

FRAZER LINDSTROM
Climate Change and Energy Sector Strategic Advice



After the Carbon tax: What next for the New Zealand Gas Market?

Stuart Frazer – Frazer Lindstrom Limited

Climate
Change

Energy
Sector

Strategic
Advice

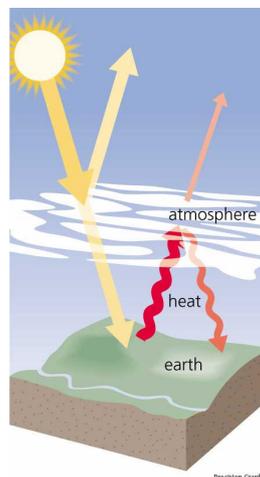
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Agenda

- Global Warming - What is it?
- What is the role of the gas industry?
- Farewell to the Carbon Tax – what happened?
- The Current Policy Hiatus
- Future Policy Options

What is Global Warming?

- Life on earth depends on the greenhouse effect
- The question is are we changing its magnitude?

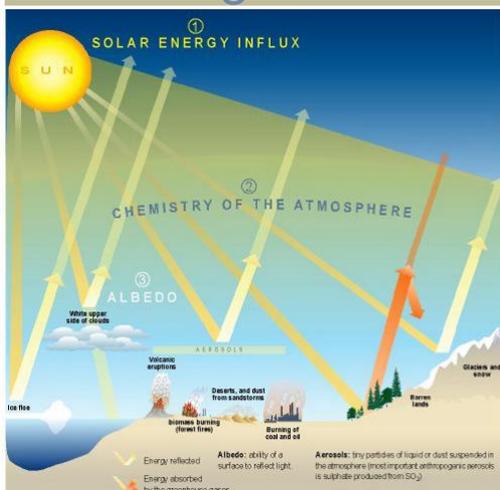


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Three key drivers of the greenhouse effect:



1. Solar Influx

2. Chemistry

- The role of Greenhouse Gases (GHG);
CO₂, **CH₄**, N₂O,
SF₆, PFCs, HFCs

3. Albedo Effect

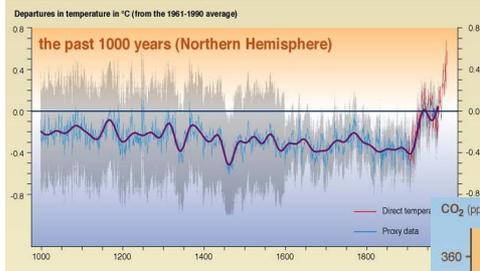
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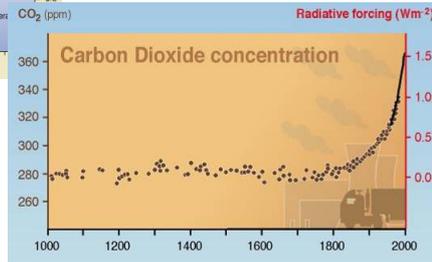
The Climate Scientist's View

Temperature



“There is strong evidence of a correlation between temperature And CO₂ emissions”

CO₂



Source IPCC

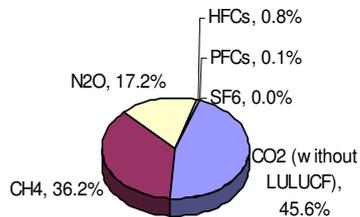
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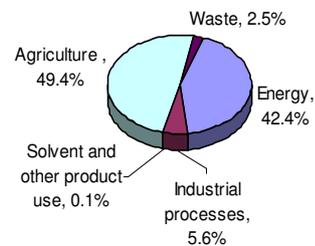
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New Zealand's 2004 GHG Emissions

NZ Greenhouse Gas Emissions by Gas



NZ Greenhouse Gas Emissions by Sector



Source: MfE NIR 2004

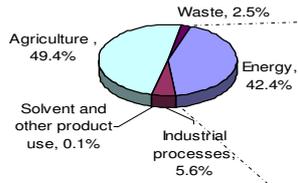
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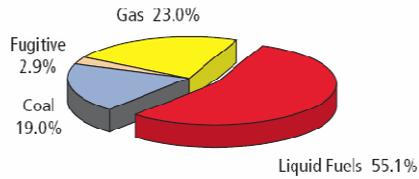
The Gas Industry Role?

NZ Greenhouse Gas Emissions by Sector



Source: MfE NIR 2004

Energy CO₂ Emissions by Fuel Type



Source: MED 2006

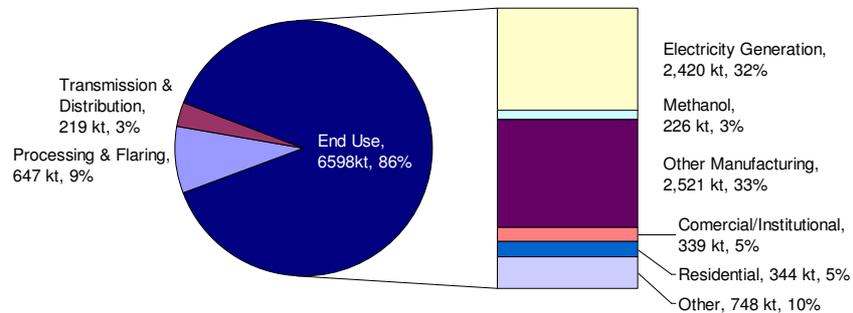
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The Gas Industry Role?

NZ Gas Industry Emissions Sources 2005



Source: MED 2006

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Progress to Date (2002-2005)

New Zealand's Old Domestic Policies



Agriculture

- Pastoral GHG Research Consortium



Plantation Forests

- NZ Government retains sinks (post 1990 planting)
- Takes on deforestation liability up to 21MtCO₂e cap



Indigenous Forests

- Permanent Forest Sink Initiative (PFSI)



Energy, Industry and Transport

- Carbon Tax from 2007 at NZ\$15/tCO₂e
- Negotiated Greenhouse Agreements (NGAs) to protect industry facing international competition

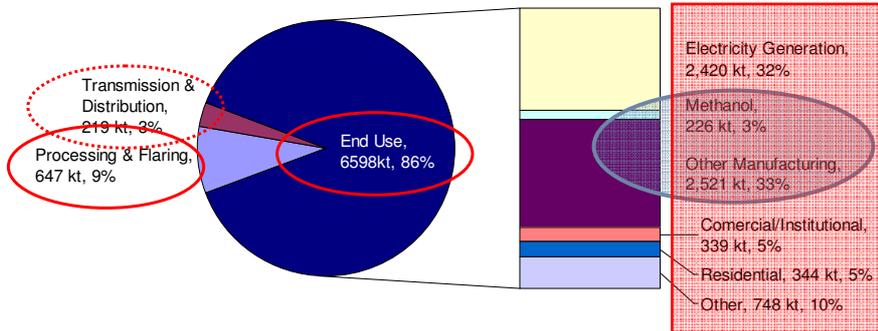
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The Old Carbon Tax

NZ Gas Industry Emissions Sources 2005



Upstream point of obligation
for tax collection...

Downstream "end users" impacted

Provision for "rebate" to CAR status firms
through Negotiated Greenhouse Agreements

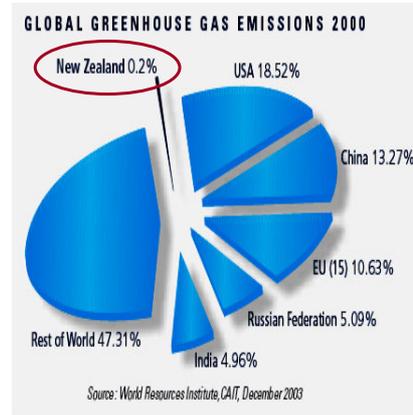
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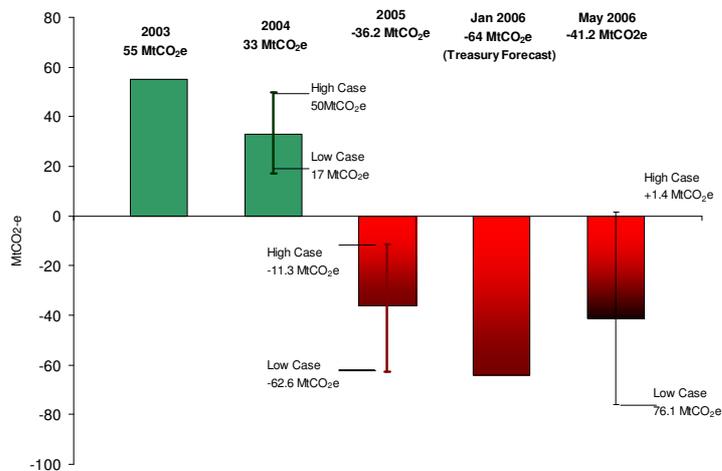
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New Zealand's Kyoto Obligations

- New Zealand Ratified
19th Dec 2002
- Obligation to:
 - reduce its 2008 – 2012
GHG emissions to 1990
level or
 - take responsibility for
excess emissions



New Zealand's Kyoto CP1 (2008-12) Emissions Projected Balance by year of forecast



The 2005 Election

Climate Change

- Kyoto? - Yes
- Carbon Tax? - Yes
- Emissions Trading? - Likely



NEW ZEALAND
Labour

- Kyoto? - Maybe
- Carbon Tax? - No
- Emissions Trading? - Likely



National

Authorised by Steven Joyce, 14th Floor, 57 Willis Street, Wellington

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Climate Change Policy Review June – November 2005

- Key Outcomes:
 - Revisit the “downward path by 2012 goal” now unrealistic
 - Cost effective domestic emissions reductions will be small
 - More cost effective to purchase emission units offshore
- Report Recommendations flowed into cabinet decisions...

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Cabinet Decisions

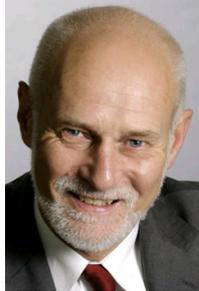
Cabinet Decisions announced 21 Dec 2005:

- Still committed to meeting Kyoto obligation
- Carbon Tax scrapped
- Programmes to be developed include:
 - Alternatives for industry include
 - voluntary agreements
 - narrow based tax with NGA type arrangements
 - emissions trading
 - Forestry policy options to give right signals
 - International unit purchasing strategies
 - Incentivising renewables / disincentivising fossil fuel electricity generation.
 - Need for future shape of a PRE programme

Since Then?

- 4th July 2006 announcements
 - New Zealand Energy Strategy
 - National Energy Efficiency & Conservation Strategy; and
 - Climate Change Work Programmes;
- But no details/substance/timeline

Win Hearts & Minds Mode



Hon Pete Hodgson

- Need a mandate from the voters for action.
- Election did not deliver this...

4 million careful owners

WWW.4MILLION.ORG.NZ

THE CLIMATE IS CHANGING.
DO WE NEED TO CHANGE TOO?

Join the people who are helping to reduce the effects of climate change. From turning off a light to using your car less, small steps can make a difference. New Zealand 4 million careful owners
VISIT WWW.4MILLION.ORG.NZ NOW AND BECOME A PART OF THE ANSWER

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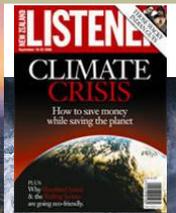
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Win Hearts & Minds Mode



Hon David Parker



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International Policy

What happens after 2012?
– the end of the first Kyoto Commitment Period?

AP 6

- USA, Aus, China, India, S Korea, Japan



Kyoto 37

- EU, NZ, Japan... (Canada)

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Cabinet Decisions to be taken

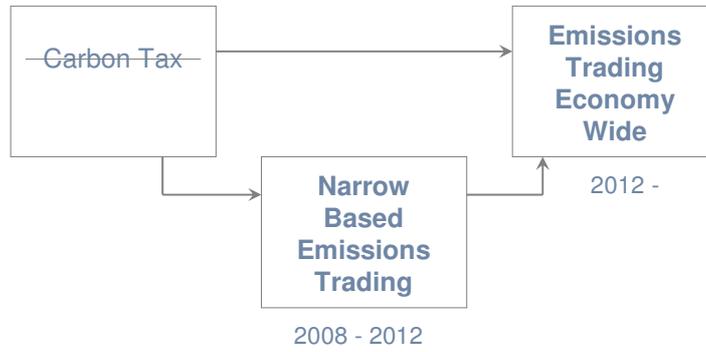
1. *Should NZ economy get prepared for carbon pricing through a “broad price-based measure” post 2012*
2. *The scope of sectoral climate change objectives for large direct emitters ...from 2008-2012 and post-2012;*
3. *The type of transitional policy measure (eg, a carbon tax, emissions trading regime, voluntary agreement scheme, regulation under the RMA, or other measures) for large direct emitters pre-2012*
4. *The detailed design features of the transitional policy measure(s) for large direct emitters;*
5. *The detailed design features of the longer-term policy measure for introducing the price of emissions into the New Zealand economy (eg, economy-wide emissions trading post-2012, or other price-based measures).”*

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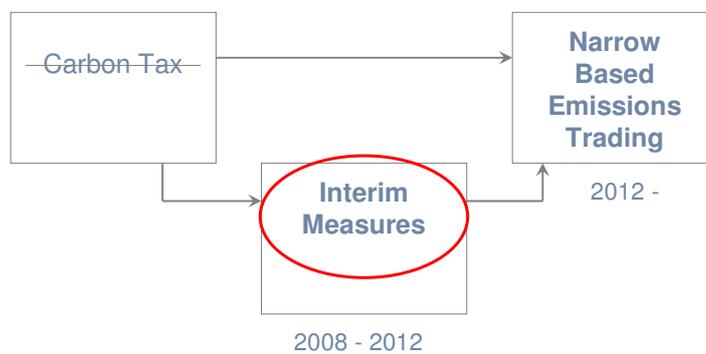
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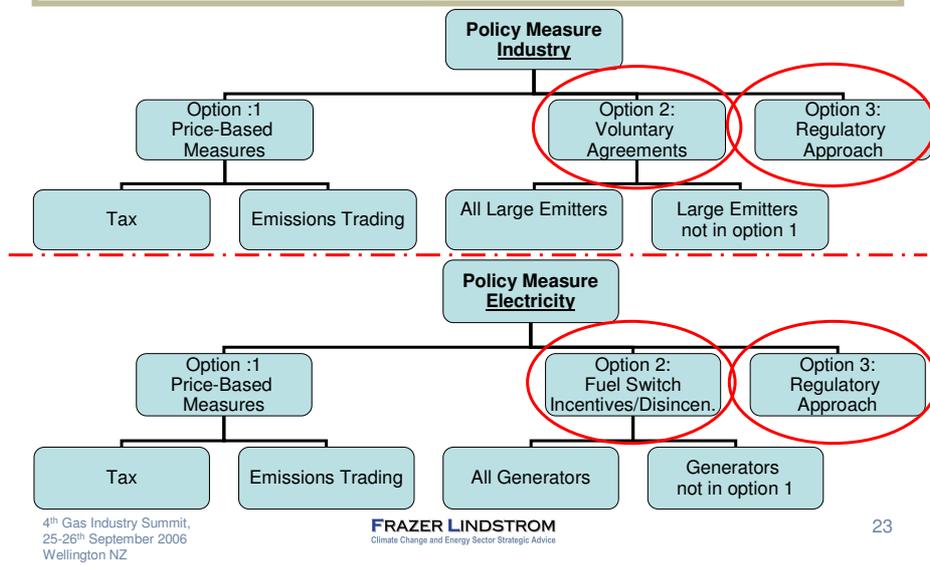
Emissions Trading Prospects for NZ - The ideal policy makers world...



Emissions Trading Prospects for NZ - The more likely outcome?



“Short Term” Interim Measures - downstream “Large Direct Emitter” focus

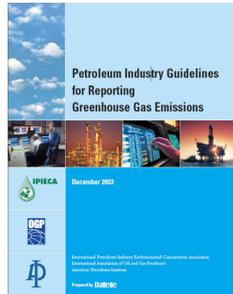


So where does this leave the Gas Industry?

- Gas Processing = Large Emitter
 - Voluntary Agreement + Regulation
- End User Large Emitters
 - Voluntary Agreement + Regulation
- Existing Electricity Generation
 - No price measures ; windfall gain issue
- New Electricity Generation
 - Anything But Coal now also A. B. Gas? OR
 - Coal / Gas accepted but only with abatement?

VA's & Regulation

- Measure to Manage:



- Set targets & track
- ISO 14064
- GHG Protocol

- Regulation Aussie style?

- Mandatory Energy Efficiency / Emissions Audits
- Mandatory publication of outcomes & investment recommendations
- Mandatory public reporting of progress against these...

- The role of NEECS?

- Climate Change Response Act
 - IRD like powers..

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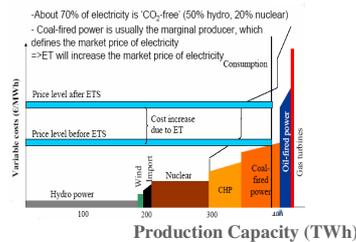
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Gas Fired Generation Impacts

- How to incentivise renewables without windfall gains?

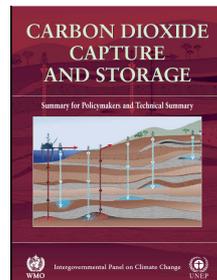
- Feed in Tariffs?
- Renewables Quotas?

THE IMPACT OF EMISSIONS TRADING ON THE NORDIC ELECTRICITY PRICES



- Abatement?

- Offsets (Taranaki CC)
- CCS
 - Norwegian precedent?



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End Game is Emissions Trading...

- Much to be learnt from international experience to date...
- If we are to have an NZ ETS we should take the time to develop one that is matched to New Zealand's circumstances.




Confronting Climate Change and Emissions Reduction in the Energy Sector

Emissions Trading

EU ETS Experience & Lessons for New Zealand

Murray Dyer – Prime Markets Limited
 Stuart Frazer – Frazer Lindstrom Limited
 Karen Price – Minter Ellison Rudd Watts





<http://www.frazerlindstrom.com/Publications.htm>

Eu ETS Price Volatility



Recommendations?

- Put in place emissions accounting
 - It will be needed sooner or later...
- Identify cost effective emissions reductions
 - Sooner or later emissions will have a price...
- Recognise that BAU is not an option
 - “there will be some pain” but on who?
- Highlight policy contradictions
 - Increased oil & gas exploration but do not burn it here?
- Be patient
 - Meaningful policy some way off...

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