



MAJOR ELECTRICITY USERS' GROUP

28 March 2007

Mr Stuart Calman
Transitional measures
Ministry of Economic Development
By email to transitionalmeasures@med.govt.nz

Dear Stuart

Submission on Transitional Measures discussion paper

1. This is a submission by the Major Electricity Users' Group (MEUG) on the discussion paper, *Transitional measures – Options to move towards low emissions electricity and stationary energy supply and to facilitate a transition to greenhouse gas pricing in the future* (the “transitional paper”) published jointly by the Ministry of Economic Development and Ministry for the Environment on 11th December 2006. On the same date the Ministry for the Environment published a companion report, *Discussion paper on measures to reduce Greenhouse Gas Emissions in New Zealand post-2102* (the “post-2012 paper”).
2. The governments preference¹ for a transitional electricity and stationary energy sector specific emissions trading regime is not supported by MEUG because:
 - a) It is premature to consider the highly interventionist proposals in the transitional paper when climate change is a complex global issue requiring global solutions (paragraph 4 to 5 of this submission);
 - b) Sector specific transitional measures are likely to harm the economy and undermine investor confidence compared to broad based transitional measures (paragraph 6 to 10);
 - c) The criteria used to assess options is flawed and instead a standard cost benefit analysis approach should have been used (paragraph 11 to 12);
 - d) All of the transitional measure proposals are likely to have lengthy implementation timetables and this factor alone implies none are practical (paragraph 13 to 15);
 - e) In the absence of knowledge about post-2012 international agreements, only actions likely to be common to all future scenarios should be undertaken (paragraph 16 to 17); and
 - f) The best transitional policy is to keep all options open and not to have a knee jerk reaction that will harm the economy (paragraph 18).
3. MEUG answers to the 26 questions in the post-2012 paper are set out in the appendix to this submission.

¹ Refer Transitional paper, p6, last sentence reads, “Based on the above principles, the government is attracted to measures which would support the early development of emissions trading in the sector.”

Premature to implement highly interventionist transition policies ahead of global consensus on how price-based measures might develop

4. Climate change is a global problem that requires understanding complex scientific, economic and political issues. New Zealand acting unilaterally will not improve the global environment or global economy. More than likely we will simply harm our economy without any climate change benefits. All of the policy measures suggested in the transitional paper are highly interventionist in that they will create direct costs for private companies and indirect costs by way of taxes to cover increased government costs for implementation. The benefits of these transitional interventions in terms of mitigating global climate change effects are far from clear.
5. MEUG believe it is premature to consider the highly interventionist proposals in the transitional paper when climate change is a complex global issue requiring global solutions.

Sector specific transitional measures likely to be harmful to the economy and to investor confidence

6. The post-2012 paper notes² the preference of government for broad based measures rather than sector specific proposals. MEUG agrees. However the transitional paper proposals are highly sector specific and, as the post-2012 paper argues, will be less efficient than broad based measures.
7. The long term greenhouse gas footprint for New Zealand is likely to remain dominated by methane (CH₄) and the transport sector. It seems bizarre that the transitional measures for those two sectors will impose some but relatively modest costs compared to the highly interventionist and costly transitional proposals for the electricity and stationary engine sectors. To put this into perspective:
 - a) Assuming the transitional paper estimate³ that between 2005 and 2015 greenhouse gas emissions from stationary energy generation and industrial energy use will increase by approximately 18%; this is equal to an annual compounding increase of 1.7%. Based on MED data for 2005⁴ this equals an increase in greenhouse gases of 219 kt CO₂-e between 2005 and 2006 and rising to 254 kt CO₂-e between 2014 and 2015 assuming the annual percentage increase is constant.
 - b) To put the above estimated increase in greenhouse gas emissions into perspective it's useful to compare forecast absolute growth in CH₄ emissions. Publicly available non energy sector greenhouse gas data is not as current as the MED energy related emission data. The latter being available to 2005 and the former to 2004. Nevertheless an approximate comparison can be made. Ministry for the Environment report⁵ methane emissions in 2004 were 27,064 CO₂-e. The Ministry of Agriculture and Forestry expect CH₄ emissions to remain growing at the historic (1990 to 2004) average of 1% per annum⁶. On this basis CH₄ emissions will increase by 273 kt CO₂-e between 2005 and 2006 and rising to 299 kt CO₂-e between 2014 and 2015.

In summary while the annual rate of increase in greenhouse gas emissions from stationary energy generation and industrial energy use is expected to increase by 1.7% per annum, the absolute volume growth in emissions is still less than the annual increase in CH₄ emissions even though the percentage increase is only 1% per annum. The reason for the higher absolute volume growth of CH₄ emissions is that the opening level of emissions is significantly higher than the stationary energy generation and industrial energy sectors.

² Post 2012 paper, p6, paragraph 2]

³ Transitional paper, p9, paragraph 2

⁴ MED, *Revised NZ Energy Greenhouse Gas Emissions 1990-2005*, December 2006, Table 1.1.1, p1

⁵ Ministry for the Environment, *New Zealand's Greenhouse Gas Inventory 1990-2004*, April 2006, table 1.1, p11

⁶ Ministry of Agriculture and Forestry, *Sustainable land management and climate change – options for a plan of action*, December 2007, p19, paragraph 4

As a result by 2015 CH₄ emissions will be a higher percentage of New Zealand's greenhouse gas emission footprint than stationary energy generation and industrial energy use on a business as usual scenario.

8. MEUG is also concerned that uncertainty on transitional policy is affecting investor confidence as follows:
 - a) End consumers considering investment in energy intensive businesses are unsure what if any penalty will apply to greenhouse gas emissions and hence will defer investment in new plant; and
 - b) Thermal power station investors will be wary of transitional measures that may affect the economics of proposals and will therefore defer investment in new power stations. Some renewable energy generators may also defer investment in the hope that transitional measures will give them wind fall profits.
9. MEUG is not as concerned about investor confidence post-2012 because the government has signalled that post-2012 policies are likely to be in line with our trading partners and competitors. This means end use or generation investors when assessing the cash flow of projects post-2012 should be indifferent to investing in New Zealand or those countries.
10. The uncertainty regarding the electricity and stationary engine sector specific transitional measures may be creating a barrier to investment. Government can solve that policy uncertainty problem by making decisions that hold between 2008 and 2012. In the absence of knowledge on the long term global solutions, the transitional policies should err on the side of doing no harm to the economy because no matter what we do over the next 4 years it will have no measurable impact on global climate change.

The evaluation criteria are flawed and standard cost benefit analysis should be used

11. Standard policy cost benefit analysis should have been used rather than the 5 criteria used in the transitional paper⁷. In a standard cost benefit analysis the sum of the present worth of future benefits and costs would be compared. For non quantifiable factors (eg externalities) there are different techniques to assess using cost benefit analysis, eg using a range of values to test the sensitivity of alternative proposals to the range of possible values for the externality⁸.
12. In comparison the evaluation criteria in the transitional paper and the summary of effects in table 3⁹ are highly subjective. For example:
 - a) The evaluation criteria "environmental effectiveness" is presumably short hand for climate change benefit, ie how much of the perceived negative climate change externality has been mitigated. However there is an argument that there is no negative externality value that can be ascribed to any marginal change in greenhouse gas emissions by New Zealanders because the effect globally is extremely small and any effect on other parties will take place several decades (or centuries) in the future which after discounting becomes negligible.

More work is needed to assess a reasonable range of values to use for policy analysis to take into account perceived climate change externalities.
 - b) The criteria "cost effectiveness" ranks the proposals in terms of estimated cost to implement. This is not a good proxy for comparing the NPV of alternatives using standard cost benefit analysis because some options might be least cost but also have very little benefit. Alternatively a high cost option might be ruled out using the criteria in the paper but under a standard cost benefit analysis approach have by far the highest NPV.

⁷ The standard cost benefit analysis methodology is best summarized in the Treasury report, *Cost Benefit Analysis Primer*, Version 1.12, December 2005, refer <http://www.treasury.govt.nz/costbenefitanalysis/default.asp>

⁸ Note the MEUG submission on the draft NZ Energy Strategy submitted 28 March 2007 recommends "research is undertaken to determine the range (both negative and positive) of externality values to be used by government for climate change effects in cost benefit analysis recommendation."

⁹ Transitional paper, p51

Implementation not feasible

13. In Australia the RECS scheme took 6 years to develop and implement. MEUG believe implementation of the sector specific proposals in the transitional paper may take just as long. Given detailed design is unlikely to commence until 2008 and all of the transitional measures will require new legislation; this only leaves 4 years to implement before the post-2012 options may be triggered.
14. The report by Holcim¹⁰ also provides actual evidence from the European Union Emissions Trading Scheme about the lengthy time needed to design, test and implement trading schemes – and even then the Europeans made some mistakes.
15. MEUG suggests all of the transitional measure proposals are likely to have lengthy implementation timetables and this factor alone implies none are practical.

Some economy wide transitional measures should be acted on

16. There are some measures that can be implemented because they are likely to be useful for all possible post-2012 arrangements. For example developing measurement standards across all the economy, eg standards to assess CH₄ emissions from stock.
17. MEUG submits that in the absence of knowledge about post-2012 international agreements, only actions likely to be common to all future scenarios should be undertaken.

The best transitional policy is to keep our options open

18. MEUG submit that the best transitional policy is to keep all options open and not to have a knee jerk reaction that will harm the economy. Two examples of the type of knee jerk reaction that will undermine confidence by consumers and electricity suppliers follow:
 - a) The Prime Ministers stated objective for New Zealand to become Carbon Neutral without any appreciation of the likely costs and benefits having been considered; and
 - b) The letter from the Minister of Energy on 18 December to prospective investors in the stationary energy sector¹¹ stating it is the intention of government to apply constraints on new investment in thermal generation as at the date that the final NZES is published. As all the policy options that might constraint new thermal investment will require new legislation, to give effect to the Ministers letter will require retrospective legislation as it's unlikely legislation will be passed at the same time the final NZES is published. Retrospective legislation is not considered best practice; hence the letter of 18 December to prospective investors in thermal generation appears to be a knee jerk reaction to achieve an outcome that has not been properly tested.

Concluding comments

19. MEUG members would welcome an opportunity to brief or answer questions of Ministers or officials on the contents of this submission.

Yours sincerely



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Executive Director

¹⁰ Refer Holcim (NZ) Ltd, *Creating a Good Atmosphere – Insights on Emissions Trading for New Zealand*, 1 February 2007

¹¹ Refer http://www.med.govt.nz/templates/MultipageDocumentTOC_25159.aspx

Appendix: MEUG answers to the questions in the Transitional discussion paper

The middle column lists the page reference of the question in the Transitional discussion paper.

Questions	Refer.	MEUG comments
Emissions trading:		
1. Which of the four emissions trading options discussed (including the Trustpower proposal) would be the most suitable transitional measure for the New Zealand stationary energy sector?	p.21	None of the proposals is supported if implemented only for the electricity and stationary engine sectors. Policies that are sector specific will lead to economic distortions compared to economy wide policies.
2. Do you support gratis allocation, auctioning or hybrid allocation schemes, and why?	p.21	None are supported because do not support transitional sector specific interventions
A CO₂ charge (narrow based):		
3. Should a CO ₂ charge on emissions for electricity and industrial heat be a preferred option as a transitional measure in the stationary energy sector?	p.25	Should only be considered as an economy wide measure including methane. An essential element should be an NGA or other mechanism to manage competitiveness-at-risk issues
4. If so: How should the rate of the charge be set?	p.25	Err on low side as this is a transitional policy, it must not be out of step with trading partners and competitors and must be broad based rather than applied solely to the electricity and stationary engine sectors
5. How should large emitters subject to the charge be defined?	p.25	As broad national coverage as possible, ie not just stationary engines and industrial heat but also CH ₄ and transport emitters both of which in absolute terms are much larger greenhouse gas emitters.
6. Should electricity price impacts of the charge be managed? If so, how?	p.25	Yes for competitiveness-at-risk sectors
7. How should revenue from the charge be used?	p.25	No view
Renewable obligations:		
8. Should a renewable obligation be a preferred option as a transitional measure?	p.31	Refer reply to question 1 – ie proposal not supported.
9. If so: Should the obligations be to provide capacity or generation?	p.31	Refer reply to question 1 – ie proposal not supported.
10. Should the obligation be placed on generators or retailers (suppliers)?	p.31	Refer reply to question 1 – ie proposal not supported.

11.	Is there a need for a buy-out mechanism to limit certificate price?	p.31	Refer reply to question 1 – ie proposal not supported.
12.	Should the obligation be un-banded?	p.31	Refer reply to question 1 – ie proposal not supported.
Incentives:			
13.	Should capacity incentive measures be a preferred option as transitional measures?	p.37	Refer reply to question 1 – ie proposal not supported.
14.	If so: Should the transitional measure be a capital grant; or a capacity subsidy mechanism such as the Non Fossil Fuel Obligation or a feed-in mechanism?	p.37	Refer reply to question 1 – ie proposal not supported.
15.	Do the benefits of a feed-in tariff (lower risk, new entrants, support for diverse technologies, successful deployment, industrial goals and simplicity of implementation) balance the way it runs in parallel to the electricity market?	p.37	Refer reply to question 1 – ie proposal not supported.
16.	If a feed-in tariff is preferred, what technologies should be eligible?	p.37	Refer reply to question 1 – ie proposal not supported.
17.	Is a feed-in mechanism compatible with New Zealand nodal pricing? If so, what policy should be introduced to link them?	p.37	Refer reply to question 1 – ie proposal not supported.
18.	Are some technologies more suited to capital grants than others?	p.37	Refer reply to question 1 – ie proposal not supported.
19.	Are there any reasons why an obligation or a capacity subsidy for certain technologies should or should not be linked?	p.37	Refer reply to question 1 – ie proposal not supported.
Project based measures:			
20.	Are projects a climate change policy measure worth considering for the energy sector? If so, why?	p.41	Refer reply to question 1 – ie proposal not supported.
21.	If a project programme was to be used for energy, what part of the sector should it cover and who should provide the incentive?	p.41	Refer reply to question 1 – ie proposal not supported.
22.	Should the incentive be provided upfront (and with claw-back provisions for non-delivery) or subsequent to delivery of abatement (as in PRE)?	p.41	Refer reply to question 1 – ie proposal not supported.
23.	Are there any experiences with PRE you would like to bring to the attention of officials considering policy options for the energy sector?	p.41	MEUG believe the PRE programme was gamed by some generators, ie some projects that generators intended to go ahead with anyway and therefore were Business-as-usual, received funding under PRE.
Regulatory measures:			
24.	What impact would you expect regulatory measures to have on energy prices?	p.47	Difficult to comment on without specific proposals to consider. Initial impression is that regulatory measures will increase energy prices, increase central and local government bureaucracy, increase taxes to cover the bureaucracy and increase uncertainty to business about the risk of future regulatory changes without any measurable effect on reducing greenhouse gas emissions globally.
25.	What impact would you expect regulatory measures to have on security of electricity supply?	p.47	Difficult to comment on without specific proposals to consider.

26. In addition to the measures discussed in this section, are there examples of regulatory barriers that need to be identified?	p.47	Regulatory barriers that are impeding new generation, be it renewable or thermal, include the SOE Act (eg the Boards of Directors SOE have a propensity to follow government dictum rather than profit motives) and the increasingly politicized decision making by the EC.
27. What activity should an NES target?	p.47	MEUG does not, on the evidence presented so far, support a NES approach.
Voluntary measures: 28. What process should be used to develop voluntary agreements for generators?	p.48	The same process as developing voluntary agreements with all sectors in the economy, ie no point in a sector specific process when the least cost mitigation path is to design and implement broad economy wide measures
29. Can voluntary agreements be used as an effective tool to make the transition to long-term price-based measures?	p.48	Difficult to comment on without specific proposals to consider.