

Major Electricity Users' Group

27 February 2009

Hon Peter Dunne Chairman Emissions Trading Scheme Review Committee c/- Steven Mitchell Clerk to the Committee Parliament

By email to steven.mitchell@parliament.govt.nz

Dear Mr Dunne

Submission on the Emissions Trading Scheme Review

- This is a submission by the Major Electricity Users' Group (MEUG) to the Emissions Trading Scheme Review Committee (the "Committee") in response to an invitation¹ for submissions on the Emissions Trading Scheme ("ETS") and related matters.
- The Major Electricity Users' Group (MEUG) comprises 20 individual companies and 2 trade associations. Collectively members of the group consumer approximately 29% of total electricity demand in New Zealand. A list of members and the mission statement of MEUG are set out in appendix 1.
- 3. MEUG members are materially affected by the ETS in three ways:
 - a) Directly because future input costs will increase if the ETS is implemented as enacted.

For example if the price of a NZ Unit (NZU) is \$25, then electricity costs to members of MEUG will increase by \$151m per annum before accounting for carbon credits allocated to trade exposed enterprises. Approximately half of MEUG members are likely to be eligible for carbon credit allocations. Even in a best case scenario where likely eligible MEUG members receive 90% free allocations and have a 10% residual liability, the aggregate increase in electricity costs to MEUG members will be \$21m per annum at a price of \$25/NZU.

b) Another immediate direct impact is a dampening on possible investment due to uncertainty on whether the ETS will proceed as enacted (the least preferred case) or if Parliament after consideration of the Committee review will adopt a more appropriate package for New Zealand's response to the risks and opportunities of climate change given current economic conditions.

¹ Refer <u>http://www.parliament.nz/en-NZ/SC/SubmCalled/4/8/d/49SCETSreviewets200902131-Review-of-the-Emissions-Trading-Scheme-and.htm</u>

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- c) Indirectly by weaker GDP growth in the near term leading to weaker domestic demand for their products and services if the ETS is implemented as enacted.
- 4. MEUG welcomes this Parliamentary review because our climate change response needs to be robust, flexible and appropriate. The ETS enacted last year was a key policy in the prior government's objective for New Zealand to become carbon neutral. There was a deliberate bias in favour of environmental goals given the assumption the economy would continue to grow and New Zealand could afford a slight reduction in that overall positive growth trend. We did not judge the current ETS design to be affordable with positive economic growth and it is even less so now. The international credit crisis and ad hoc policies of governments throughout the world has undermined the assumption New Zealand will have positive GDP growth in the near term.
- 5. The following sections comment on five items in the terms of reference for the Committee². This submission concludes with a request to be heard before the Committee.

Regulatory Impact Statement

6. The Committee under bullet point three of the terms of reference must:

"Require a high quality, quantified regulatory impact analysis to be produced to identify the net benefits or costs to New Zealand of any policy action, including international relations and commercial benefits and costs of the Committee."

- 7. The announcement by government in late 2006 that an ETS was the preferred solution without any supporting analysis was an early warning that there would not be a robust Regulatory Impact Assessment (RIA) of all the options before final decisions were made. A file note of a meeting between Dr Brent Layton (NZIER), Dr Bryce Wilkinson (Capital Economics) and Ralph Matthes (MEUG) with officials on 28th June 2007 to ensure the foundations of a robust Regulatory Impact Assessment is attached for the information of the Committee³.
- 8. As it turned out politics rather than sound policy analysis was the driver of the process and the implementation of the ETS legislation. The Regulatory Impact Statement (RIS) in support of the ETS Bill barely covered the issues we had raised in June 2007 with officials. Considering the scale of the effects on the economy (the government understood this would happen and even used the slogan "transforming the economy"), the quantified analysis was superficial and failed to consider all options adequately.
- 9. We understand that the Committee will not be undertaking a RIS as required by the terms of reference. This is disappointing because this remains a significant gap in developing the best response for New Zealand to climate change policies. MEUG recommend the Committee establish a hierarchy of climate change policy objectives, list the options that could meet those objectives and recommend to government that using those assumptions a high quality, quantified regulatory impact analysis be undertaken.
- 10. MEUG would be concerned if the officials that were responsible for preparing the ETS Bill RIS were also responsible for the preparation of a new RIA. MEUG suggest the Committee recommend to government the engagement of an independent economic advisor to manage the analysis, have an independent peer review of that work and have a public consultation on the findings of the new high quality and quantified RIA, and the peer review report.

² Refer <u>http://www.parliament.nz/en-NZ/SC/Details/EmissionsTrading/9/b/e/00SCETS_TOR_1-Terms-of-reference-of-the-</u> Emissions-Trading-Scheme-Review.htm

³ A copy of the file note is also available at http://www.meug.co.nz/includes/download.aspx?ID=26263

Sector impacts

11. The Committee under bullet point five of the terms of reference must:

"Consider the impact on the New Zealand economy and New Zealand households of any climate change policies, having regard to the weak state of the economy, the need to safeguard New Zealand's international competitiveness, the position of tradeexposed industries, and the actions of competing countries."

- 12. Our submission focuses on the impact on electricity consumers in three parts:
 - The aggregate increase in electricity costs for end consumers as a result of the ETS.
 - A comparison of New Zealand forward and Australian future electricity prices and how the market uncertainty on timing and final design of the ETS on both sides of the Tasman is probably responsible for observed very large increases in future and forward market spot prices over the next three years.
 - The EU experience on pass through and wind fall gains by generators demonstrates that the effects can be complex and policy designers need to carefully model possible effects beforehand.
- 13. The table below summarises are lower bound estimate of the increase in electricity costs for different sectors of the economy depending on the price of carbon:

| l able 1 | | | | |
|--|---------------|---------|----------------|-----------|
| Price of Carbon | \$/t = \$/NZU | 15 | 25 | 50 |
| Wholesale electricity price increase | c/kWh | 0.7 | 1.4 | 2.9 |
| Retail electricity price increase | c/kWh | 1.0 | 2.0 | 4.0 |
| Annual cost: | | | | |
| Household sector | | \$127 m | \$255 m | \$509 m |
| Commercial sector | | \$90 m | \$180 m | \$360 m |
| Industrial sector after free allocations | | \$46 m | \$92 m | \$190 m |
| Total annual cost to consumers (2007 demand) | | \$263 m | \$526 m | \$1,059 m |

- 14. The assumptions used for this estimate were:
 - The unit increase in wholesale and retail electricity prices are those set out in the explanatory note to the Climate Change (Emissions Trading and Renewable Preference) Bill 187-1 (2007)⁴ (the "ETS Bill"). There is much debate on how generators that must purchase NZU will be able to pass that cost onto consumers and if non-thermal generators will be able to price up to the avoided cost of thermal generators (including their NZU liability). There is also an ongoing debate on whether in a market with weak competition; generators will be able to charge costs much greater than the carbon cost⁵. The unit pass through costs in the Bill are, in our view, at the lower bound of likely unit price increases.
 - The demand assumed was actual demand for the year ended March 2007⁶. If demand in each year between 2010 and 2013 is higher then costs per sector will be higher. This is by no means certain given the current economic downturn.
- 15. In summary the ETS will increase the cost of electricity across all sectors of the economy, net of those parties that are allocated free NZU, of between several hundreds of millions to over a billion dollars per annum depending on the NZU price.

⁴ Refer page 30 of the Bill, available at <u>http://www.legislation.govt.nz/bill/government/2007/0187-1/3.0/viewpdf.aspx</u>

⁵ This is the so called "Cournot effect"

⁶ Refer Ministry of Economic Development, Energy Data File

16. The graph below illustrates forward electricity spot prices in Australia⁷ and New Zealand⁸ based on forward prices and exchange rate⁹ as at 26th February 2009. These forward prices include market participants expectations of the impact of the respective ETS regimes for each country:



- 17. The important results to note from this graph are:
 - For 2009, that is this year before the planned commencement of an ETS on either side of the Tasman, Australian consumers already have an advantage over New Zealand consumers in terms of lower wholesale futures and forward market prices of \$22/MWh. Over all of New Zealand demand of ≈36,000 GWh, this equates to an additional \$800 million per annum higher wholesale costs in New Zealand than Australia.
 - Forward and futures markets in both countries are trading prices in 2011 that are significantly higher than prices being traded for the balance of 2009. In New Zealand annual compounding wholesale electricity price increases of 9.4% per annum for each of the two years between 2009 and 2011 are expected based on current forward prices. In Australia the annual rate of wholesale price increases is 17.7% based on current future prices. The uncertainty on what the ETS might finally be decided on either side of the Tasman is an important driver of the markets perception of future risk and hence prices. These rates of wholesale electricity price inflation are well above expected CPI in the near term.
 - By 2011 the forward and futures market price differential between New Zealand and Australia has closed to \$15.6/MWh. At that differential consumers in New Zealand will be paying \$560 million per annum more for their wholesale power portion of their bill than Australian consumers.
- 18. The above analysis is indicative only given the relative low volumes traded of longer dated products in particular. There may also be a difference in how the markets have been adapting their prices given New Zealand generators have had longer to consider and price in possible effects compared to Australian generators. Nevertheless the Committee should take into account the overall trend that wholesale electricity prices are likely to be rising much faster than expected CPI and New Zealand prices will be significantly higher than those in Australia.

⁷ Refer D-cypha futures market Eastern Power Index as at 26-Feb-09 (ie covers most liquid Australian National Electricity Market participant states of NSW, Victoria & Queensland), refer <u>http://d-cyphatrade.com.au/</u>

⁸ Refer Energyhedge closing prices 26-Feb-08, refer <u>http://www.energyhedge.co.nz/ePublic/mtrade.mt_public.home</u>. Annualized prices calculated as average of quarterly prices where all quarters have been posted. For 2009 the average annual price is for the average of the forecast 2nd, 3rd and 4th quarters.

⁹ 0.7871 \$NZ/\$Aus. As at 26-Feb-09, refer Reserve Bank http://www.rbnz.govt.nz/statistics/exandint/b1/data.html

19.

- *Prices*" released in December 2008¹⁰. This comprehensive study examined the structure of power markets in nine EU countries: France, Germany, Italy, Poland, Spain, Sweden, Czech Republic, United Kingdom and the Netherlands, modelled the extent of market power and/or competitive aspects, the extent of the pass through of carbon costs and the subsequent impact on electricity prices. Key factors analysed included the shapes of the demand and supply curves, the mix of generation, changes in marginal costs and how windfall profits of the generation sector are treated.
- 20. The ECN report is a review of behaviour and outcomes from actual experience with the EU ETS. The EU ETS to date differs from that proposed in New Zealand, eg the EU ETS to date included some generators receiving free EU allowances. The value of the Committee considering the ECN report is to illustrate that the EU ETS has had some unexpected consequences such as very large profiteering by generators at the expense of consumers. This includes generators charging higher costs than the actual carbon cost they face (the so-called "Cournot effect" found in markets with weak competition). As a result the EU has considered taxing such super profits. Designing an ETS needs great care to manage pass through and wind fall gains by generators.

An ETS or tax?

21. The Committee under bullet point eight of the terms of reference must:

"Examine the relative merits of an emissions trading scheme or a tax on carbon or energy as a New Zealand response to climate change."

22. MEUG has been open to either an ETS or tax as an interim solution, with the longer term goal being an international ETS. For example our submission to the Finance and Expenditure Committee last year noted¹¹:

"Most commentators agree that the best long term global solution is a global greenhouse gas market. In the absence of a global market or as a precursor to such, regional markets and or taxes can be designed as equivalent market mechanisms. Within the latter group of interim market mechanisms pending a comprehensive global market, there are various designs."

- 23. When the New Zealand ETS was being enacted details of the Australian ETS were not known. We now know the Australians are proposing an ETS but with a cap and not linked to international carbon markets. In effect the Australian regime is a domestic market with prices restricted to a narrow band. It might as well be a domestic tax regime.
- 24. MEUG supports use of market mechanisms such an ETS where the conditions exist for competition and innovation to grow. Our qualified support of an electricity market in New Zealand since its inception in 1996 is evidence that energy intensive users want markets to work efficiently. Lessons learned from the 13 years of trying to improve the electricity market are relevant to the Committee evaluating the current legislated New Zealand ETS, eg:
 - Is the price set in a competitive market?

We don't think the international carbon market will be liquid anytime soon. There may be a more liquid domestic supply of NZU from the forestry sector.

Who controls the rules of the market?

In New Zealand the rules and governance of the electricity market can in the end be overturned by legislation. We are not sure who might end up controlling the international carbon markets. There is also the ever present risk of fraud in the international carbon markets. In the small New Zealand domestic market context, oligopolies cannot be allowed to set the rules.

¹⁰ Refer <u>http://www.ecn.nl/docs/library/report/2008/e08007.pdf</u>

¹¹ Refer http://www.meug.co.nz/includes/download.aspx?ID=30753

Can intervention by government create distortions in the market?

The government decisions to build Whirinaki power station, the under-write of gas supply to Genesis for their e3p power station and the ban on new thermal power stations were examples of government interventions. These interventions created distortions in the market. Those poor policies should be wound back by government.

In the international carbon markets other governments can make interventions in their domestic markets that could have a material impact on the cost of New Zealand emitters meeting their NZU liabilities. The New Zealand ETS prices will be at the whim of changes by governments in other countries. The long term solution is to have a better international accord on trading carbon. After that is in place, an appropriate ETS could be enacted, but not before then.

25. The pros and cons of an interim tax or interim ETS as a step towards an ETS fully integrated with an international trading regime pricing regime should be part of a high quality, quantified regulatory impact analysis.

Non-fiscal and or fiscal instruments?

26. The Committee under bullet point nine of the terms of reference must:

"Consider the need for any additional regulatory interventions to combat climate change if a price mechanism (an ETS or a tax) is introduced."

27. MEUG do not consider additional regulatory interventions are needed if a broad economy wide fiscal instrument such as a tax or ETS is introduced. In support of this view the following quote from The Treasury Briefing to the Incoming Minister of Finance on Medium-term economic challenges of December 2008¹² is noted. While The Treasury refer only to the ETS, the same comments would apply to a Carbon tax:

"By pricing emissions, New Zealand has made many of the emissions reductions policies introduced prior to the ETS redundant. Productivity may be compromised if businesses are required to comply with layers of emissions reductions policies that are not required. These policies are warranted only where they target a market failure that is not addressed by the ETS. Policies such as the thermal moratorium, biofuel standards and vehicle-fleet fuel-economy standards do not meet this test – they are costly and unnecessary when an ETS is in place. Research expenditure, particularly in agricultural emission mitigation options, is a valuable complementary measure. Energy efficiency programmes have some justification but funding provided needs to be conditional on rigorous assessment of costs and benefits, ex-post reviews of effectiveness and comparison with other government expenditure priorities through the Budget process."

Timing

28. The Committee under bullet point ten of the terms of reference must:

"Consider the timing of introduction of any New Zealand measures, with particular reference to the outcome of the December 2009 Copenhagen meeting, the position of the United States, and the timetable for decisions and their implementation of the Australian government."

- 29. We see no benefit and considerable risk in rushing an ETS or carbon tax ahead of our key trading partners.
- 30. Australia has wisely decided to start in July 2010 to allow time to consider the December 2009 Copenhagen meeting outcome. New Zealand should follow suit. The outcome of the Copenhagen meeting may result in an international path and timing for managing climate change policy that is inconsistent with the New Zealand ETS. More likely the Copenhagen discussions will fail to reach a conclusion and we will remain in limbo. In that case the ETS in the legislation should be indefinitely deferred and other interim options considered.

¹² Refer <u>http://www.treasury.govt.nz/publications/briefings/2008</u>, released 4 December 2008.

- 31. MEUG notes anecdotal concern from members on whether the ETS as enacted can be implemented in time. For example large end consumers that will have stationary engine or industrial process liabilities in 10 months time do not have a complete picture of how they can manage that risk, eg
 - There is still uncertainty on what international units will be acceptable;
 - There is and will be for at least another 6 months, uncertainty on what allocation of carbon credits they will be entitled to and therefore what balance they must manage.
- 32. Setting up the machinery in each company to manage such a portfolio is not a simple or low cost exercise. The potential diversion of resources to manage a carbon portfolio doesn't help businesses struggling to manage in a commercial environment where risks and uncertainties on weakening demand for their products and ability to access credit are absorbing the time of senior management.
- 33. This problem is further compounded by businesses that have operations in both New Zealand and Australia having to develop expertise in two different regimes. If ever there was a case for trans-Tasman harmonisation as much as possible, then the response to climate change risks and opportunities is a good place to start.

Request to be heard

34. MEUG request to be heard before the Committee in support of this submission. The presenters will be Mr Terrence Currie, Chairman, and Mr Ralph Matthes, Executive Director.

Yours sincerely

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Ralph Matthes Executive Director

Appendix 1: List of MEUG members and Mission Statement

There are 20 member companies in MEUG plus two industry group members as listed below along with estimated annual load, onsite generation and peak demand.

| MEUG member ¹³ | Load GWh/y | Onsite generation GWh/y | Net Load GWh/y | Peak demand |
|---|---------------|-------------------------------|-------------------|----------------|
| Rio Tinto New Zealand | 5,000 | - | 5,000 | 580 MW |
| Norske Skog Tasman | 1,300 | 230 | 1,070 | 170 MW |
| Carter Holt Harvey | 1,105 | 260 | 845 | 130 MW |
| New Zealand Steel | 1,045 | 600 | 445 | 106 MW |
| Pan Pac Forest Products | 550 | 66 | 550 | 78 MW |
| Fletcher Building | 454 | - | 454 | |
| Winstone Pulp International | 330 | - | 330 | 48 MW |
| The New Zealand Refining Company | 235 | - | 235 | |
| Telecom New Zealand | 190 | - | 190 | |
| Oceana Gold Limited | 152 | - | 152 | 16.5 MW |
| Holcim | 70 | - | 70 | |
| Dongwha Patinna | 58 | - | 58 | 9 MW |
| Heinz Wattie's | 56 | - | 56 | |
| Tegel Foods | 56 | - | 56 | |
| Canterbury Meat Packers | 41 | - | 41 | |
| Solid Energy New Zealand | 29 | - | 29 | |
| Ravensdown Fertiliser Co-op | 28 | 22 | 6 | |
| Auckland International Airport | 23 | - | 23 | 13 MVA |
| Lion Breweries | 23 | - | 23 | 6.5 MW |
| Methanex New Zealand | 18 | - | 18 | |
| Business NZ | | | | |
| Wood Processors Association of NZ | | | | |
| | 10,763 | 1,178 | 9,585 | |
| NZ total demand ¹⁴ | 36,898 | | | |
| MEUG as percentage of total ¹⁵ | 29% | | | |

The Mission Statement for MEUG is:

"The members of the Major Electricity Users' Group are committed to ensuring the continuing availability of electricity services, at the lowest cost to the economy as a whole, consistent with sustainable development. Within this framework, the Group seeks to ensure competitive electricity prices and security of supply to the members of MEUG."

The 2007/08 external strategic objectives for MEUG are:

- 1) Improve competition;
- 2) Environmental policies that support the primary goal of economic growth;
- 3) Security of supply arrangements do not distort the market;
- 4) Most cost efficient transmission; and
- 5) Most cost efficient distribution.

¹³ Load, generation and peak load data may not be up to date because of changes in operations by individual companies since last surveyed by MEUG.¹⁴ Refer Ministry of Economic Development, Energy Data File, January 2006, p139, demand for year ended 30 March

²⁰⁰⁵ ¹⁵ Excluding demand by non-MEUG members of Business NZ and Wood Processors Association