



TASK 38 CONFERENCE

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22-23 March 2004
Rotorua, New Zealand



The Government's Objective

- New Zealand should have made significant greenhouse gas reductions on business as usual and be set towards a permanent downward path for total gross emissions by 2012

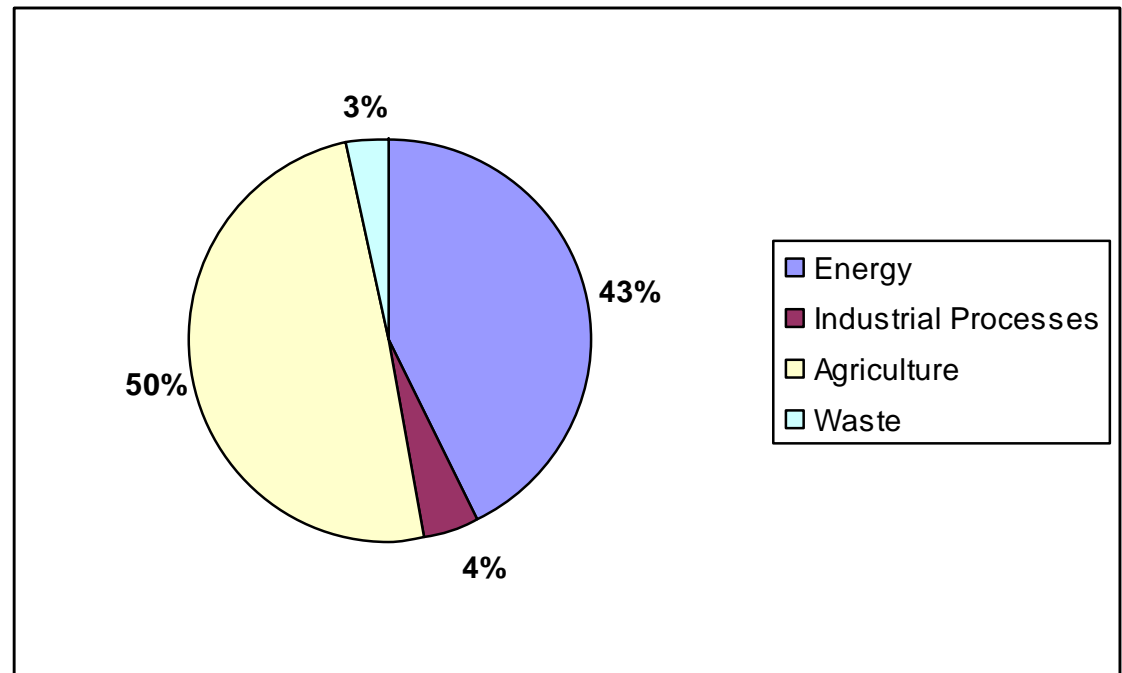
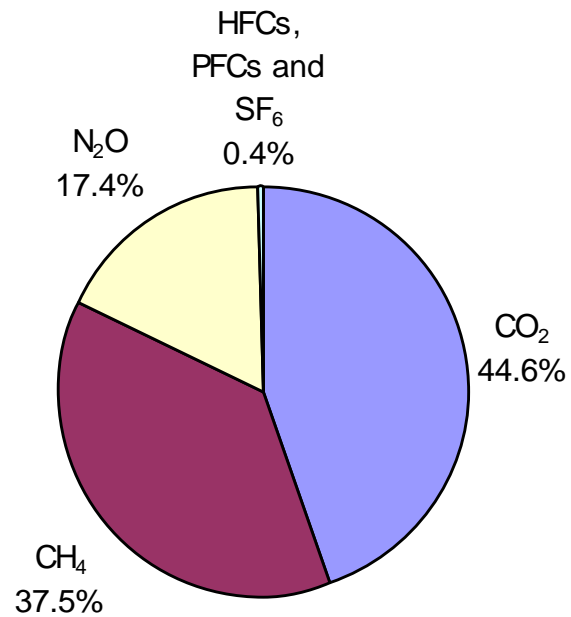


New Zealand in the World

- It's a global issue and countries must work together
- Varying impacts predicted for New Zealand e.g. (e.g. sea-level rise, flood risk, new pests and diseases, human health in some regions)
- Extreme events almost invariably cause damage – likely increase in drought risk, flooding, importance of storms for property damage and coastal erosion



Emissions by Gas/Sector





New Zealand Position in CP1

BAU projections 2008-2012	383
Assigned Amount Units (5 times 1990 emissions = AAU)	309
Article 3.3 sink credits	105
Allowed emissions (AAU + sink credits = 309 + 105)	414
Projections 2008-2012 (with policies scenario = 383 - 25)	358
Net Position (allowed emissions minus projections = 414 - 358)	+56



Comprehensive Policy Package

Carbon charge capped @ \$25/t CO₂ from 2007

Revenue recycling

Retention of sink credits and capped liabilities

NGAs for competitiveness at risk firms/world best practice

Industry/Government funded research in the agriculture sector

Projects to reduce emissions

Industrial gases voluntary agreement

SMEs and Business Opportunities

Public Education and Awareness



Foundation Policies

- Local Government Partnership
- Resource Management Act Amendment
- Adaptation
- New Zealand Waste Strategy
- Public Awareness Programme
- National Energy Efficiency and Conservation Strategy
- Growth and Innovation framework
- Research
- New Zealand Transport Strategy



Monitoring & Reporting

- NZCAS
- Inventory Reporting
- Science



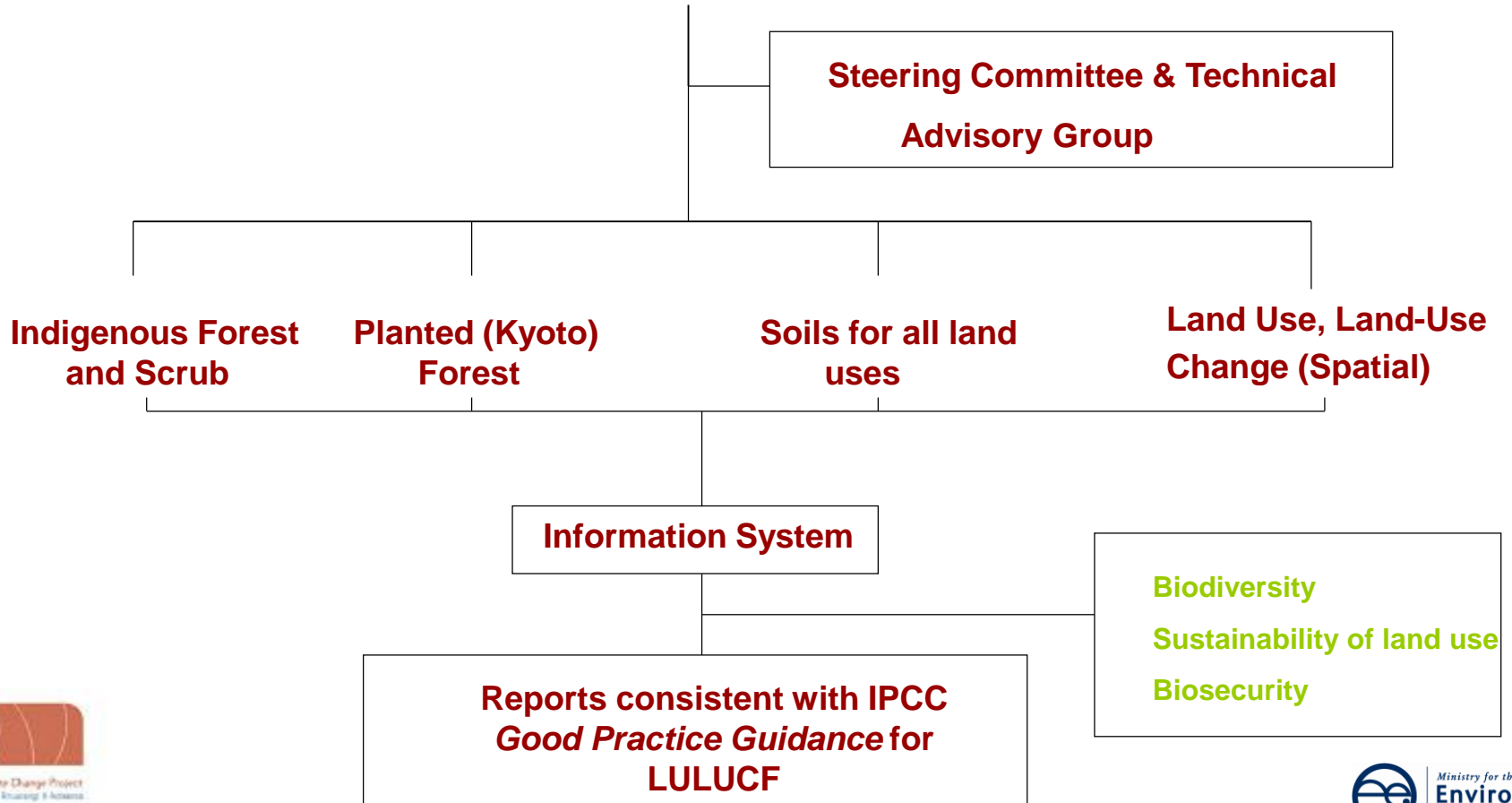
GHG Inventory

The New Zealand Climate Change Office is responsible for:

- Compiling and reporting greenhouse gas inventory
- Carbon Accounting System
- New Zealand's commitments to both UNFCCC (1992) and Kyoto Protocol (1997)



New Zealand Carbon Accounting System





The First Plot

February 2002

Near Rainbow Valley at 1500m elevation and on a 50 degree slope. Beech forest (*Nothofagus* sp.)



New Zealand Climate Change Office
Te Tari Rerekētanga Āhuarangi o Aotearoa



Ministry for the
Environment
Manatū Mō Te Taiao



Planted Forest



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Ministry for the
Environment
Manatū Mo Te Taiao



The New Zealand: Addressing the Big Issues





Further information

www.climatechange.govt.nz



Emissions Charge

- To change relative prices to encourage lower carbon fuels and processes
- 2007 onwards, capped at \$25 per tCO₂
- To integrate emissions cost into economic activity (prepare for trading)
- Revenue raised to be recycled
- Design of charge underway



Negotiated Greenhouse Agreements (NGAs)

- Carbon charge may cause emissions “leakage”
- NGAs for “competitiveness at risk” firms
- Partial/full exemption if move to world’s best practice in emissions management
- 12 firms applied, prioritised, and 6 eligible to negotiate



Projects to Reduce Emissions

- Award of Kyoto emission units to projects that will reduce GHG emissions below business-as-usual.
- 15 successful tenderers
- 14 of 15 signed up
- 6 Project announcements made
- Assessment of first round underway



Proposed Forest Industry Framework Agreement (FIFA)

- MOU between Crown and Forestry Industry
- Aims to encourage a growing, viable forestry industry and to meet climate change objectives (protection of sinks)
- Recycles a proportion of sink credits to industry



Agricultural Emissions

- Government will take responsibility for cost of non-CO₂ emissions in first commitment period (2008-2012)
- Voluntary funding by industry for research through PGGRC



Small and Medium Sized Enterprises

- Policy for SMEs under development but will cover
 - ways of reducing SME energy use and emissions



Business Opportunities

- Policy for Business Opportunities is being developed, but will look at:
- The role of Government in supporting the development of a climate change service industry
- In particular, by working with business and industry organisations focusing on emissions management, energy efficiency, renewable energy and emissions trading opportunities



Public Awareness and Education

- Public awareness and education (for long term behaviour change) an important foundation of government's policy package
- programme targeting major stakeholders



Indigenous Forest, Scrub and Soils

- Year 2 of a 5 year programme to establish permanent sample plots on a national 8x8 km grid (~1400 in total)
- Field crews measure 20m x 20m plots (based on field manuals)
- Identify and measure vegetation (7 tiers: 25m -<0.3m)



Planted (Kyoto) Forests

NZCCO commissioned MAF to establish sampling plots, make vegetation & soil measurements, and develop modelling capability;

Pilot project to start in 2004 (Gisborne-East Coast);

Make use of existing PSP data, models, allometric equations and yield tables;

NZCCO ensuring 'Kyoto' forest modelling research capability maintained.



Soil Carbon Monitoring

Assumptions:

- **Soil carbon will attain ‘quasi-steady’ state under long-term land use, and further changes can be disregarded**
- **If land use is constant there will be no change in soil carbon**

The system must measure only soil carbon changes caused by land-use change



Land cover Mapping

- **LCDB1 – completed for 1995/96, using SPOT imagery**
- **LCDB2 – near completion for 2001/02, using Landsat 7 ETM+ imagery (70 land cover classes)**
- **1990 baseline – currently considering how this could be established**



Information System & Modelling Framework

- Information system will likely involve integration and robust management of a number of resources
- Work on this about to start!