collins**  
Manager Climate Change  
Ministry of Agriculture and Forestry



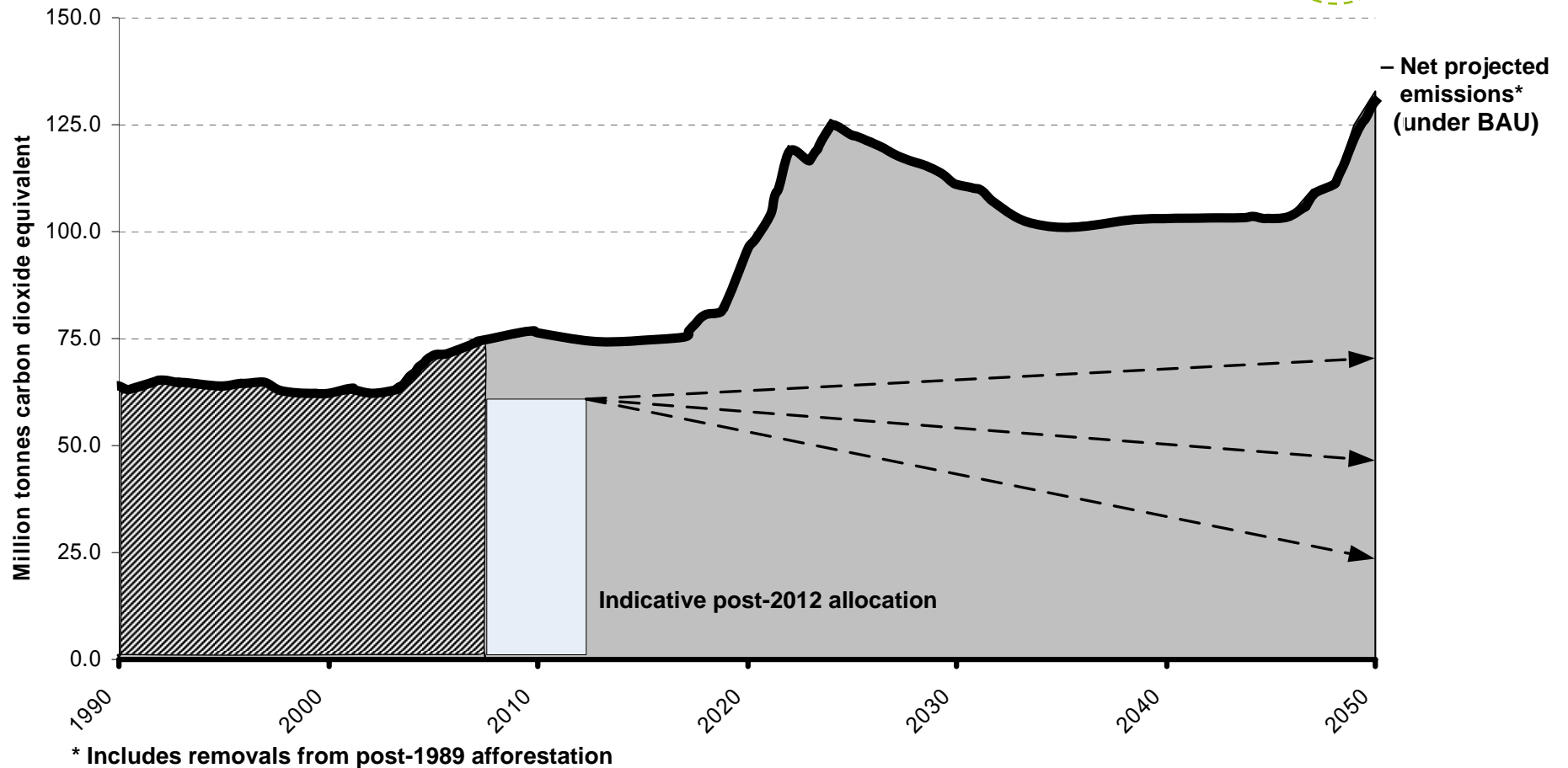
# Presentation overview

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 CO<sub>2</sub>e 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

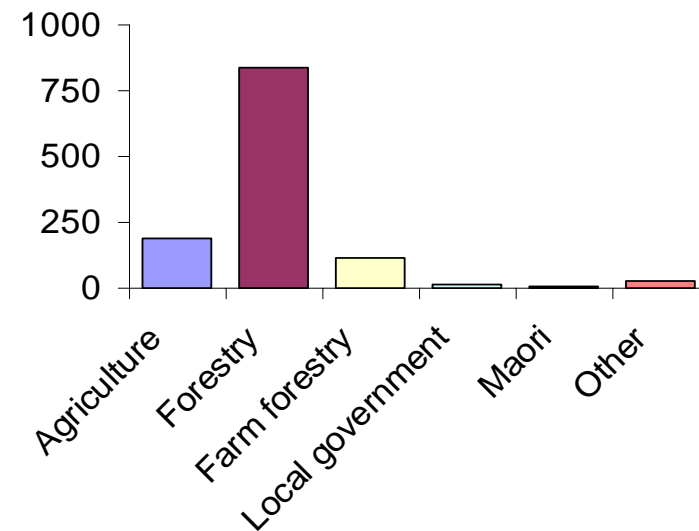
- Consultation in 2002 on climate change policies (included agriculture and forestry)
  - Deforestation cap
  - Agriculture not to face price measures before 2013, provided adequate research
- 2005 major review of policies
- December 2006 – March 2007 consultation on *Sustainable Land Management and 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

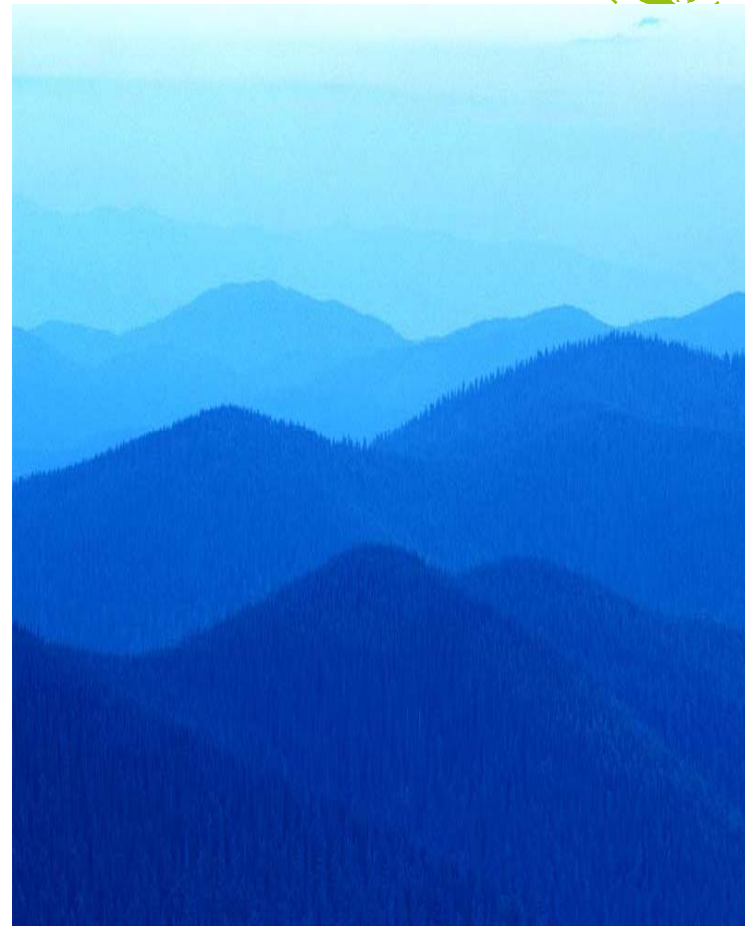


Overall farmers and foresters wanted more incentives and land use flexibility

# 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

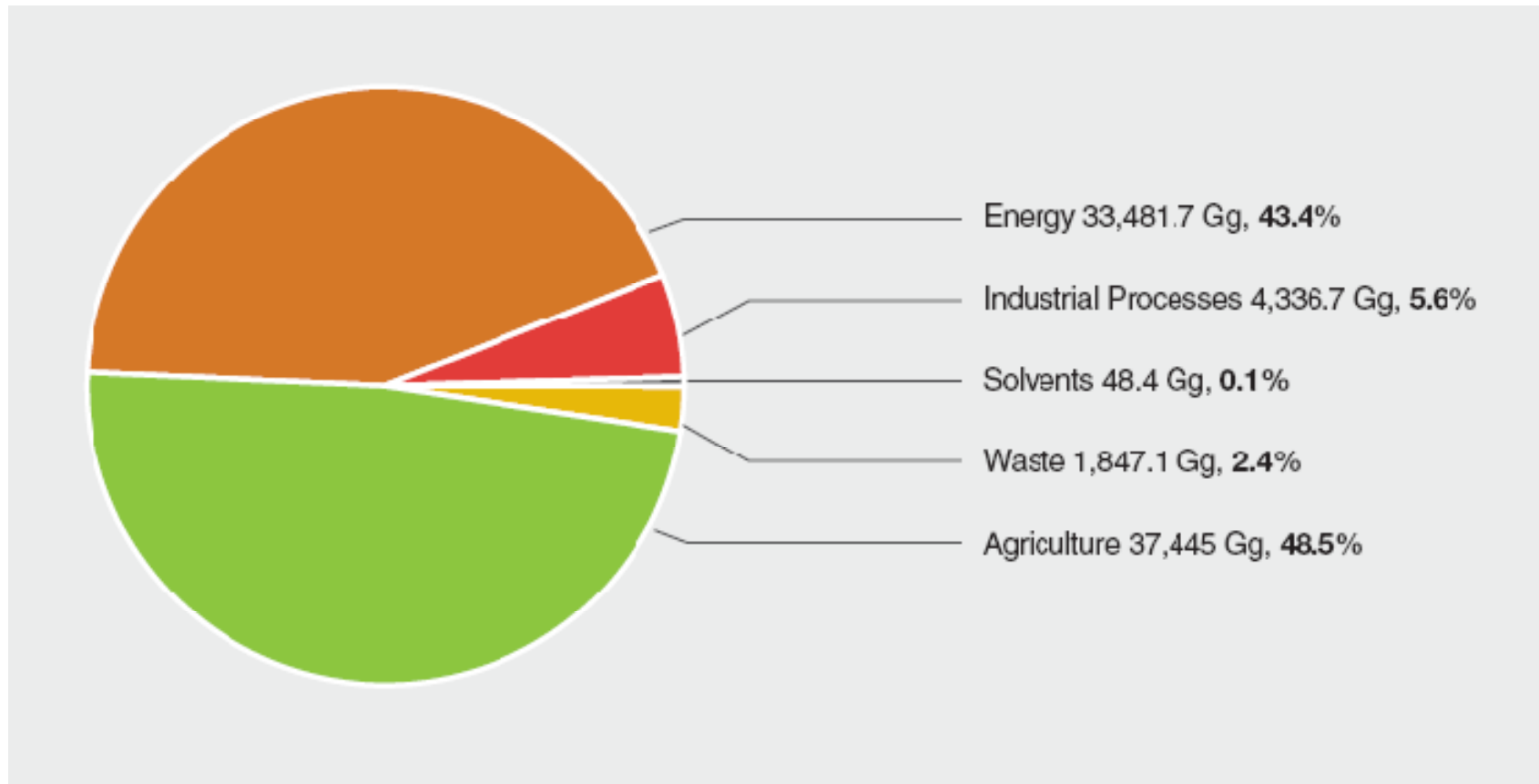
Sector	Commencement of obligations	End of initial compliance period
Forestry (includes deforestation of pre-1990 forest land and afforestation post-1989)	1 January 2008	31 December 2009 (first compliance period for deforestation two years)
Stationary energy (includes coal, natural gas and geothermal)	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-CO<sub>2</sub> 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: CO<sub>2</sub> 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 CO<sub>2</sub> in Europe
- A price of CO<sub>2</sub> affects business decisions
- No evidence of leakage
- A mechanism for long-term control of GHG emissions
- Abatement in line with modest initial ambition

# Questions?

