MAJOR ELECTRICITY USERS' GROUP

NEW ZEALAND BusinessROUNDTABLE
PROMOTING POLICIES FOR A BETTER NEW ZEALAND

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By email to levyconsultation@eeca.govt.nz

Dear Mike

Consultation paper – 2012/13 appropriations for electricity efficiency appropriation

This is a submission by the New Zealand Business Roundtable and the Major Electricity Users' Group on the proposed Energy Efficiency and Conservation Authority (EECA) priorities and draft appropriations set out in appendix E of the joint EECA and Electricity Authority consultation paper "2012/12 Appropriations, Authority Path to CRE, and EECA work programme", released 29th November 2011[1].

This submission[2] focuses on the proposed electricity efficiency appropriation for 2012/13 of $15.5m to be funded by a levy collected by the Electricity Authority from every electricity consumer in proportion to the quantity of power they use. The levy money is then appropriated to EECA for electricity efficiency work programmes. All other EECA spending on the efficient use for all other energy forms is funded from general revenues.

The proposed appropriation is an increase of $2.5m (+19%) over the 2011/12 budget of $13m.

The proposal covers three existing programmes and one new programme:

Programme		Proposed appropriation	Fraction of bid
Existing	Efficient lighting and product and systems	$5.5m	35%
	Commercial Buildings – heating, ventilation, air conditioning and refrigeration efficiency	$4.5m	29%
	Industrial motors and motor systems	$3.0m	19%
New	Electrical equipment regulation, labelling and compliance	$2.5m	16%
Total		$15.5m	100%

[1] Refer EECA website http://www.eeca.govt.nz/node/16278 or the Electricity Authority website http://www.ea.govt.nz/our-work/consultations/corporate/proposed-appropriations-2012-3/

[2] MEUG has made a separate submission to the Electricity Authority on their work programme.

Inadequate information in support of the $15.5m levy proposal

In the past, justifications for EECA interventions in the electricity efficiency market have been inadequate both *ex ante* and *ex post*. Particularly disappointing in the latter respect is the absence of published independent reviews of the effectiveness of programmes.

Good information should be the starting point for good analysis, and the paucity of relevant information in the appendix E material released at the beginning of this consultation round did nothing to alleviate past concerns. A meeting with EECA at the start of December followed by email correspondence has uncovered some additional material. That information should have been made available in appendix E on 29th November. Time spent seeking information has shortened time spent on analysing the proposed appropriation.

This isn't the way appropriation proposals should work. EECA should have provided interested parties with the information necessary to justify levying power users $15.5m in order to allay any risk its proposal would not be supported. The inability of EECA to provide convincing evidence of the willingness of end users to spend in excess of $15.5 million more than the suppliers of energy-saving products have been able to convince them to spend, let alone to justify levy funded programmes as the best option, reinforces a perception that the EECA is not incentivised to establish rigorously that end users are getting value for money from these programmes. The lack of such a justification invites the conclusion that the electricity efficiency programmes cannot be justified in public interest terms.

EECA also does a disservice to parties that pay the electricity efficiency levy by failing to publish submissions received on proposed appropriations in a transparent and accountable manner. In contrast the Electricity Authority and the Electricity Commission that preceded the Authority have always published submissions[3]. We recommend in future submissions on EECA proposed electricity efficiency levy funded proposals be published.

Inadequate analysis of the inadequate material provided to justify the proposal.

The justification for the proposed $15.5m has a number of weaknesses:

- Paragraph E.12 of appendix E states "programmes will be targeted to cost-effectively address market barriers". The list of market barriers includes "technical expertise within and/or available to businesses" and "budget constraints and investment capital prioritisation". Yet none of these are market barriers. They all reflect value-for-money decisions by firms based on assessments of customer willingness to pay. Furthermore, insufficiently justified levies on suppliers can be expected to raise suppliers' costs relative to customer demand thereby aggravating the EECA's feared problem. Programmes that rely on such 'justifications' fail the public interest test and should definitely not be candidates for levy funding.

  The remaining two market barriers of "access to information, leading to process efficiencies and attitudinal changes" and "split incentives and intra-organisational blockages" are not obviously market failures. Contrary to some allegations, landlords can and do provide high quality residences where there is a demand, just as car manufacturers can provide cars that use fuel very economically. If the EECA has strong evidence that tenants nationwide persistently underestimate the monthly power bills from the residences that they rent, it should provide that evidence. More generally, consumers' access to information through advertising, word-of-mouth, credible product guarantees and specialist information providers (such as the Consumer NZ) has been vastly enhanced in the last decade by the explosion of global

[3] Refer http://www.ea.govt.nz/our-work/consultations/corporate/ .

information on products made available to the world on the internet and made immediately accessible through powerful search engines. Whatever justification there was for levies for these purposes a decade ago, there would appear to be much less justification for doing the same today. In the joint New Zealand Business Roundtable and Major Electricity Users' Group letter to the Minister of Energy in December 2008 we explained why information asymmetry, externalities and split incentives are not always clear cut cases of market failure[4]. The letter to the Minister was attached to our submission to EECA on the appropriation consultation round last year[5]. As noted beforehand, EECA have never acknowledged or responded to that submission. Again, the EECA seems to be unduly uninterested in establishing whether its spending programmes are providing end users with value for money.

- There is no evidence that the EECA is considering the full range of impediments to better value-for-money outcomes for end users. For example, are there artificial impediments to price discovery in particular market segments? This is a well-known issue in the electricity sector where households see no peak pricing signal; if they did behaviours including more efficient use of electricity would occur. If there is an information asymmetry problem then perhaps a low cost information awareness campaign would have a higher benefit to cost ratio than the comprehensive information, training and subsidy programmes.

- The claimed benefits to date for all of the programmes assume all consumers would not have switched to more economically efficient equipment for on average another ten years. We are sceptical that the 10 years has much validity given the rapid changes in some technologies and associated lower costs. For example energy efficient lighting technology has changed and is expected to continue to change rapidly and with scale economies of production overseas, costs and prices have fallen.

  To demonstrate the sensitivity of the assumptions in calculating benefits the table below summarises the cost of the electricity efficiency programmes to date, claimed savings and estimates the benefit in the first year of additional programme spending and number of years required to achieve a payback.

Year ending June		2006	2007	2008	2009	2010	2011
Cost of programme							
Levy costs	$m pa	1.4	4.9	5.9	8.0	10.3	11.0
Consumer direct costs	$m pa	2.7	9.3	11.2	15.2	19.6	20.9
Government dead-weight-loss	$m pa	0.3	1.0	1.2	1.6	2.1	2.2
Total cost of programme	$m pa	4.3	15.2	18.3	24.8	31.9	34.1
MEUG analysis							
Power saved initial year of levy	GWh pa	32	169	177	66	59	135
Generation savings @ $80/MWh	$m pa	2.6	13.5	14.2	5.3	4.7	10.8
Benefit (cost) in initial year only	$m pa	-1.8	-1.7	-4.1	-19.5	-27.2	-23.3
Incremental cost of programme assuming first year savings only	$/MWh	136	90	103	376	541	253
Number of years to payback	years	1.7	1.1	1.3	4.7	6.8	3.2

  Levy costs, consumer direct costs (estimated at 1.9 times levy contribution) and GWh electricity savings in the initial year of each annual increment of the programme have been sourced from EECA. A 20% dead-weight-loss has been added to levy expenditure to reflect the relative inefficiency of government intervention versus parties finding solutions

[4] Refer letter at http://www.meug.co.nz/includes/download.aspx?ID=116069, paragraphs 10 to 14 discuss these claimed market failures.

[5] Refer http://www.meug.co.nz/includes/download.aspx?ID=116068

themselves, ie Government failure from interventions arising from problems of mixed incentives and inadequate information.

The analysis demonstrates that if electricity savings only accrue for one year then for every year since 2006 the costs of the programme in total (that is levy funded work, other consumer costs and the dead-weight loss of government intervention) have exceeded claimed benefits. To payback the initial cost of the programme would have required consumers to have forgone making changes to more electricity efficient appliances, equipment and practices of between 1.1 years for the programme in 2007 up to 6.8 years for the programme undertaken in 2010.

Another way to view the analysis for 2010 is that the electricity efficiency programme total cost was equal to $31.9m (about one third attributable to the levy) but the incremental claimed annual value of electricity savings was $4.7m resulting in a net cost to the economy for that single year of $27.2m. The incremental total unit cost of the programme in that year was $541/MWh versus an assumed generation cost of $80/MWh. It will take 6.8 years to payback the incremental cost of the 2010 work programme.

Two observations are relevant. First, the above initial assessment of the electricity efficiency programmes gives a much more critical view of effectiveness than that claimed by EECA. This reinforces the need for an independent and robust evaluation. Second, there is a general trend for the number of years to achieve payback to lengthen with each subsequent programme year (the first three years had paybacks of less than two years and the last three years have a payback greater than three years). This is not surprising as quick payback programmes should have been implemented first and less effective programmes last. This highlights the importance of more robust analysis for future programmes that are likely to have less incremental benefit than earlier programmes.

- In looking forward, the EECA's analysis fails to consider other changes to the electricity market. For example smart meters, smart networks, smart appliances and smart prices are imminent. This will result in fundamental changes to customer and supplier behaviour and energy efficiency. We have not seen any evidence of how to optimise current levy paid electricity efficiency programmes to fit with that new world.

- The existing lighting programme has been in place for some time. Surprisingly the lighting programme is the largest (35%) programme proposed for next year. We are surprised because we expected this programme would start to wind down. Disappointingly we found no evidence of any planned exit strategy for any of the programmes.

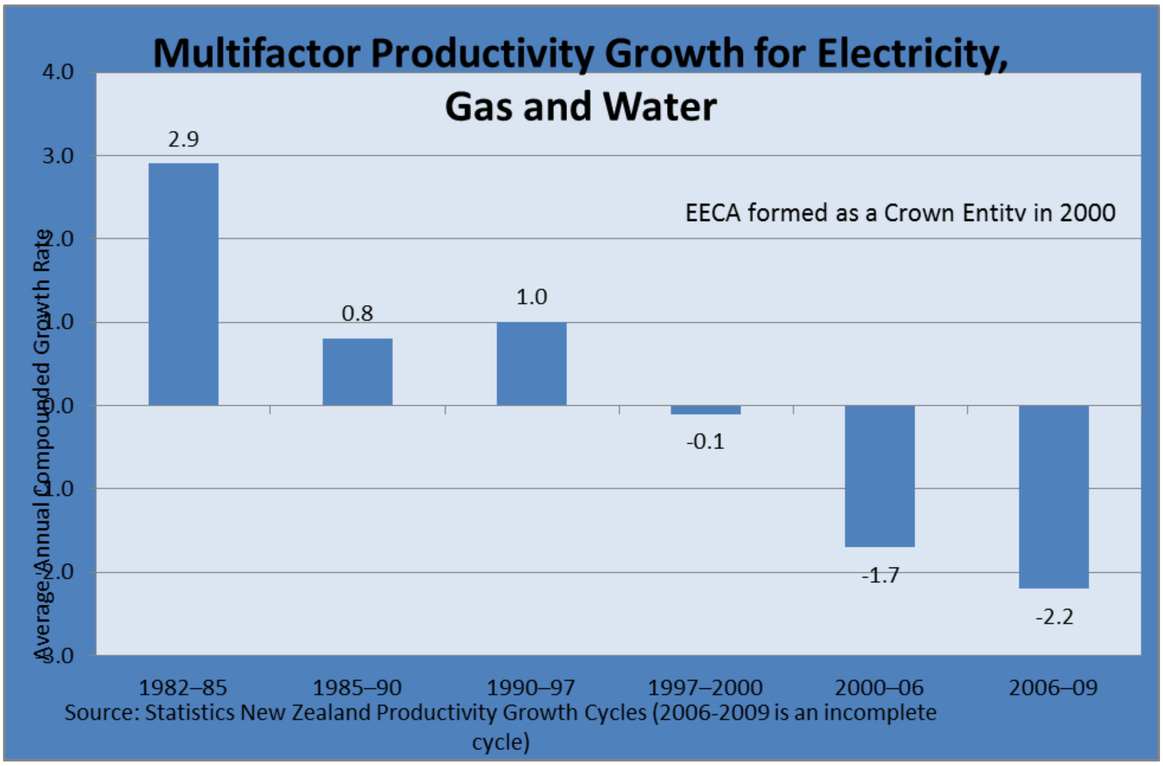
- The new programme for electrical equipment regulation, labelling and compliance is more of a standard industry regulation type approach than the existing lighting, commercial building and industrial motors programmes that were subsidy based activities. Much of the regulation of standards is necessary because of various joint standards making arrangements with Australia. This is already business-as-usual work conducted by EECA (eg distribution transformer standards) and we fail to see any reason to include it under the electricity efficiency programme.

Consideration of the proposal in the wider economic and regulatory context

Proposing an increase in the levy burden on electricity users' in these extremely challenging times is not what consumers or we believe Ministers expect of any government agency unless there are offsetting unambiguous extraordinary circumstances. In our view, the EECA has failed to provide any such compelling rationale or for that matter sufficient evidence the existing programmes are money well spent. The EECA Board either has a rationale that has not been explained or the Board is unacceptably out of touch with the harsh realities facing the economy and the agenda set by the new Government for fiscal restraint.

To put this into perspective, consider the five largest MEUG members that collectively use about 21% of total New Zealand power demand. Those five large industrial users' will in aggregate pay $3.3m of the proposed $15.5m levy. Those five major users' are highly incentivised to be energy efficient in order to compete, survive and innovate in export and or import substitution commodity markets. Those five major power users' have invested, and will continue to invest in energy efficient projects within their plant. The proposed $3.3m levy burden on those businesses will do nothing for their in-house energy efficiency projects. The levy will simply be an unavoidable fixed cost[6] that they cannot pass on. The levy will divert resources that otherwise would have allowed them to be better competitors in international markets.

A key government policy concern is to reverse the productivity slowdown that has become evident in the last decade. Time series released early this year by Statistics New Zealand do not separate out the electricity sector from gas and water, but the trend shown in the chart for the three sectors combined suggests that the government should be reviewing very closely government policies that appear to be raising costs in this sector without any adequate cost-benefit justification.



[6] The fixed cost nature of the levy is also relevant to the policy choice of using a fixed levy versus funding work through general Government revenues and companies contributing through company tax applied to their residual profit. In these challenging times the residual profit for export commodity businesses can fluctuate significantly from year to year including being negative. This issue of funding through a levy versus share of company tax is covered in recommendation 5 in the concluding submissions section of this letter.

Government agencies should also be cognisant of the risks to the economy as highlighted by the Minister of Finance, Hon Bill English, in a media release on 5th December 2011 titled "Spending restraint needed for foreseeable future"[7]:

> *"But getting back to surplus won't be easy. In many ways, restraint in the public sector has only just started.*
>
> *"The Government is committed to meeting this challenge. We've taken steps to control spending and get on top of debt, while putting in place policies that build a more competitive economy and more real jobs.*
>
> *"We will continue with that plan over the next three years," Mr English says.*

Appendix E and the material received subsequently give us no comfort that EECA have considered opportunities for restraint and cost control before deciding the optimal appropriation proposal should be $15.5m.

Also relevant is the Confidence and Supply Agreement[8] between the National Party and ACT New Zealand Party to progress a form of Regulatory Standards Bill[9] through the House. The current form of the Bill sets out principles in relation to taxes and charges as follows:

> *"s.7 (1) The principles of responsible regulation are that, except as provided in subsection (2), legislation should -*
>
> *(e) not impose, or authorise the imposition of, a charge for goods and services (including the exercise of a function or power) unless the amount of the charge is reasonable in relation to both –*
>
> *(i) The benefits that payers are likely to obtain from the goods or services; and*
>
> *(ii) the costs of efficiently providing the goods or services:"*

In our view the EECA has not adequately explained to levy payers the benefits they will receive through the allegedly heightened consumer demand for electricity efficiency will exceed the amount of the levy, nor has it established that its proposed programme will deliver the alleged benefits at least cost. The EECA should put both matters right.

Finally any EECA programme should be considered in the context of an all-of-Government approach. There may be proposals from the Green Growth Advisory Group[10] that will need to be considered. Reconciliation of work by other government agencies is also needed. For example Energy Mad last week on 14th December 2011 announced[11] it had "secured $220,000 of Ministry of Science and Innovation TechNZ Funding to develop its new Ecobulb downlight using an innovative tube technology." Several policy questions arise such as will any innovation by Energy Mad make obsolete claimed lighting programme gains by EECA, and given limited resources should the TechNZ funding or EECA programmes be given priority?

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[7] http://www.beehive.govt.nz/release/spending-restraint-needed-foreseeable-future

[8] http://www.national.org.nz/PDF_Government/National-ACT_Confidence_and_Supply_Agreement.pdf

[9] http://www.legislation.govt.nz/bill/government/2011/0277/latest/whole.html#DLM3601228. Passage of the Bill to date can be found at http://www.parliament.nz/en-NZ/PB/Legislation/Bills/8/2/0/00DBHOH_BILL10563_1-Regulatory-Standards-Bill.htm

[10] http://www.med.govt.nz/sectors-industries/environment/green-growth

[11] http://www.energymad.com/nz/Invest_Announce.htm

Concluding submissions

The New Zealand Business Roundtable and the Major Electricity Users' Group:

1. Oppose the proposed electricity efficiency programme of $15.5m;

2. Recommends all programmes justified on the basis of claimed market barriers of addressing technical expertise within and/or available to business, and or budget constraints and investment capital prioritisation, be removed as those are not "market failures" in the standard approach to economic cost-benefit-analysis;

3. Recommends that the EECA submits a budget for 2012/13 that is less than the existing $13m level of funding in order to be consistent with the broader government agenda of fiscal prudence given the extremely challenging economic environment levy payers currently face and the reality of much improved access to end user information through the internet and other sources. That lower level of appropriation bid should include:

    a) Providing a forecast multi-year path to wind down existing programmes; and

    b) If necessary re-prioritising and accelerating the exit from existing programmes where those are of less value than new programmes.

4. Recommends that the EECA publishes all submissions received on the proposed appropriation and all summary of submissions considered by the EECA Board; and

5. Repeats the point in our joint submission last year where we:

    "Noted that Government needs to address the inconsistency between funding EECA energy efficiency work for all energy forms except electricity through the Consolidated Account and electricity related work through the carry-over of a levy set by and for work undertaken by the now expired Electricity Commission.

    This inconsistency is a matter for Ministers rather than this consultation. We have mentioned it here because funding sources should be part of a strategic review of the role of EECA recommended above."

    That view still stands and we have copied this submission to the Ministers of Energy and Resources and Minister of Finance for their information.

This submission is not confidential and a copy will be published on both our web sites. The New Zealand Business Roundtable and the Major Electricity Users' Group look forward to the EECA Board considering these submissions.

Yours sincerely

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