

What kinds of engagement have you or your organisation had with EECA?

Engagement on the uptake and promotion of electric vehicles

Q2

What forms of energy do you or your organisation use, and which levies do you pay?

Electricity Industry Levy

Q3

EECA's proposed levy-funded work programme in 2018/19 will request funding from the three energy levies set out in question 2. Do you support EECA's levy proposal for \$14 million in 2018/19?

Yes

Q4

Do you support the proportions EECA has requested across the three energy levies?

Yes

Q5

Which of EECA's levy-funded activities is of most interest to you:

• Electric Vehicles (EV) Programme

06

Do you support the mix of levy-funded activities listed above?

Yes

07

Are there any new activities or specific sectors that you think EECA should invest more or less levy funding in for 2018/19, and in the future?

Electric vehicle uptake

Q8

Do you agree that EECA's levy-funded activities result in benefits for New Zealand businesses and consumers in:

- Improving energy productivity
- Improving electricity efficiency
- Improving gas efficiency
- Encouraging, promoting, and supporting energy efficiency, energy conservation, and the use of renewable sources of energy?
- Reducing engine fuel consumption (e.g. petrol and diesel)
- Reducing greenhouse gas emissions

Would you like to provide any other comments on EECA's 2018/19 levy proposal and activities?

Support the proposal to bring forward from future years an additional \$1 million for the EV contestable fund (compared to 2017/18).

Q10 Name of submitter

Name Dougal Morrison

Company HMI Technologies

What kinds of engagement have you or your organisation had with EECA?

Service Provider of energy efficiency and biomass energy advice and consultancy to the public and private sector

Q2

What forms of energy do you or your organisation use, and which levies do you pay?

• Gas Safety, Monitoring and Energy Efficiency (GSMEE) Levy

Q3

EECA's proposed levy-funded work programme in 2018/19 will request funding from the three energy levies set out in question 2. Do you support EECA's levy proposal for \$14 million in 2018/19?

Yes in support but we are currently developing a wood energy programme in Otago and would like to make EECA aware of this and how it might fit within existing funding available

04

Do you support the proportions EECA has requested across the three energy levies?

I would like to see more funding allocated to low carbon business activities and renewable energy as there are many opportunities within the expansion of the Wood Energy South project into Otago and this is currently being investigated and considered by Otago Councils.

Q5

Which of EECA's levy-funded activities is of most interest to you:

Large energy user engagement programme

Q6

Do you support the mix of levy-funded activities listed above?

Again, we are working with Otago Councils to expand the Wood Energy South programme into Otago. We will have good support from the councils (financially) and we would like to leverage this with EECA funding. But how do we get this opportunity also built into EECAs work program is where I'm not clear so would be good to understand this process?

Q7

Are there any new activities or specific sectors that you think EECA should invest more or less levy funding in for 2018/19, and in the future?

Wood biomass funding but taking a regional léd approach. A national programme with regionally led partners

Do you agree that EECA's levy-funded activities result in benefits for New Zealand businesses and consumers in:

- Reducing greenhouse gas emissions
- Improving electricity efficiency

Q9

Would you like to provide any other comments on EECA's 2018/19 levy proposal and activities?

Ahika is currently undertaking an assessment from the Bioenergy Association on expanding the Wood Energy South project into Otago. There is a lot of support from all Councils and internal funding is being secured. Assuming we are able to get financial support from the Councils, the crux of this project relies on EECA funding support for feasibility and capital funding and without it, the project is unlikely to proceed. This would be a real shame after all the support from the Councils and the approach can be a framework from other Regions to adopt. So how does this project fit within your current activities?

Q10

Name of submitter

 Name Lloyd McGinty Company Ahika Consulting



What kinds of engagement have you or your organisation had with EECA?

Policy, lobbying and promotion for electric vehicles

Q2

What forms of energy do you or your organisation use, and which levies do you pay?

Petroleum or Engine Fuel Monitoring (PEFM) Levy

Q3

EECA's proposed levy-funded work programme in 2018/19 will request funding from the three energy levies set out in question 2. Do you support EECA's levy proposal for \$14 million in 2018/19?

Yes

Q4

Do you support the proportions EECA has requested across the three energy levies?

Yes

Q5

Which of EECA's levy-funded activities is of most interest to you:

Electric Vehicles (EV) Programme

Q6

Do you support the mix of levy-funded activities listed above?

Yes

Q7

Are there any new activities or specific sectors that you think EECA should invest more or less levy funding in for 2018/19, and in the future?

Charging infrastructure

Q8

Do you agree that EECA's levy-funded activities result in benefits for New Zealand businesses and consumers in:

- Reducing greenhouse gas emissions
- Reducing engine fuel consumption (e.g. petrol and diesel)

- Improving electricity efficiency
- Encouraging, promoting, and supporting energy efficiency, energy conservation, and the use of renewable sources of energy?

Would you like to provide any other comments on EECA's 2018/19 levy proposal and activities?

Respondent skipped this question

Q10

Name of submitter

 Name Mark Gilbert Company Drive Electric Inc





12 December 2017

Energy Efficiency and Conservation Authority Wellington

By email: levyconsultation@eeca.govt.nz

EECA 2018/19 LEVY CONSULTATION

Background

The National Energy Research Institute (NERI) is a Charitable Trust incorporated in New Zealand. Its primary purpose is to enhance New Zealand's sustainability and to benefit the New Zealand community by stimulating, promoting, co-ordinating and supporting high-quality energy research and education within New Zealand.

Its research members are Victoria University of Wellington, Auckland University of Technology, Scion, and the University of Otago, and its industry association members are the Bioenergy Association, BusinessNZ Energy Council, and the Energy Management Association of New Zealand.

This submission is made by NERI itself and may not necessarily represent the particular view of individual members.

Relationship with EECA

NERI has a longstanding relationship with NERI particularly focusing on some of the longer-term issues that arise in energy use. EECA is aware that NERI has just recently released "Energy Research Strategy for New Zealand: The Key Issues" and that NERI is actively working on it implementation.

Comments on the proposed levy-funded activities

In this context much of the substance of the proposed levy-funded activities align with themes in the Strategy, but are more short-term.

In particular the Strategy sees the adoption of EVs, improved building energy efficiency, and improvements in large industrial energy users' energy efficiency as consistent with the work we have undertaken. Our focus has been rather more on the longer-term and more intractable issues e.g. heavy-duty cycle transport.

Both approaches are essential.

¹ Available for download at <u>www.neri.org.nz/strategy</u>.

However there is one suggestion we would make that relates to the detail of the work programme with large energy users. The key outputs for this work are set out on pages 23 and 24. The focus here is on improving energy efficiency within existing business systems.

In looking at the opportunities to reduce the greenhouse gas emissions for the major industrial users in the context of the research strategy we rapidly realised there were diminishing returns from this approach. Instead we felt that the need was to explore alternative markets where clean energy earns a premium and the products and supply chains to service them².

Specifically in the main emitting industrial sectors we recommended seeking new clean energy markets in bio-chemicals, food and low emissions products from the petro-chemical industry. If existing major producers in these areas could be encouraged to start to think about new markets and products using their existing capabilities the impact could be significantly greater than working within their existing paradigm.

Recommendation

We therefore recommend that the outcomes for the programmes be expanded as follows:

Large energy user engagement programme

Second bullet point:

"Support and funding for energy audits, operational efficiency improvements such as boiler tuning, energy monitoring and targeting, and optimisation of critical energy systems, and projects to scope cleaner energy products and their potential markets: ..."

Technology demonstration programme

First bullet point:

"Providing co-funding to demonstrate proven, yet under-utilised energy efficient technologies or processes, or potential untapped markets for new cleaner energy products with the aim of promoting at least four projects to increase uptake; and ..."

Simon Arnold CEO

² We note that this addresses what is sometimes referred to as the "effectiveness of energy use" rather than energy efficiency, but the *Energy Efficiency and Conservation Act 2000* has a broad interpretation (Section 3) *energy efficiency means a change to energy use that results in an increase in net benefits per unit of energy*. Thus helping businesses to change products to give better output per quantum of energy use is consistent with the purposes of the Act. It also conserves energy.



Level 6 138 The Terrace PO Box 5324 Wellington, New Zealand

Telephone: (04) 473 8600 Facsimile: (04) 473 8601 Web: www.eea.co.nz

14 December 2017

EECA 44 The Terrace Wellington 6140

Emailed to: levyconsultation@eeca.govt.nz

EECA's 2018/19 levy-funded appropriations and work programme – EEA submission

Introduction-

The Electricity Engineers' Association of New Zealand (EEA) is the national representative organisation for technical, engineering, asset management, and health and safety issues within the electricity supply industry. Our members include corporate and individual representatives from all sectors of the industry including generation, electricity networks, contractors, engineering consultancies and equipment suppliers.

In December 2016, EEA submitted comments on EECA's 2017/18 levy-funded appropriations and work programme. We understand that EECA will continue to pursue most of last year's ongoing projects in 2018/19. We support the proposed work plan and want to thank EECA for providing more details about their projects this year.

We would also like to take this opportunity to suggest other work areas for EECA's consideration in its future work programme: (1) home insulation, (2) residential battery storage, (3) micro-grids and (4) support for greater New Zealand involvement in international electrotechnology standards. To date, EECA has strongly focused its activities on reducing energy consumption or transitioning to cleaner sources of energy. We believe EECA should take greater action to address peak electricity demand and electricity infrastructure management issues that can economically, environmentally and socially affect New Zealand. Further collaboration with the industry and research institutes such as the Electrical Power Engineering Centre (EPECentre), through the GREEN Grid research programme, would be beneficial to address these issues. Details are addressed in the body of this submission.

Comments-

EEA reviewed EECA's proposed work programme for the period covering 1 July 2018 to 30 June 2019, paying attention to the implications that the described activities would have on the electricity supply infrastructure and electricity consumers. We also considered the direction public policy and legislation may take under the new coalition government.

Which levy does our industry pay?

The electricity supply industry, which EEA represents, participates in the electricity levy. Our feedback will mainly cover the projects funded by the electricity levy, as well as those impacting the electricity supply industry¹.

¹ For example, the Low Emission Vehicles Contestable Fund. This project is proposed to be funded by the Petroleum or Engine Fuel Monitoring Levy (PEFML), not the electricity levy, however the uptake of electric vehicles will have an impact on the electricity supply industry through increased electricity demand and evolving asset management practices.

Do we support the levy proposal and the proportions allocated?

EEA notes the combined levy proposal for \$14 million and that the amount recovered from the electricity levy remains the same as last year (\$5.2 million). We also note from the consultation paper that it is likely to increase in the future as EECA works towards aligning its work programme with the New Zealand Energy Efficiency and Conservation Strategy 2017-2022 (NZEECS). As a result, EEA would like to highlight in this submission a number of areas where support from EECA would directly provide benefits for the efficient use of electricity and where our preference would go for possible future levy allocations.

Which of the levy-funded activities is of most interest to our industry?

The work EECA is producing in relation to the smooth uptake of electric vehicles (EVs) is the main area of interest to the electricity supply industry, among all projects currently conducted by the authority. Our industry is actively engaged in the promotion of EVs across New Zealand and sees this emerging technology as a promising solution to significantly reduce our country's greenhouse gas emissions and the cost of transportation for consumers.

We appreciate the fact that EECA is proposing to bring forward an additional \$1 million for the Low Emission Vehicles Contestable Fund. Whilst this is an additional burden to those paying the Petroleum or Engine Fuel Monitoring Levy (PEFML), which is financing the Contestable Fund, we note that this decision is not impacting the total amount planned to be collected over the lifetime of this project, and that this additional expense has been brought forward in time to accelerate early efforts in this work area.

The projects approved so far in the first and second rounds of the Contestable Fund show a balance of initiatives to both increase the uptake of EVs and provide for servicing and charging infrastructure, and we encourage EECA to continue in this direction.

EECA currently have a 'solar calculator', which was developed by EPECentre and is now available for use by consumers considering investing in photovoltaic technology. Something similar could be provided to consumers considering investing in EVs, in addition to the EV Contestable Fund and communication campaign.

Do we agree that the levy-funded activities provide benefits in encouraging, promoting and supporting energy efficiency, energy conservation and the use of renewable sources of energy? Are there any new activities or specific sectors EECA should invest more in in the future?

Whilst EECA has shown a strong commitment in encouraging, promoting and supporting energy conservation, EEA believe EECA should play more of a role in supporting the management of peak electricity demand. Not only does an increasing peak electricity demand have implications for infrastructure investment and consumers' costs, it is also likely to affect the profile of New Zealand's electricity generation mix². There is therefore a key opportunity for EECA to further invest in activities that can work with the electricity supply industry in being more environmentally and economically efficient for its consumers.

² Whilst some of the additional peak demand may be covered by further renewable energy capacity, some of this peak may also need to be addressed with fossil fuel generation.

The focus should lie in the residential sector, which has a large role to play in reducing its peak electricity demand. This role is clearly highlighted in the *Energy Research Strategy* published by the National Energy Research Institute (NERI) in November 2017³. The Strategy states:

"Peaks in intra-daily and inter-seasonal loads have been increasing and are projected to continue to grow faster than average demand. While hydro storage can manage a certain level of peaks this is now largely exhausted and so, unless alternatives can be found, the need for fossil fuel generation will grow to service these peaks."

and

"The main research opportunity is to find ways to flatten the load serviced by the grid."

EEA suggests two important work areas for EECA to consider as means to better manage electricity peak demand: (1) home insulation and (2) battery storage.

We would also suggest EECA has a role in (3) supporting the development of micro-grids as these can help promote a more cost-effective management of the electricity supply infrastructure and promote the use of local renewable energy sources.

Our last suggestion will regard (4) EECA's support to New Zealand's involvement in international product and technology standards development, as these standards promote the adoption of efficient and safe energy products and technologies.

1. Home insulation

Bearing in mind the above statements from NERI, EEA believes EECA should reconsider its decision to stop funding home insulation activities at the end of June 2018. NERI's strategy clearly highlights the need to pursue investments and efforts in R&D solutions that help "keep homes, particularly rentals, warm and dry". Well-insulated homes can help lower winter residential peak demand⁴ and support more efficient investments in electricity generation and network infrastructure.

In its Annual Report 2015/16, EECA estimated that another 600,000 homes still had inadequate levels of insulation: that is twice the number of houses that EECA helped retrofit since 2009⁵.

Whilst we understand that the uptake of house retrofitting by rental property owners has been slower than planned, we think that overall the Warm Up New Zealand programme has been valuable to homeowners. We would encourage EECA to review how they could encourage further insulation improvements in rental homes. On the supply side, different networks are likely to experience different levels of benefit from home retrofitting depending on local characteristics (geography, climate, customer behaviour), but we believe there are strong national advantages for both customers and electricity infrastructure in continuing EECA's involvement in promoting home insulation.

³ National Energy Research Institute, November 2017, *Energy Research Strategy for New Zealand – The Key Issues*. PDF accessed on 17 November 2017: https://www.neri.org.nz/strategy

⁴ A cost-benefit analysis conducted by Motu in 2012 and referenced in the NZEECS 2017-2022 shows that insulated homes in Christchurch can decrease their average peak demand by 18% in winter. See: Motu, 2012, Cost-benefit analysis of the WUNZ: Heat Smart Programme. Accessed on 20 November 2017: http://www.healthyhousing.org.nz/wp-content/uploads/2012/05/NZIF CBA report-Final-Revised-0612.pdf

⁵ 313,500 homes were insulated through EECA's involvement since 2009 (EECA Annual Report 201617)

We are also aware of the new government's commitment to set tougher standards for home insulation and heating, and we are waiting to see how this will be implemented in formal legislation and policy through the Healthy Homes Guarantee Bill⁶ and its implications for the retrofitting of insulation to existing housing stock.

2. Battery storage

Battery storage is another emerging technology that can impact peak electricity demand, support more efficient investment in electricity supply infrastructure and reduce the need for additional, non-renewable electricity generation.

Transpower's Discussion Document entitled *Battery Storage in New Zealand*, published in September 2017⁷, provides an analysis of the potential value of battery storage and the role it can play for energy consumers. Its findings show that "the greatest value in storage is when it is located close to end consumers". This is due to the wider range of services that batteries can provide from being directly used by local consumers. Battery storage is also a critical new tool to assist electricity networks in managing electricity supply security and reliability and providing system stability.

Barriers to battery storage uptake include poor independent customer information on battery technology and the lack of clear market signals for consumers. EECA could provide support in educating consumers and raising awareness on the value provided by battery storage in efficient electricity management. Just like for photovoltaics and EVs, we would see benefit in EECA developing a calculator for consumers considering investing in battery technology. This could be part of EECA's "innovative and efficient household energy use" output class (as presented in EECA's current work programme).

3. Micro-grids

Research in micro-grid solutions for rural or independent communities is also topical. Small remote communities create cost efficiency challenges for distribution companies, as the location and the number of customers in these communities do not necessarily economically justify the maintenance of an ageing local network, or the investment in new connections. Distributed generation solutions may help address these inefficiencies, whilst promoting the use of local renewable energy supply. A number of generation and distribution companies are now trialling this concept (e.g. Contact Energy and Wellington Electricity in some neighbourhoods in Wellington), with the objective to evaluate the effectiveness of these projects compared to traditional infrastructure investments.

Micro-grid projects also align well with initiatives to promote the uptake of battery storage, and directly relate to the strategic objective in the NZEECS to lead individuals, households and communities to make greater use of renewable energy and choose energy efficient technologies. EECA's involvement in this sector could be in the provision of information, advice and technical assistance to relevant communities on micro-grid technologies.

4. Support New Zealand's involvement in international electrotechnology standards

An important part of the efficient adoption and safe implementation of new and energy efficient electrical products and technology is increased New Zealand involvement and commitment to the international product and technology standards process.

⁶ Labour Party website, 100 Day Plan, accessed 20 November 2017: http://www.labour.org.nz/100days

⁷ Transpower, September 2017, *Battery Storage in New Zealand*. PDF accessed on 17 November 2017: https://www.transpower.co.nz/sites/default/files/publications/resources/Battery%20Storage%20in%20New%20Zealand.pdf

The key international standards bodies of IEC, ISO and ITU are jointly or individually writing international standards for the safe design, application and use of various electrotechnologies including battery technology, EVs, renewable remote area power supply and a wide range of consumer technologies. These organisations also provide recognised quality management systems for products, and as such these systems offer consumer quality assurance in these areas. EECA has a key role in participating in the development, review, recognition and implementation of these standards as fit for purpose in New Zealand. EEA recommends that provision be made within the 2018/19 levy expenditure budgets to increase support for EECA work with stakeholders and Standards New Zealand.

Conclusion-

EEA would like to thank EECA for the opportunity to comment on the content of its proposed 2018/19 levy-funded appropriations and work programme dated 16 November 2017.

We believe that a coordinated plan of action is critical to ensure New Zealand makes the most economically, environmentally and socially sound energy decisions. This submission has highlighted a few areas where we believe EECA could provide further support: home insulation, battery storage, micro-grids and standards support, in addition to the work already conducted on EVs. This list is by no means exhaustive, but provides an overview of where industry priorities sit in relation to EECA's mandate. We would encourage further collaboration with the electricity supply industry and research institutes such as EPECentre to develop tools and pursue activities relevant to these work areas.

As this consultation solely covers EECA's appropriations and work programme to 2019, we have focused our feedback on our short-term priorities. Looking at longer-term trends could however be an interesting exercise. For instance, the implications of electric vehicles on peak demand may need to be further understood both from a consumer education and independent information perspective. We would also invite EECA to consider the implications of the 100% renewable electricity target by 2035, which was agreed by the newly elected government coalition. This shift will create challenges for electricity grid stability (i.e. the balance between production and consumption of electricity) and we would appreciate a coordinated discussion between EECA, MBIE, the electricity supply industry, research institutes and tertiary education providers on how to address these and deliver on the target.

Should you wish to further discuss or clarify any matters mentioned in this submission, please contact Marion Sorez, Industry Analyst, at marion@eea.co.nz or Peter Berry, Executive Director, at peter@eea.co.nz or 04 4738 600.

Yours sincerely,

Peter Berry Executive Director





EECA

Via email: levyconsultation@ecca.govt.nz

20 February 2018

Consultation on EECA's 2018/19 levy funding proposal and related work programme

Mercury welcomes the opportunity to provide feedback on EECA's 2018/19 levy funding proposal and related work programme. Mercury is an electricity generator and retailer providing energy services to homes, businesses and industrial consumers throughout New Zealand. We have a long heritage of renewable energy in New Zealand serving 1-in5 homes and businesses under the Mercury brand and other speciality brands. We also have proven capability and technical expertise in smart metering services, geothermal and solar. Our goal is to be the leading energy brand in New Zealand, inspiring our customers, owners and partners in delivering value, innovation and outstanding experiences.

Last year we submitted on the revised New Zealand Energy Efficiency and Conservation Strategy (NZEECS) which included a proposal for legislative change to enable EECA to receive levy funding from the Gas Safety, Monitoring, and Energy Efficiency (GSMEE) levy and the Petroleum or Engine Fuel Monitoring (PEFM) levy. Mercury was in favour of this change as it would enable EECA to focus on carbon intensive sectors, such as process heat and transport, as well as continuing to invest in driving efficiencies in the use of electricity. We are pleased that the Energy Innovation (Electric Vehicles and Other Matters) Act has passed making the proposal a reality.

Mercury notes that EECA is consulting on its funding and work programme prior to making adjustments to reflect the policies and priorities of the new government. For example, the section on the EV programme still contains the targets set by the previous National government. We believe that there will need to be further consultation on any proposed changes and further clarity on how EECA's planned work will fit with new funding channels such as the Green Growth Fund, the Regional Development Fund, the more stringent renewable electricity target, the EV uptake target and with the work likely to be undertaken by the Climate Commission when it is established. For example, we anticipate some overlaps between EECA's technology demonstration programme and the Green Growth Fund.

Mercury supports EECA's decision to provide more detailed information on the work programmes that will be funded from the three energy levies, the expected outcomes and benefits these will deliver, and the need for each programme. This was suggested by submitters in last year's consultation and will ensure greater transparency in the use of levy funding for programmes as will information on the link between those groups being levied and whether they benefit from, or cause a need for, the levy-funded programme. We also support the provision of more information about the entire proposed programme portfolio to demonstrate the wider context for EECA's work, particularly how the partially levy-funded programmes fit within the wider portfolio.

Mercury supports the key change EECA has made to the EV Programme in 2018/19 to bring forward from future years of the programme an additional \$1 million for the contestable fund. We agree that it is important to get more projects underway earlier, when investment is likely to have greater impact in accelerating uptake and can support the government target.

PHONE: + 64 9 308 8200

FAX: +64 9 308 8209

mercury.co.nz

Consultation Questions

Questi	on	Mercury Response
1.		Mercury works constructively with EECA particularly in
	organisation had with EECA?	the area of EV promotion.
2.	, , , , , , , , , , , , , , , , , , ,	Mercury pays the Electricity Industry Levy.
	organisation use, and which levies do you pay?	
3.	EECA's proposed levy-funded work programme	Yes.
	in 2018/19 will request funding from the three	
	energy levies set out in question 2. Do you	
	support EECA's levy proposal for \$14 million in	
	2018/19?	
4.	2	Yes.
****	requested across the three energy levies?	
5.	Which of EECA's levy-funded activities is of	All programmes although we have a particular interest in
	most interest to you:	EVs.
	EV programme	
	Equipment Energy Efficiency programme	
	Large Energy User Engagement programme	
	Technology Demonstration programme	
	NABERSNZ	
		•
6.	Do you support the mix of levy-funded activities	Yes.
	listed above?	
7.	Do you agree that EECA's levy-funded activities	Yes.
	result in benefits for NZ businesses and	
	consumers in"	
	Reducing ghg emissions	
	Reducing engine fuel consumption	
	Improving energy productivity	
	Improving electricity efficiency	
	Encouraging, promoting and supporting energy	
	efficiency, energy conservation, and the use of	
	renewable sources of energy?	
	Any other comments?	See cover letter.







15 December 2017

Energy Efficiency and Conservation Authority PO Box 8036 The Terrace WELLINGTON 6143

Email: levyconsultation@eeca.govt.nz

Dear Sir/Madam

Christchurch City Council submission on EECA's 2018/19 levy funding proposal and related work programme

Christchurch City Council staff welcome the opportunity to submit on the Energy Efficiency and Conservation Authority's 2018/19 levy funding proposal and related work programme. Please find the submission attached.

If you require clarification on the points raised in this submission or additional information, please contact Kevin Crutchley, Resource Efficiency Manager at kevin.crutchley@ccc.govt.nz or 03 941 8209.

Yours faithfully

Brendan Anstiss

General Manager Strategy and Transformation

Break A-Frier

Christchurch City Council



CONSULTATION ON EECA'S 2018/19 LEVY FUNDING PROPOSAL AND RELATED WORK PROGRAMME

Christchurch City Council Staff Submission - December 2017

Consultation Questions and Responses

1. What kinds of engagement have you or your organisation had with EECA?

Christchurch City Council (Council) has worked together with EECA on a range of work programmes, including:

- EECA collaboration agreement with Council providing support for energy efficiency, energy management and renewable energy initiatives
- Working on specific projects with Target Sustainability business members on building design and operational energy efficiency
- Working on residential energy efficiency initiatives
- 2. What forms of energy do you or your organisation use and which levies do you pay? (1. Electricity Industry Levy, 2. Petroleum or Engine Fuel Monitoring (PEFM) levy, 3. Gas Safety, Monitoring and Energy Efficiency (GSMEE) levy).

Council uses a range of forms of energy including electricity, diesel, petrol, bio-diesel, wood chip, wood pallets, landfill gas and LPG. Council does not pay the levies mentioned above.

3. EECA's proposed levy-funded work programme in 2018/19 will request funding from the three energy levies set out in question 2. Do you support EECA's levy proposal for \$14 million in 2018/2019?

Yes.

4. Do you support the proportions EECA has requested across the three energy levies?

Yes.

- 5. Which of EECA's levy-funded activities is of most interest to you:
 - Electric Vehicles (EV) Programme
 - Equipment Energy Efficiency (E3) Programme
 - Large energy user engagement programme
 - Technology demonstration programme
 - NABERSNZ

All of these EECA levy-funded activities are very important work programmes and all of these activities are of interest to Council. Below is the order of interest to Council.

- 1. Electric Vehicles (EV) Programme
- 2. Large energy user engagement programme
- 3. Technology demonstration programme
- 4. Equipment Energy Efficiency (E3) Programme
- 5. NABERSNZ



6. Do you support the mix of levy-funded activities listed above?

Yes.

7. Are there any new activities or specific sectors that you think EECA should invest more or less levy funding in for 2018/19, and in the future?

Yes. Please see question 9.

- 8. Do you agree that EECA's levy-funded activities result in benefits for New Zealand businesses and consumers in:
 - Reducing greenhouse gas emissions
 - Reducing engine fuel consumption (e.g. petrol and diesel)
 - Improving energy productivity
 - Improving electricity efficiency
 - Improving gas efficiency
 - Encouraging, promoting, and supporting energy efficiency, energy conservation, and the use of renewable sources of energy?

Yes and it is very important that EECA is funded appropriately to deliver the activities listed above.

9. Would you like to provide any other comments on EECA's 2018/19 levy proposal and activities?

Electric Vehicles (EV) Programme - Low Emission Vehicles Contestable Fund

It is recommended that the Low Emission Vehicles Contestable Fund should have funding criteria and funding grants that focus on battery electric zero tail pipe emission vehicles and not include funding criteria and funding grants for plug-in hybrid or electric range extender vehicles. Plug-in hybrid vehicles or electric range extender vehicles generally have limited battery electric range and it has been suggested in a recent overseas investigation that users of plug-in hybrid vehicles tend to use fossil fuel as the main energy source for these vehicles. If EECA invests contestable grant funding into plug-in hybrid or electric range extender vehicles EECA cannot determine carbon emission savings for that investment because EECA cannot guarantee how the users of plug-in hybrid or electric range extender vehicles will fuel the vehicle. The range (distance) of battery electric zero tail pipe emission vehicles available in the market is increasing rapidly and is expected to match the range of internal combustion vehicles in the near future. These zero tail pipe emission vehicles, which also have the benefit of lower maintenance costs, and the associated environmental and health benefits, especially in urban centres, should be the vehicles to be promoted with EECA funding support.

Electric Vehicles (EV) Programme - Energy Efficiency ratings for battery electric vehicles

It is recommended that EECA develop robust energy efficiency ratings for battery electric vehicles that can be used to compare different models of electric vehicles, i.e. kWh used per 100km.

NABERSNZ

It is recommended that the NABERSNZ rating scheme is expanded for use for other facilities in New Zealand not just office buildings, e.g. for use for hotels, shopping centres, hospitals, swimming pool complexes etc.

It is recommended that the NABERSNZ public displayed rating for a building also includes the CO₂ equivalent emission component of the rating so potential tenants and the public can also easily see



the CO₂ equivalent emission element of the rating for comparison purposes between buildings. This would publically promote the level of greenhouse gas emission generation of the building which is important for greenhouse gas emission evaluations between buildings.

It is recommended that EECA investigate and consult on having a mandatory requirement for New Zealand commercial facilities, of a certain size in square metres, to have, and display, a NABERSNZ rating for these facilities as is done in Australia.

Energy and Greenhouse Gas Emission Data

It is recommended that EECA works with Government agencies on implementing national reporting of energy consumption, by energy type and by source and National reporting of greenhouse gas emission generation by source. This Government reporting should also be broken down by region, and city or district so that councils can monitor energy consumption, by energy type and by source and monitor greenhouse gas emission generation by source. A best practice and consistent energy consumption and greenhouse gas emission data collection reporting framework by Government is required both for Government to measure the results of its programmes and also to allow councils access to the reporting so comparisons can be made across communities. This would also support voluntary approaches to monitor and manage greenhouse gas emissions (e.g. The Global Covenant of Mayors for Climate and Energy).

Productive low carbon business activities

It is recommended that the emission reduction programme of work expands slightly from a focus on industrial process heat opportunities to also include some targeted project support for fuel switching to zero local emission options with commercial equipment and with smaller fossil fuel boilers to demonstrate these types of options for switching to zero local emission technology for businesses.

Equipment Energy Efficiency (E3) Programme

It is recommended that a greenhouse gas emission rating is developed for equipment alongside the current energy efficiency rating.





Better together.

Trustpower Limited

Head Office 108 Durham Street Tauranga

Postal Address: Private Bag 12023 Tauranga Mail Centre Tauranga 3143

F 0800 32 93 02

Offices in Auckland Wellington Christchurch Oamaru

Freephone 0800 87 87 87

trustpower.co.nz

15 December 2017

EECA 2018/19 Levy Consultation EECA Level 8 44 The Terrace P O Box 388 WELLINGTON 6140

By email: levyconsultation@eeca.govt.nz

TRUSTPOWER SUBMISSION: 2018/19 LEVY FUNDING PROPOSAL AND RELATED WORK PROGRAMME

- 1 Introduction and overview
- 1.1.1 Trustpower appreciates the opportunity to submit on the Energy Efficiency and Conservation Authority's (EECA) 2018/19 levy funding proposal and related work (Consultation Paper).
- 1.1.2 EECA is seeking feedback on \$14 million of funding from three energy levies as follows:
 - a) \$7.5 million from the Petroleum or Energy Fuel Monitoring (**PEFM**) levy;
 - b) \$5.2 million from the Electricity Industry levy (electricity levy); and
 - c) \$1.3 million from the Gas Safety, Monitoring and Energy Efficiency (GSMEE) levy.
- 1.1.3 EECA proposes to use the levies to partially fund the following activities in 2018/19:
 - a) The Electric Vehicle Programme \$7.5m is sought from the PEFM to invest in the Low Emission Vehicles Contestable Fund (\$7m) and an EV information campaign (\$0.5m) to promote and support the uptake of low emission transport technologies.
 - b) The Equipment Energy Efficiency (E3) Programme \$2.6m is sought from the electricity levy and \$54k from the GSMEE levy to develop business and residential product energy efficiency standards and regulations.
 - c) Productive low carbon business activities comprising of:
 - i. The Large Energy user engagement programme \$2.1m is sought from the electricity levy and \$1m from the GSMEE levy to support businesses in energy efficiency and renewable energy investments, and adoption of best energy management practice; and
 - ii. **The Technology demonstration programme** \$200k is sought from the electricity levy and \$190k from the GSMEE levy to support demonstration projects for proven, but underutilised energy efficient technologies and processes.

1



d) National Australian Built Environment Rating System New Zealand (NABERSNZ) - \$280k is sought form the electricity levy to investment in the scheme to improve the energy performance of commercial buildings.

2 Trustpower's views

- Trustpower supports the proposal of \$14 million to partially fund¹ EECA's work programme for 2018/19, as presented in the Consultation Paper.
- 2.1.2 We are pleased that EECA has taken into account the feedback it received last year that more detailed information is required on the programmes that will be funded from the three energy levies, the expected outputs and benefits those will deliver, and the need for each programme.
- 2.1.3 The adoption of this feedback has resulted in improved transparency as to what EECA's funding will be spent on during the upcoming financial year². This assists interested parties to obtain a better understanding of how those costs are to be applied and whether the various components which make up those costs are reasonable, appropriate relative to other choices, or required at all.
- 2.1.4 The information provided in the Annual Report also enables interested parties to assess at a high level whether the funding allocated to EECA's work programme in the previous year has delivered the proposed benefits, including any anticipated cost savings or reduction in energy consumption³.

2.2 Proposed refinements for levy-funding consultations

- 2.2.1 We support EECA in considering whether more detailed supporting information could be provided with its requests for levy funding in the future.
- 2.2.2 Specifically we suggest that EECA:
 - a) provides a breakdown of the requested funding and key outputs and benefits of each project within a work programme, where applicable. This should be supported by reporting on performance at a more disaggregated level in the Annual Report; and
 - b) considers whether there is any additional information it could provide in its levy funding proposals around how any existing work programmes are performing in order justify continued expenditure in this area, in addition to the information provided in the Annual Report.
- 2.2.3 These further improvements would better enable interested parties to:
 - a) form their own opinions around whether the work plan represents best value for money; and
 - b) monitor the success of all components of the work programme over time.

2.3 Encouraging, promoting and supporting the use of renewable sources of energy

2.3.1 Under the Energy Efficiency and Conservation Act 2000, the function of EECA is to "encourage, promote, and support energy efficiency, energy conservation, and the use of renewable sources of energy" (our emphasis added).

¹ The remainder of funding will be covered by EECA's baseline appropriations.

² Unless a reprioritisation of work is undertaken – as occurred with the proposed information campaign in the last financial year.

³ Provision of this information as an Appendix is particularly useful to interested parties when assessing the application.

⁴ Energy Efficiency and Conservation Act 2000, s21(1)



2.3.2 We support EECA considering how it can further encourage, promote and support the use of renewable sources of energy as part of its ongoing work programme.

For any questions relating to the material in this submission, please contact me on 027 549 9330.

Regards,

Fiona Wiseman

Holoseman

Senior Advisor, Strategy and Regulation



Energy Efficiency and Conservation Authority Level 8 44 The Terrace Wellington 6140

By email: levyconsultation@eeca.govt.nz

Dear FECA

PO Box 10742 Wellington Level 2, Harbour City Tower 29 Brandon Street Wellington, New Zealand contactenergy.co.nz

EECA's 2018/19 levy funding proposal

Thank you for the opportunity to comment on the Energy Efficiency and Conservation Authority's (EECA) 2018/19 levy funding proposal.

Contact Energy (Contact) strongly supports EECA's overall strategic direction to 'encourage, promote, and support energy efficiency, energy conservation, and the use of renewable sources of energy'. This direction aligns with Contact's vision of leveraging New Zealand's renewable energy resources to reduce our reliance on fossil fuels and decarbonise our energy sector.

Contact supports the targeting of funding at areas that can deliver maximum emissions reduction and energy efficiency for New Zealand — enhancing sustainability while reducing costs to the economy. To this end, we consider that EECA funding should be allocated to research, to publish a marginal abatement cost curve (MACC) for emissions reduction and energy efficiency in the New Zealand energy sector. This analysis would help enable prioritised funding in areas that would deliver the best value energy efficiency improvements and emissions reductions for New Zealand.

Subject to any insights derived from any such MACC (and the funding allocation decisions these insights might influence), we have the following comments on the proposed EECA funding allocation:

- a. Given that transport emissions dominate New Zealand's energy sector emissions (over 18% of gross emissions), we support the high proportion of total EECA funding directed at accelerating the uptake of electric and other low emission vehicles. Electric vehicles are significantly less emissions intensive and significantly more energy efficient than internal combustion alternatives, and will be key in decarbonising our transport system.
- b. We would however support increased funding to support the accelerated decarbonisation of the manufacturing sector. Manufacturing is the energy sub-sector producing the second largest proportion of gross emissions (over 11%) and we consider the proportion of funding allocated to this sub-sector should better reflect its contribution to New Zealand's total gross emissions.
- c. We would support the allocation of this funding through a low emissions manufacturing contestable fund (based on the LEV contestable fund model), aimed at accelerating the decarbonisation of manufacturing, and co-funding of demonstration projects to promote and enable stakeholders to better understand the risks and benefits of low emissions manufacturing technologies and processes.

Contact is running a Design Thinking project to better understand the challenges and opportunities associated with decarbonising the energy sector in New Zealand. Contact is pleased to be working with EECA and a range of other important stakeholders on this process.

Yours sincerely

Louise Griffin

Head of Regulatory Affairs and Government Relations





c/- Stephen Daysh NZGA President

PO Box 149, Napier 4140 +64 21 246 8595 +64 6 834 4344

SUBMISSION ON EECA'S 2018/19 LEVY FUNDING PROPOSAL AND RELATED WORK PROGRAMME

TO:

ENERGY EFFICIENCY AND CONSERVATION AUTHORITY

SUBMITTER:

NEW ZEALAND GEOTHERMAL ASSOCIATION

INTRODUCTION

- 1. This is a submission by the New Zealand Geothermal Association (NZGA) on the Energy Efficiency and Conservation Authority's (EECA) Consultation on EECA's 2018/19 levy funding proposal and related work programme. We have liaised with the Geothermal Heatpump Association of New Zealand (GHANZ) in the preparation of this submission.
- 2. NZGA is an independent, non-profit association that provides information on geothermal resources and utilisation for industry, government, tourism, cultural and educational organisations. As a member of the International Geothermal Association, NZGA contributes to the international exchange of information within the geothermal development industry. NZGA membership comprises participants, regulators, and interested parties within the geothermal community. It totals 293 members currently.
- 3. NZGA submitted in December 2016 that geothermal energy was not prioritised in EECA's 2017/18 work programme. We note that geothermal energy, as a key New Zealand renewable energy resource, is again not prioritised in EECA's proposed work programme for 2018/19.
- 4. We submit that geothermal energy should be recognised and provided for by EECA in its 2018/19 work programme.

THE ROLE OF GEOTHERMAL ENERGY IN NEW ZEALAND AND FOR EECA

- 5. Geothermal energy is the second largest primary energy supply in New Zealand, having surpassed gas in 2015, and only presently being exceeded by oil.
- 6. The newly elected government's climate change goals (including a Zero Carbon Act and Independent Climate Commission, investing in regional resilience and adaptation to climate change, a net zero emission economy by 2050, 100% renewable electricity target by 2035) give a strong indication that geothermal heat will be a cornerstone of New Zealand's energy sources in the future.
- 7. Figures 1 to 3 in this document highlight the areas where geothermal energy can make a direct contribution to EECA's programmes, interventions, outcomes and goals. While electricity markets are outside EECA's scope, geothermal energy can contribute to home and business heating through the use

of geothermal heat pumps right throughout New Zealand, and in other areas through the use of warm and hot aquifers. Geothermal energy can also contribute process heat to industry, particularly through the Taupo Volcanic Zone and near Ngawha in Northland whilst geothermal heat pumps can contribute heat to industry and the commercial sector across New Zealand. With such a broad range of utility, the geothermal energy industry has strategic importance to New Zealand, and should be better championed through EECA.

- 8. Geothermal energy contributes to two of EECA's three priority areas:
 - Renewable and efficient use of process heat; and
 - Innovative and efficient use of electricity (through beneficial electrification, such as geothermal heat pumps which reduce peak loads, reduce energy demand and reduce carbon-intensity of supplied energy, and indirectly as geothermal energy will help meet the 90% renewable electricity targets by 2025 and 100% by 2035).
- 9. Geothermal energy can make a major contribution to Lower Carbon Business (where EECA plans to invest most significantly), lower Household Energy Use and to lower Commercial Buildings' energy use.
- 10. We recommend that the following areas (which are currently proposed not to be funded from the levies or are only partially funded from the levies) are identified for funding of geothermal activities:
 - Government leadership in renewable heat;
 - Engagement and information provision to low carbon businesses and large energy users;
 - A process heat action plan (aligning with the Geoheat Strategy); and
 - Technology demonstrations.

NZGA'S KEY POINTS

- 11. We would like to raise and discuss the following main points (before responding to the specific consultation questions from the Consultation document):
 - I. 2018 is a key year for the implementation of the Geoheat Strategy.
 - II. Geothermal Heat Pumps can contribute to EECA's objectives.
 - III. More data on direct use of geothermal heat is needed.

2018 IS A KEY YEAR FOR THE IMPLEMENTATION OF THE GEOHEAT STRATEGY

- 12. The Geoheat Strategy for Aotearoa NZ was launched in 2017 to stimulate investment in the direct use of geothermal energy at the commercial and industrial level. The Strategy was funded by the NZGA, with technical input from GNS. It is a national framework and its implementation is now underway, with the establishment of a volunteer-based Governance Group coordinated by the NZGA.
- 13. In 2018, a programme to promote the Geoheat Strategy is required to increase awareness of the benefits and opportunities available with geothermal energy. This implementation will be driven by the Governance Group and through a number of new members who have agreed to assist with its implementation on a voluntary basis.
- 14. EECA programmes which Geoheat Strategy projects align well with are:
 - Public sector initiatives

- Large Energy User Engagement
- NABERSNZ
- Technology demonstrations
- 15. Direct geothermal use is also being promoted through the Bay of Connection's Energy Strategy, which is closely aligned to the GeoHeat Strategy, but with a regional focus. A new Geothermal Business Development Lead role has been established to deliver objectives, and is jointly funded by MBIE, Bay of Connections and industry partners, including \$10,000 from NZGA. Longer term this initiative may be extended more widely.

II. GEOTHERMAL HEAT PUMPS CAN CONTRIBUTE TO EECA'S OBJECTIVES

- 16. Geothermal Heat Pumps can align with and contribute to EECA's proposed programmes and outcomes for residential, commercial and process heat.
- 17. Benefits of ground and water source heat pumps include:
 - More efficient heating and cooling than all alternative heating and cooling systems (including air source heat pumps)
 - Not impacted by cold winter conditions as are air source heat pumps
 - Contribute to New Zealand's climate change goals by reducing the use of carbon based fuels and increased resilience through diversity of sources of energy
 - Innovative, world-leading technology supported by skilled designers and installers is attracting a growing number of international experts to New Zealand
 - Can be developed in a range of sizes, and especially attractive commercially for larger scale or high occupancy premises.
 - Geothermal heat pumps can form the basis of high-efficiency district heating and cooling systems. These are being developed in a number of European Cities were the focus on city wide energy systems is driving very significant reductions in city carbon footprints.
- 18. GHANZ will soon initiate a review of its 2014-2017 Strategic Action Plan. It anticipates that this will include alignment with the following proposed EECA programmes:
 - Public sector initiatives
 - Large Energy User Engagement
 - NABERSNZ
 - Technology demonstrations
- 19. The strategic initiatives discussed above are consistent with the Government's renewable energy and climate change targets and are well aligned with some of EECA's priorities. As such they may serve as a catalyst for further discussion between the NZGA, EECA, industry and local government. The NZGA, in collaboration with GHANZ, would like to discuss opportunities for EECA to provide support, either through advocacy, advice, or co-funding of initiatives.

III. MORE DATA ON DIRECT USE OF GEOTHERMAL HEAT IS NEEDED

- 20. There is currently limited data on direct use of geothermal heat (particularly in the commercial and residential sectors), with existing published information being limited to surveys and assumptions.

 Regional councils are now investing in measurement programmes which will help to understand more closely the exact usage. This will include improved understanding about energy requirements, and will involve working directly with users to determine their energy needs and options for more efficient use.
- 21. Reliable audit data on direct heat use would contribute to outcomes identified by EECA, including those related to energy in commercial buildings and home heating.

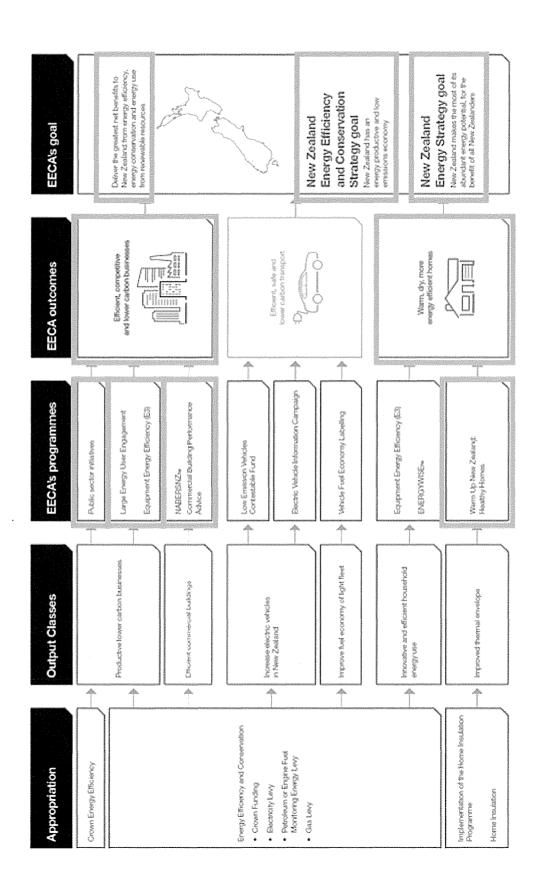


Figure 1 Highlighted areas (orange boxes) where geothermal energy contributes to EECA's 2017/18 programmes, outcomes and goals (adapted from EECA's 2017/18 outcome framework).

EECA Intervention		2018/19 levy request	
	PEFM levy	Electricity Industry Levy	GSMEE levy
Low Emission Vehicles Contestable Fund	\$7.0 million	•	•
EV information campaign	\$0.5 million		L
E3 Programme – <i>Residential</i> products energy efficiency standards and regulations	,	\$1,552,723	•
E3 Programme – Business products energy efficiency and standards regulations	•	\$1,035,148	\$54,609
Large energy user engagement programme	•	\$2,124,419	\$1,054,740
Technology demonstration programme	*	\$206,185	\$190,651
NABERSNZ	£	\$281,525	•
Energy levy total	\$7.5 million	\$5.2 million	\$1.3 million
Total levy funding proposal for 2018/19		\$14 million	

Figure 2 Highlighted areas (orange boxes) where geothermal energy should be part of EECA's 2018/19 interventions (adapted from EECA's 2018/19 levyfunded programmes).

						'				Confinentia	חיושאיוטיי איזאַחטיט בעניבאנטענווועטי	201 Wall		חינות זהו הפוונים כווופווומוווווומר	וכו אימורה		-		
		Electrici	Electricity Industry	GSME	GSMEELevy	DECM Law	DECAG Laws settinisties	Non-Lev	Non-Levy related	Electricity Industry	tel	PEFM Levy	Electricity Industry	GSMEE Levy PEFM Levy	PEFM Lewy	Electricity Industry G	GSMEE Levy	PEFM Levy	Electri
		Levy a	Levy activities	acti	activities			acti	activities	Levy	activities			activities	activities			activities	Lev
	Total fully allocated cost per project	×	. vs	×	w	×	v	%	ν,							✓	· •	V	\$ 4 7
	2,044,098			. : 	•			75007	2,044,098						n de la companya de l				. 20 . 4 . 4 . 4
	2,400,787		0		0		0	2004 24 17	2,400,787							0	o	0	
	1,028,909	334 J						7,007	1,028,909										
E 32	3,346,506	38 38 38 38 38 38 38 38 38 38 38 38 38 3	2,201,717	8	o		0	1 I	115,890							2,201,717	0	0	1,552
	7,508,290					100%	7,508,290	86 8				(2,670,834)			2,670,834			7,518,70	
	9,233,773		0		6	 	9,233,773	 	0	Common or a common or a common of the common of the common or a common of the common o							0	9,233,773	
	298,407							3001	298,407										
the state of the s	657,762						0	1 1 8031	459,355 657,762							0	0	0	
	130,369	Jan I						3001	996,061										
ng E3) Carbon Business	1,545,064	85% %	1,467,811	፠	27,77 25.25			£ 5 3	1,317,123							1,467,811	77,253		3.03 2.03
	7,593,771	\$18 \$75	3,872,823	15%	1,139,066			100.5 24.5 26.5 26.5 26.5 26.5 26.5 26.5 26.5 26	2,581,882	(2,819,735)	(626,608)		1,959,279	049,640 361 571		3,012,367	1,492,098		2,124
	709,708	1 1						100%	307,907		Ì						YOU TO THE		3
	13,607,948		5,555,543		1,399,389		0		6,653,016	The state of the s						4,772,542	1,839,058		3,365
	227,132	86	300 105	ž				700%	227,132							100			
	726,126		399,195	k	0	k . l	0		326,931							399,195		0	788
	32,017,000		8,156,455		1,399,389	1	9,233,773		13,227,383	(2,929,952)	(713,207) (2,670,834)	2,670,834)	2,146,951	1,152,876	2,670,834	7,373,454	1,839,058	9,233,773	2,200
mmitments made and			2,929,952		713,207		2,670,834						,						
· 3		:	5,226,503		686,182		6,562,939												
ally committed in year eld in retained earnings)			2,146,951		1,152,876		2,670,834												
			7,373,454		1,839,058		9,233,773												
	:	1100		:	:														
		:	5,200,000	:	1,300,000		7,500,000		\$ 5 6 8 1										
			2,173,454		539,058	:	1,733,773												

RESPONSES TO SPECIFIC QUESTIONS IN THE CONSULTATION DOCUMENT

1. What kinds of engagement have you or your organisation had with EECA?

NZGA has taken some initiatives over the last few years to forge a closer partnership arrangement with EECA, given our complimentary nature, with EECA being tasked with delivering benefits from renewable energy sources, and our organisation being the New Zealand representative body for geothermal energy.

NZGA regularly comments on issues and on Annual Reports and participates in consultation exercises like this one.

EECA has assisted with funding reports on direct use, heat pumps and on the distributed energy role of geothermal energy, which has been gratefully received. EECA has also provided some funding to the annual industry conference run by the University of Auckland.

We are keen to rekindle and build on this partnership opportunity.

2. What forms of energy do you or your organisation use, and which levies do you pay?

NZGA advocates for wider use of geothermal energy, including for electricity generation, industrial geothermal direct heat use, commercial and domestic geothermal space and water heating. With such a diverse membership, some of our member organisations (and key sponsors) will pay all levies, but in particular the Electricity and Gas Levies.

3. EECA's proposed levy-funded work programme in 2018/19 will request funding from the three energy levies set out in question 2. Do you support EECA's levy proposal for \$14 million in 2018/19?

Overall, we support EECA's request for funding. However, we note that EECA has been enabled by Cabinet to recover \$17.5m (page 14 of the discussion document) but has only chosen to recover \$14m.

There are some areas that appear to be inadequately funded (e.g., Technology Demonstrations (\$800k) and Industry Development (\$700k)) for which geothermal applications can be found.

4. Do you support the proportions EECA has requested across the three energy levies?

NZGA notes the methodology used and the choice to fund certain activities from general appropriations. Table 1 overleaf compares appropriations for 2017/18 and those proposed for 2018/19.

It is apparent that the absolute value of Electricity and Gas Levy appropriation has been retained while the fuel levy has been increased by \$1M (and the logic for the fuels' increase has been explained in terms of bringing \$1M forward from future years for a contestable fund). Given that the Electricity and Gas levies feed into the under-resourced Technology Demonstration and Industry Development programmes, then an increase to the previously accepted proportions for the Electricity and Gas Levies could be justified in our view.

Table 1 EECA appropriations for 2017/18 and 2018/19

Levy	203	17/18	2018/19		
	% of total	Value (\$M)	% of total	Value (\$M)	
Electricity Levy	40	5.2	37	5.2	
Gas Levy	10	1.3	9	1.3	
Petroleum or Engine Fuel Monitoring Levy	50	6.5	54	7.5	

5. Which of EECA's levy-funded activities is of most interest to you?

Electric Vehicles (EV) Programme

Many of our members are involved with the production of electricity. As such, promotion of electric vehicles will help to grow the electricity market and allow renewable energy to displace fossil fuels. We support funding for this area, including for both the private and the public transport sector.

Large energy user engagement programme

There can be a close meshing between EECA's large energy user engagement programme and the Geoheat Strategy. We would like to closely collaborate with EECA (both in terms of potential monetary and staff resources) in the implementation of the Geoheat Strategy through this programme.

Technology demonstration programme

This programme could benefit both the Geoheat Strategy and the Geo Heat Pump Strategy. We would like both of these strategies to specifically benefit from the programme.

NABERSNZ

This programme could benefit both the Geoheat Strategy and the Geo Heat Pump Strategy. We would like both of these strategies to specifically benefit from the programme.

6. Do you support the mix of levy-funded activities listed above?

NZGA supports the funding of the activities proposed but submits that vital activities are missing from the proposal, in that specific geothermal initiatives as outlined above are not referenced.

7. Are there any new activities or specific sectors that you think EECA should invest more or less levy funding in for 2018/19, and in the future?

We have pointed out that monitoring was originally a specific element of the levies. As such we would like to see collaboration around use data capture.

While we have suggested that the Geoheat Strategy and the Geothermal heat pump initiatives could be brought specifically under the general programmes outlined by EECA, specific support may need to be given by EECA outside these planned programmes.

We consider that there should be further consideration of opportunities for the direct use of geothermal energy for home heating, which is consistent with EECA's goals around healthy homes. While resource sustainability is an issue that needs to be carefully managed in some geothermal systems (e.g. Rotorua), there is considerable potential for wider use of direct geothermal heat or GSHPs for home heating. Some of the obstacles to this wider use include affordability, lack of information

about available technology, and the lack of visibility of successful business models, particularly for domestic schemes.

Partnership/multi-agency initiatives could potentially help minimise these obstacles, especially for greenfield developments, and could result in significant social and cultural benefits (e.g. partnerships with regional and district councils, iwi and other public sectors).

- 8. Do you agree that EECA's levy-funded activities result in benefits for New Zealand businesses and consumers in:
 - Reducing greenhouse gas emissions
 - Reducing engine fuel consumption
 - Improving energy productivity
 - Improving electricity efficiency
 - Improving gas efficiency
 - Encouraging, promoting, and supporting energy efficiency, energy conservation, and the use of renewable sources of energy?

NZGA considers that the proposed activities to be funded do result in these benefits.

However, the promotion of increased usage of geothermal energy will help New Zealand meet these objectives more effectively through:

- the use of a low emissions renewable form of energy;
- substitution of current fossil fuel transport fuels with electric vehicles; and
- the use of efficient technologies such as geothermal heat pumps.

NZGA would like to see more encouragement, promotion or support from EECA for geothermal energy in general, and direct use in particular.

9. Would you like to provide any other comments on EECA's 2018/19 levy proposal and activities?

In the New Year, I will be in touch to seek a meeting with EECA Chief Executive, Andrew Caseley, to introduce myself as the new President of NZGA, and to discuss opportunities for our respective organisations to continue to work closely together.

Date: 15 December 2017

Stephen Daysh

President

New Zealand Geothermal Association

May

Address for service:

New Zealand Geothermal Association

c/- Stephen Daysh

PO Box 149

Napier 4140

Contact details:

Telephone 021 246 8595

Email: president@nzgeothermal.org.nz





15 December 2017

Andrew Caseley
Chief Executive
Energy Efficiency and Conservation Authority
By email to levyconsultation@eeca.govt.nz

Dear Andrew

EECA 2018-19 levy consultation

- 1. This is a submission by the Major Electricity Users' Group (MEUG) on the Energy Efficiency and Conservation Authority (EECA) paper "Consultation on EECA's 2018/19 levy funding proposal and related work programme", 16 November 2017.¹
- 2. MEUG members have been consulted in the preparation of this submission. This submission is not confidential. Some members may make separate submissions.
- 3. MEUG makes this submission as an interested party for MEUG members that collectively will pay approximately 26% or \$1.35 million of the proposed \$5.2 million levy funded electricity efficiency work in 2018-19.
- MEUG submits:
 - a) An in-principle objection to the levy framework.

Setting aside the in-principle objection then:

- b) The total levy funded work programme should be kept at \$13 million and not increased by \$1 million next year (an 8% increase) to \$14 million; and
- c) More granularity and target ex post reviews of work being published.
- 5. Each of these are discussed in the next 3-sections.

In-principle objection

6. MEUG has a long-standing and well-known objection in-principle to the levy framework. We have not repeated the rationale for those objections in this submission. Those objections have not changed with the material in this year's consultation paper.

¹ URL https://www.eeca.govt.nz/about-eeca/consultations-and-proposal-and-related-work-programme.pdf at https://www.eeca.govt.nz/about-eeca/consultations-and-proposals/#levy

Increased total levy budget contrary to government belt-tightening

7. The proposed \$1 million increased spending and hence levies in aggregate for motorists, gas and electricity customers is contrary to government belt-tightening. The \$1 million increase is an 8% increase for the total levy funded work programmes and a 15% increase for the levy on motorists. See the MEUG summary table below setting out these increases:

Work programme		2017-18	2018-19	Change 2	017-18 to 2018-19
Levy sources:		Current	Proposed	_	
		\$m	Sm	\$m	Pct
Petroleum or Engine Fuel Monitoring (PEFM) levy		\$6.5m	\$7.5m	\$1.0m	15%
Electricity Industry Levy		\$5.2m	\$5.2m	-	-
Gas Safety, Monitoring and Energy Efficiency (GSN	MEE) levy	\$1.3m	\$1.3m	-	-
Total		\$13.0m	\$14.0m	\$1.0m	8%
		Note 1	Note 2		
Note 1 EECA levy consultation paper, p36, 16	-Nov-17				
Note 2 EECA levy consultation paper, p2, 16-1	Vov-18				

- 8. The 8% increase for the total levy funded programme is 4 times the expected rate of inflation. The 15% increase in the levy on motorists is more than 7 times the expected rate of inflation.²
- 9. MEUG recommends no change in the current levy of total levy-funded work at \$13 million per year. If the value of work funded by the Petroleum or Engine Fuel Monitoring (PEFM) levy is expected to yield higher returns than work on the electricity and gas sectors, then an increase on the levy on motorists would be justified provided there was an offsetting reduction in levies on electricity and gas customers resulting in no net change to the overall levy budget of \$13 million.
- 10. MEUG notes that the Electricity Authority (EA) has and continues to set a good precedent by proposing to keep its 2018-19 core operating expenses unchanged at \$18.729 million. This has been unchanged since 2012/13.3

Improving accountability on work programmes

- 11. MEUG recognises EECA has been improving its accountability on work programmes and plans better measurement tools in the future. An example of a willingness to be transparent with more granular accountability of levy funded spending has been EECA's provision to MEUG of an updated list of electricity levy funded work recipients following publication of an initial list last year in response to a request by the Taxpayers Union.⁴
- 12. To ensure ongoing public accessibility to this information a copy of the updated list is attached. We understand that in future years EECA is likely to be able to publish updated recipient lists along with the value of the levy funded work and a brief explanation of the work for each recipient. This will assist scrutiny of the \$2,124,419 for the large energy user engagement programme. This is the second largest component of the proposed total electricity levy on all customers of \$5.2 million. This \$2.1 million programme is 41% of the total electricity levy spend.

EECA: 2018-19 Appropriations

² The latest Reserve Bank Monetary Policy Statement, 9 November 2017, stated "Overall, CPI inflation is projected to remain near the midpoint of the target range and longer-term inflation expectations are well anchored at 2 percent". Refer https://www.rbnz.govt.nz/monetary-policy/monetary-policy/statement/mps-november-2017

https://www.rbnz.govt.nz/monetary-policy/monetary-policy-statement/mps-november-2017

3 EA, 20018-19 Levy-funded appropriations and work programme focus areas, consultation paper, paragraph 3.19, 21-Nov-17, refer https://www.ea.govt.nz/dmsdocument/22843

⁴ http://www.taxpayers.org.nz/corporate power bill welfare

- 13. The largest component of the \$5.2 million electricity levy spend is for energy efficiency standards and regulations totalling \$2,587,871 (50% of the levy budget). Gauging by how the EA, for example, manage very complex work programmes such as:
 - a) consideration of real-time-pricing; and
 - b) contract for various service providers for complex ongoing market operations (eg the Financial Trading Rights market),

we do not understand how work on standards and regulations can be at this level.

14. MEUG suggests an independent ex post review of last years and progress to date on the current year's work on standards and regulations be undertaken before finalising the work programme for 2018-19. By independent we mean by a consultant that is selected by and reports to EECA, MBIE and a panel of customer representatives with experience in energy efficiency standards and regulation.

Yours sincerely

Ralph Matthes

Executive Director

Appendix: Information provided by EECA to MEUG on direct recipients of EECA electricity efficiency levy funded work

Businesses that EECA contracted electricity levy funding for through the EECA Business programme in 2017/18 (MEUG members)

- 1. Fonterra
- 2. George Weston Foods (NZ) Limited
- 3. Hastings District Council
- 4. Napier City Council
- 5. New Zealand Steel Limited
- 6. Whanganui City Council

Businesses that EECA contracted electricity levy funding for through the EECA Business programme in 2016/17 (MEUG members)

- 1. Affco
- 2. Ara
- 3. Auckland Council
- 4. Auckland DHB
- 5. Auckland International Airport
- 6. AUT
- 7. Barkers Fruit Processors
- 8. Bluebird
- 9. Canterbury District Health Board
- 10. Christchurch City Council
- 11. Cold Storage Nelson
- 12. Counties Manukau DHB
- 13. Danone
- 14. Dominion Salt
- 15. Dongwha
- 16. Dunedin City Council
- 17. Eastpack
- 18. Frucor
- 19. Griffins
- 20. Halls
- 21. Heinz Watties
- 22. Hellers
- 23. Horowhenua District Council
- 24. Hutt City Council
- 25. IRD
- 26. Kiwi Rail
- 27. Massey University
- 28. Nelson Pine
- 29. New Plymouth District Council
- 30. Norske Skog
- 31. Northland District Health Board

- 32. NZ Aluminium Smelter
- 33. NZ Post
- 34. Otago Polytech
- 35. Porirua City Council
- 36. Ports of Auckland
- 37. Progressive
- 38. Queenstown Lakes District Council
- 39. Ravensdown
- 40. Red Stag Timber
- 41. Refining NZ
- 42. Sanford
- 43. Sealord Group Ltd
- 44. Sky City
- 45. St Georges Hospital
- 46. T&G
- 47. Tallevs
- 48. Tauranga City Council
- 49. Tegel
- 50. University of Canterbury
- 51. University of Otago
- 52. Victoria University of Wellington
- 53. Waitemata DHB
- 54. Watercare
- 55. Wellington City Council
- 56. Wellington International Airport

Businesses that EECA contracted electricity levy funding for through the EECA Business programme in 2015/16 which we continue to implement (MEUG members)

- 1. AFFCO
- 2. Air New Zealand
- 3. Alliance
- 4. Anzco Foods
- 5. Auckland International Airport
- 6. AUT
- 7. Cadbury
- 8. Canterbury District Health Board
- 9. CHH Packaging
- 10. Christchurch City Council
- 11. Daiken
- 12. Danone
- 13. Evonik Peroxide
- 14. Fletcher Building
- 15. Fonterra Group
- 16. Goodman Fielder

- 17. Goodman Properties
- 18. IAG
- 19. Lincoln University
- 20. McDonalds Restaurants
- 21. Meadow Mushrooms
- 22. Nelson Pine
- 23. NZ Aluminium Smelter
- 24. NZ Police
- 25. NZ Sugar
- 26. Orora Packaging
- 27. Otago Polytech
- 28. Panpac
- 29. Precinct Properties
- 30. Progressive
- 31. Red Stag Timber
- 32. Sanitarium
- 33. Scales Corporation
- 34. Talleys
- 35. Tegel
- 36. University of Canterbury
- 37. Waterfront Auckland
- 38. Westland Milk





meridian

19 December 2017

Submissions
Energy Efficiency and Conservation Authority
By email: levyconsultation@eeca.govt.nz

EECA's 2018/19 levy funding proposal and related work programme

Meridian appreciates the opportunity to provide feedback on the Energy Efficiency and Conservation Authority's (EECA) levy funding proposal for the 2018/19 work programme.

The proposal is for the electricity levy to provide \$5.2 million of funding to EECA for the 2018/19 financial year. This is the same level of electricity levy funding as the previous financial year. Meridian pays a substantial portion of the electricity levy as a generator and as a purchaser passes on the costs of the levy to Meridian customers. EECA proposes to use electricity levies to partially fund the following activities in 2018/19:

- The Equipment Energy Efficiency (E3) Programme: \$2,587,871 is sought from the electricity levy to invest in the E3 Programme to develop business and residential product energy efficiency standards and regulations.
- **Productive low carbon business activities**: \$2,124,419 is sought from the electricity levy to invest in the large energy user engagement programme to support businesses in energy efficient and renewable energy investments, and the adoption of best energy management practice.
- The technology demonstration programme: \$206,185 is sought from the electricity levy to support demonstration projects for proven, but under-utilised energy efficient technologies and processes.
- National Australian Built Environment Rating System New Zealand: \$281,525
 is sought from the electricity levy to invest in the NABERSNZ scheme to improve the
 energy performance of commercial buildings.

Meridian supports EECA's proposed levy expenditure for 2018/19 as we expect a direct benefit to consumers from energy efficiency and cost savings. Energy efficiency initiatives

also present opportunities to reduce carbon emissions, which Meridian fully supports as a generator of electricity from 100% renewable sources.

Meridian encourages EECA, as part of the large energy user engagement programme, to look beyond electricity efficiency at fuel use and carbon emissions intensity. EECA is clearly already doing this for other fuel types. The consultation document states that, "as well as increasing efficient gas use, in some situations there are also economically-viable lower emission alternatives that can avoid the use of gas and its associated emissions." The same could be said of coal based technologies. Switching from fossil fuels to electricity in manufacturing and industrial heat is a significant emissions reduction opportunity, for example the electrification of boilers used in dairy processing. Moving industrial heat to electricity would produce significant emissions reductions given the high percentage of renewable electricity generation in New Zealand. We encourage EECA, to the extent possible, to consider partnerships and/or programmes targeted at manufacturing and industrial heat that demonstrate reductions in emissions.

Although, not funded by the electricity levy, we would also like to comment on EECA's EV Programme. Meridian strongly supports EECA's work to accelerate the uptake of EVs and agrees that the EVs will enable the country's transition to a low emissions economy. The widespread uptake of EVs will help New Zealand meet its climate change commitments, reduce fossil fuel consumption, improve local air quality, save money, diversify the sources of our transport energy, and enhance energy security.

Please contact me if you have any queries regarding this submission.

Yours sincerely

Sam Fleming Regulatory Analyst

DDI 04 803 2581 Mobile 021 732 398

Email sam.fleming@meridianenergy.co.nz

A. Responses to consultation questions

	Question	Response
1	What kinds of engagement have you or your organisation had with EECA?	Meridian has not had significant engagement with EECA.
2.	What forms of energy do you or your organisation use, and which levies do you pay? • Electricity Industry Levy • Petroleum or Engine Fuel Monitoring (PEFM) Levy • Gas Safety, Monitoring and Energy Efficiency (GSMEE) Levy	Meridian pays the electricity levy as a generator and as a purchaser we pass on the costs of the levy to Meridian customers.
3.	EECA's proposed levy-funded work programme in 2018/19 will request funding from the three energy levies set out in question 2. Do you support EECA's levy proposal for \$14 million in 2018/19?	Yes.
4.	Do you support the proportions EECA has requested across the three energy levies?	Yes.
5.	Which of EECA's levy-funded activities is of most interest to you: Electric Vehicles (EV) Programme Equipment Energy Efficiency (E3) Programme Large energy user engagement programme Technology demonstration programme NABERSNZ	The EV Programme and all programmes that are part funded by the electricity levy. Please also see the cover letter of this submission.
6.	Do you support the mix of levy-funded activities listed above?	Yes.

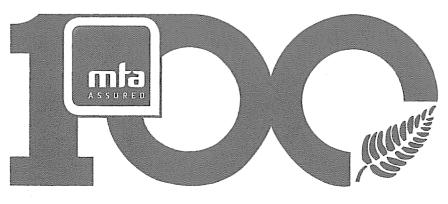
7.	Are there any new activities or specific sectors that you think EECA should invest more or less levy funding in for 2018/19, and in the future?	Please see the cover letter of this submission. Meridian would like EECA to look further at fuel use and carbon emissions intensity. EECA is looking at the efficiency of alternative fuels to gas and we would like to see the same support for alternatives to coal based technologies. The electrification of manufacturing and industrial heat, such as coal boilers in the dairy industry is the largest emissions reduction opportunity in New Zealand outside of the transport sector. We encourage EECA, to the extent possible, to consider partnerships and/or programmes that demonstrate reductions in emissions.
8.	Do you agree that EECA's levy- funded activities result in benefits for New Zealand businesses and consumers in: Reducing greenhouse gas emissions Reducing engine fuel consumption (e.g. petrol and diesel) Improving energy productivity Improving electricity efficiency Improving gas efficiency Encouraging, promoting, and supporting energy efficiency, energy conservation, and the use of renewable sources of energy?	Yes.
9.	Would you like to provide any other comments on EECA's 2018/19 levy proposal and activities?	No.





Submission to EECA On the 2018/19 levy funding proposal and related work programme

15 December 2017



ONE HUNDRED YEARS OF TRUST

Dear Sir / Madam

Submission: Consultation on EECA's 2018/19 levy funding proposal and related work programme

This submission is from:

Motor Trade Association (Inc) PO Box 9244 Marion Square Wellington 6141

The contact person in respect of this submission is:

Name:

Ian Baggott

Title:

Sector Specialist Energy & Environment

Ph:

(04) 381 8843

Fax:

(04) 385 9517

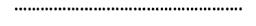
Email:

ian.baggott@mta.org.nz.

Thank you for the opportunity for MTA to provide comment on EECA's 2018/19 levy funding proposal and related work programme regarding the views of and its effect on the automotive industry.

Yours sincerely

Sector Specialist-Energy & Environment





Introduction

The Motor Trade Association Incorporated (MTA) was founded in 1917 to represent the interests of an industry with a well-defined obligation to provide quality service to the public. One of the founding maxims of the organisation is to do nothing that is contrary to the principles of "Safety First and Always".

MTA currently represents approximately 3,500 businesses within the New Zealand automotive industry and its allied services. Members of our association operate businesses including automotive repairers (both heavy and light vehicle), collision repairers, service stations, vehicle importers and distributors and vehicle sales. In total MTA members employ more than 40,000 staff across New Zealand.

MTA Submission on EECA's 2018/19 levy funding proposal and related work programme

1) What kinds of engagement have you or your organisation had with EECA?

MTA has worked with EECA on a range of activities over the past few years (for example, fuel efficient tyres) as well as activities in their current work programme.

- 2) What forms of energy do you or your organisation use, and which levies do you pay?
- Electricity Industry Levy -No
- Petroleum or Engine Fuel Monitoring (PEFM) levy -see commentary below
- Gas Safety, Monitoring and Energy Efficiency (GSMEE) levy

MTA has approximately 870 service station members of which only a few (fuel company corporate members) directly contribute to the PEFM levy. However, the remaining fuel retailer members are indirectly affected by the collection of the PEFM levy through the cost of supply arrangements.

3) EECA's proposed levy-funded work programme in 2018/19 will request funding from the three energy levies set out in question 2. Do you support EECA's levy proposal for \$14 million in 2018/19?

We note the request from submitters last year to spread the cost of programmes across all levies. MTA was not party to that consultation and would only encourage clearer proportionality in the actual work programme across the levy paying sectors. That is to say, it would be patently unbalanced for the PEFM levy to contribute over 30% of EECA's funding if the fuel-related section of the work programme amounted to a much smaller proportion of EECA's activities. It is difficult to assess the relative weight of any one section of the work programme; MTA simply asks that EECA ensure this is a consideration in developing its work programme and associated levy requirements.

4) Do you support the proportions EECA has requested across the three energy levies?

We note the philosophy that the levies are used to spread the cost of activities across the three energy levies to ensure that levies are paid by the causers of a problem or are aligned with the beneficiary of EECA activities. Following this logic, it makes sense to fund the VFEL work programme from the PEFM levy. However, it could also be argued that the proposed "widespread uptake" of EVs directly benefits the electricity sector (through increased consumption of electricity), and yet the EV programme is heavily funded from the PEFM levy.

5) Which of EECA's levy-funded activities is of most interest to you:

MTA has a keen interest in the Electric Vehicles (EV) Programme so we can keep members up to date with the potential impact of increased numbers of EVs in the fleet on their businesses. MTA is also progressing the development of an "MTA Approved EV Repairer" certification in conjunction with MITO. We would like to see the investment focus of LEV Contestable Fund modified to include projects that enhance the supply of repair and maintenance services for EVs (including batteries). Consumer confidence in the purchase of an EV would be enhanced by knowing that the automotive services sector is able support EV maintenance and operation.

MTA Dealer Members are affected by the requirement to display a Vehicle Fuel Efficiency Label (VFEL). We would like to see initiatives linking the VFEL programme to improving the fuel economy of the light vehicle fleet. To the extent that MTA can assist, we would be interested in any programme development in this area.

In a related matter, MTA is seeking a review of the Customer Information Notice (CIN) required under the Motor Vehicle Sales Act. As part of that review, we would propose that consideration be given to combining the VFEL with the CIN and removing the actual, numerical fuel economy figure and leaving simply the star rating. The inclusion of an actual figure raises numerous issues with respect to the accuracy of the testing, the vagaries of real world vehicle performance and driver behaviour, and the unintended consequences of consumers seeking to establish the VFEL fuel economy figure as a concrete measure of vehicle performance. We have seen vehicle dealers held financially liable for vehicle performance that does not meet the VFEL figure when meeting this target is subject to a range of variables outside the dealer's control.

We would be interested in hearing more detail on the referenced *Transport Strategy & Development* work programme and what areas of transport sector are going to be given more focus.

6) Do you support the mix of levy-funded activities listed above?

Subject to our comments about the need for ensuring proportionality across the sectors, MTA is broadly supportive of the EECA work programme.

We support the bringing forward (increase \$1M) in the LEVCF but we would like to see how the investment focus encourages the uptake of more heavy transport EV technology (other than the obvious electric bus projects), particularly the development of on route charging infrastructure.

7) Are there any new activities or specific sectors that you think EECA should invest more or less levy funding in for 2018/19, and in the future?

The automotive services sector is looking for more certainty about the scope and scale of the future of electric vehicles in New Zealand. MTA believes a more robust target or set of initiatives is required to achieve the "widespread uptake" of EVs in New Zealand. The current target of 64,000 EVs by 2021 will equate to less than 1.5% of the fleet. In comparison, there are twice as many vehicles over the age of 35 years presently (about 3%).

With record imports over the past four years – including nearly 340,000 new and used cars in 2017 alone – the projected size of the fleet by 2021 will negate the already low market impact of the 64,000-vehicle target.

MTA members, who sell, fix, and energise the fleet, respond to market pressures. At present, the market is encouraging MTA business members to consider the capital outlay required to enter the EV automotive service sector. Overseas experience has shown the market taking over from government initiatives when the EV proportion of the fleet is closer to 15%. At less than 2% of the fleet by 2021, there is little confidence to invest in maintenance and repair equipment and training for staff.

At present, "training" does not meet the criteria for consideration under the LEV Contestable Fund scheme. As part of EECA's broader education initiatives, training automotive sector participants would be a direct channel to the vehicle purchasing public and would ensure that experts in the sector are able to speak with confidence about EVs to the public.

Any updated target needs to be mindful of the limited pool of used electric vehicles from Japan, particularly Nissan Leaf's (14,000 new registrations per annum), and the fact that New Zealand is competing with other countries for that limited pool. Thus, the burden for supplying cars to meet any target will fall on the new vehicle sector. Without stronger incentives to bridge the current new EV affordability gap, there is a real danger that EV numbers will not increase to a point to trigger widespread uptake. Optimistic forecasts suggest battery costs will not bring new vehicles into a more affordable price bracket until at least 2019.

As noted above, MTA would like to see more promotion of EV technology in the heavy transport space that encourages the early adoption and transition to available technology in the medium duty heavy vehicle space as well as to normalise EV technology in this sector to embrace the heavy-duty technology when it is viable.

We would also like to see EECA do more direct engagement with the commercial transport sector where there are opportunities to link the purpose of EECA to encourage, promote, and support energy efficiency, energy conservation, and the use of renewable sources of energy.

With the reducing trend of vehicle kilometres travelled for the light vehicle fleet and the predicted increase in freight of 58% by 2042 it would seem appropriate for EECA to develop a work programme specifically to address this increased fossil fuel energy use in the heavy transport sector? Heavy vehicles make up only 4% of the fleet yet use 21% of transport fuel.

We also like to see EECA do more work to promote the transition from internal combustion engine vehicles to EVs and as such, recognise that the affordability of EVs at this stage places an EV out of the reach of most households as well as business fleets who need to manage the asset value of fleets prior to a decision to renew or replace.

- 8) Do you agree that EECA's levy-funded activities result in benefits for New Zealand businesses and consumers in:
- Reducing greenhouse gas emissions
- Reducing engine fuel consumption (e.g. petrol and diesel)
- Improving energy productivity
- Improving electricity efficiency
- Improving gas efficiency
- Encouraging, promoting, and supporting energy efficiency, energy conservation, and the use of renewable sources of energy?

MTA agrees that EECA's levy-funded activities would result in benefits for New Zealand businesses and consumers in all the sectors mentioned above.

9) Would you like to provide any other comments on EECA's 2018/19 levy proposal and activities?

MTA would like to see more electric bus funded projects coming through the LEVCF process as this is one area where NZ could lead the way in establishing a fully electric bus fleet. MTA's understanding is that the barrier presented to other bus operators is the financial risk around trialling the technology in their business is still quite high. More needs to be done with the public transport operating model and how NZTA assigns investment in PT service providers. There needs to be a clear signal from both NZTA and regional council PT contracts that strongly encourage the investment in electric bus technology where PT contracts are awarded. MTA believe there is a huge opportunity for NZ to transition a large proportion of its urban public transport fleet to EV technology.

MTA would like to see the EECA work programme linking with other Government agencies like NZTA and MfE in terms of managing some of the competing and sometimes conflicting priorities across vehicle safety and emission output. A stronger link to NZ's response to address climate change and its commitment to the Paris Agreement (COP21) would strengthen the value of the EV work programme but as above, a more ambitious target for the number of EVs on the road by 2021 and beyond will be needed to make a significant difference in this space.

National contact details:

Member toll free phone: 0800 001 144

Phone: **04 385 8859**Fax: **0800 000 695**Email: **info@mta.org.nz**

Website: www.mta.org.nz

Other contact information:

Stationery line: **0508 682 682**

Mediation service: 0508 682 633

Human Resources Advisor: 04 381 8841

Physical address:

Level 12, Nokia House, 13-27 Manners Street, Wellington 6011

Postal address:

PO Box 9244, Marion Square, Wellington 6141





PACIFIC ALUMINIUM

15 December 2017

Andrew Caseley Chief Executive Energy Efficiency and Conservation Authority

By email to levyconsultation@eeca.govt.nz

Dear Andrew

CONSULTATION PAPER – 2018/19 APPROPRIATIONS

Background

Pacific Aluminium is pleased to have the opportunity to provide a submission on the Energy Efficiency and Conservation Authority (EECA) consultation paper, EECA's 2018/19 levy-funded appropriation and work programme consultation paper, 16 November 2017. This submission is made by Pacific Aluminium on behalf of Pacific Aluminium (New Zealand) Limited and New Zealand Aluminium Smelters Limited (NZAS). Nothing in this submission is confidential.

Pacific Aluminium is the business unit of Rio Tinto responsible for managing ownership interests in four Australasian smelters. It owns 79.36 per cent of NZAS at Tiwai Point in Southland, in joint venture with Sumitomo Chemical Company Limited, a Japanese company.

The Tiwai Point smelter is a world-class facility, one of only two smelters in the world producing ultra-high purity aluminium and the only one producing this using hydroelectricity, giving NZAS one of the lowest carbon footprints of a smelter anywhere in the world.

Aluminium will continue to have a significant role in a carbon-constrained world. It is light, strong, flexible, non-corrosive and infinitely recyclable.

NZAS has contributed to the New Zealand economy for over 46 years and the team at the smelter is committed to ensuring it remains a vibrant operation for many more. However because NZAS pays one of the highest costs for power, including up to ten times as much for transmission, of a smelter anywhere in the world outside of China it remains vulnerable to fluctuations in the NZ dollar and the price of aluminium. NZAS has survived a very tough five years of historically low aluminium prices and while these are now firmer there is no guarantee this will remain the case. NZAS continues to seek relief from high power prices and in particular high transmission costs which have increased by \$30 million per annum since 2008 during which time the smelter has received exactly the same transmission service.

NZAS pays by far the highest Electricity industry participants levy (the electricity levy) of any single entity in New Zealand, a significant proportion of which is allocated for EECA funding. In the 2018/19 appropriations year NZAS will pay \$640,000 via the Electricity Authority toward EECA levies.

PACIFIC ALUMINIUM

NZAS welcomes the input of EECA and looks forward to continuing to work with the organisation but the value NZAS receives in relation to the cost of the levy it pays is mismatched.

Since 2007 EECA has collaborated on three projects with NZAS. One project with regard to transport efficiency, another that looked at LED lighting and one relating to reduction cell power efficiency. In 2014 NZAS signed a collaboration agreement with EECA. Under this agreement the total value of all EECA funding for projects must not exceed \$135,000.

Every electron saved at NZAS represents value gained. The team at NZAS is one of the best in the world at operating a smelter which requires expertise in using electricity efficiently. If NZAS were to apply the 2018/19 appropriation of \$640 000 directly to its own energy efficiency initiatives it would derive greater benefit and efficiencies, therefore delivering greater energy efficiency to the entire country's electricity sector. Accordingly, there is no net benefit and a considerable net cost to NZAS from EECA work funded via the current level of EECA levy.

Further, NZAS also notes that there are already incentives for businesses to improve their energy efficiency to reduce their exposure to the high cost of electricity in New Zealand and more broadly with the imposition of a broad based carbon price on the New Zealand economy via the New Zealand Emissions Trading Scheme.

Pacific Aluminium agrees with the Major Electricity Users Group (MEUG). MEUG's position is that the use of a mandatory levy to fund an activity which has public good characteristics which is not linked to those who pay it either as exacerbators or beneficiaries could be contrary to the Auditor-General's good practice guide "Charging fees for public sector goods and services" as well as the Treasury's "Guidelines for Setting Charges in the Public Sector." Unless the beneficiaries or causers of the work can be clearly identified then general taxation should be used to fund the work.

Concluding Comments

Pacific Aluminium would be happy to discuss any questions or comments you may have in relation to the points made above. If you would like to discuss our comments further, please contact either Andrew Elder by email: Andrew.Elder@pacificaluminium.com.au or myself on (04) 916 1496 or by email: Jennifer.Nolan@pacificaluminium.com.au.

Yours sincerely

Jennifer Nolan

Director External Relations – New Zealand Pacific Aluminium



EECA, 44 The Terrace, Wellington

Submitted by email

EMANZ Submission on the 2018/19 EECA Levy Funding and Related Work Programme Consultation

Introduction

EMANZ welcomes the opportunity to comment on EECA's Funding and Work Programme Consultation and has endeavoured to provide constructive comment to fine tune the valuable programmes proposed in the EECA plan.

EMANZ represents the energy managers of New Zealand. We enjoy a strong membership and a key role in delivering energy management training and accreditation. EMANZ has a very strong working relationship with EECA and we appreciate the sterling work EECA undertakes across New Zealand to improve energy efficiency and productivity.

In an effort to assist analysis, we shall address the consultation questions published in the document directly.

Consultation Questions

1) What kinds of engagement have you or your organisation had with EECA?

EMANZ has regular contact and works closely with EECA.

2) What forms of energy do you or your organisation use, and which levies do you pay? • Electricity Industry Levy • Petroleum or Engine Fuel Monitoring (PEFM) levy • Gas Safety, Monitoring and Energy Efficiency (GSMEE) levy

EMANZ operates from a small office and will be paying the electricity levy through a standard, retail billing process. The levy is invisible to EMANZ at the point of payment.

3) EECA's proposed levy-funded work programme in 2018/19 will request funding from the three energy levies set out in question 2. Do you support EECA's levy proposal for \$14 million in 2018/19?

EECA undertakes valuable work in energy efficiency and conservation and requires adequate funding. The proposal to raise \$14m from these levies is reasonable.

4) Do you support the proportions EECA has requested across the three energy levies?

EMANZ considers the funding proportions reasonable given the activity programmes.

5) Which of EECA's levy-funded activities is of most interest to you: • Electric Vehicles (EV) Programme • Equipment Energy Efficiency (E3) Programme • Large energy user engagement programme • Technology demonstration programme • NABERSNZ

All of the funded activities are relevant to EMANZ as members are active in all of these areas.

6) Do you support the mix of levy-funded activities listed above?

The mix of funded activities is mostly reasonable although a separate, identifiable activity of capacity building/upskilling would be a valuable addition. The old adage of "give someone a fish v teach someone to fish" applies here. Improving the NZ workforce's ability to identify efficiency improvements and how they may be capitalised on would deliver substantial efficiency and productivity improvements. While educational activity does take place under the listed programmes, explicit recognition of education as a driver of efficiency would be valuable.

7) Are there any new activities or specific sectors that you think EECA should invest more or less levy funding in for 2018/19, and in the future?

EECA should be enhancing its activities in capacity building and building the skill and knowledge of the New Zealand workforce to identify potential efficiencies and understand how to initiate them.

Supporting the uptake of EVs is less clearly within EECA's remit and significant market support for EVs is increasingly difficult to justify. While EVs have not yet become mainstream, uptake trends and falling prices are indicators of moving out of the market acceptance/early adopter phase. As this happens, Government support should be redirected to areas where markets are not yet delivering efficiency improvements and where support could materially accelerate efficiency improvements.

8) Do you agree that EECA's levy-funded activities result in benefits for New Zealand businesses and consumers in: • Reducing greenhouse gas emissions • Reducing engine fuel consumption (e.g. petrol and diesel) • Improving energy productivity • Improving electricity efficiency • Improving gas efficiency • Encouraging, promoting, and supporting energy efficiency, energy conservation, and the use of renewable sources of energy?

EECA programmes are mostly beneficial to New Zealand businesses and consumers and positively impact the areas listed above.

9) Would you like to provide any other comments on EECA's 2018/19 levy proposal and activities?

While EMANZ believes some of the resource allocations listed in the consultation document would deliver even greater returns with modest reallocation, this should not distract from the general, positive support for EECA programmes.

Dr M Hopkins

CEO, EMANZ

15th December 2017

mile Hyd



15 December 2017

Andrew Caseley Chief Executive Energy Efficiency and Conservation Authority 44 The Terrace WELLINGTON 6140

Sent via email: levyconsultation@eeca.govt.nz

First Gas Limited 42 Connett Road West, Bell Block Private Bag 2020, New Plymouth, 4342 New Zealand

P +64 6 755 0861 **F** +64 6 759 6509

Dear Andrew

EECA's 2018/19 levy funding and work programme

First Gas welcomes the opportunity to comment on EECA's consultation paper on its "2018/19 levy funding proposal and related work programme" dated 16 November 2017.

First Gas' interest in EECA's 2018/19 work programme

First Gas operates 2,500km of gas transmission pipelines (including the Maui pipeline), and more than 4,800km of gas distribution pipelines across the North Island. These gas infrastructure assets transport natural gas from Taranaki to major industrial gas users, electricity generators, businesses and homes, and transport around 20 percent of New Zealand's primary energy supply.¹

Given this infrastructure, we have a strong interest in the role that natural gas plays in New Zealand's energy sector, and how EECA intends to use the \$1.3 million sourced from the Gas, Safety, Monitoring and Energy Efficiency (GSMEE) levy to improve energy efficiency.

Encourage EECA to consider the role that natural gas can play

First Gas is comfortable with the three work programmes that EECA has proposed to fund with the GSMEE levy – the E3 programme, large energy users engagement programme, and technology demonstrations. We welcome the recognition of the benefits achievable from improving the performance of gas consuming facilities through:

- The introduction of Minimum Energy Performance Standards (MEPS) for gas boilers; and
- Providing direct support for large gas users through measures such as gas boiler tuning and equipment upgrades.

Substantial emission reductions can be achieved by converting process heat from coal to natural gas. We outlined this potential opportunity in our recent submission to the Productivity Commission,² where we estimated savings of up to 120,000 tonnes of CO₂.

In addition, there are opportunities for natural gas to help reduce total carbon emissions and support the government's goals by:

- Displacing coal with natural gas at the Huntly Rankine units;
- Using gas-fired generation to support renewable electricity generation;
- Using CNG or LNG for New Zealand's heavy vehicle fleet;
- Using natural gas for space heating in place of electricity; and

firstgas.co.nz

© First Gas Limited 1

¹ For further information on First Gas, please visit our website www.firstgas.co.nz.

² Low-emissions economy, First Gas submission to the Productivity Commission, 2 October 2017, https://www.productivity.govt.nz/sites/default/files/sub-low-emissions-47-first-gas-limited-953Kb.pdf



• Future options to reduce the carbon content of fuels transported via existing pipeline infrastructure, for example through the blending of biogas into the natural gas stream or conversion to hydrogen.

We encourage EECA to review these opportunities, as outlined in our submission to the Productivity Commission, and consider how these opportunities can be incorporated into its future years work programme.

If you have any questions regarding this submission or would like to meet with First Gas to discuss opportunities for optimising the use of natural gas on our networks, please contact me on 04 979 5368 or via email at karen.collins@firstgas.co.nz.

Yours sincerely

Karen Collins

Regulatory Manager



Submission, EECA levy consultation Molly Melhuish Dec 15, 2017

By email to levyconsultation@eeca.govt.nz

Thank you for the opportunity for the use of the levies on electricity, petroleum and gas to part-fund EECA's activities in these fields.

I disagree with the proposal's focus on the three priority areas, which were promoted by the previous government: process heat, low-emissions transport, and "innovative and efficient use of electricity". All are important, but this last is happening without help from EECA.

Residential consumers provide about half the revenues of the entire electricity industry. Residential energy efficiency was a priority for EECA during its first decade and more. Its levy-funding for the Warm Homes Clean Heat is now at an end.

MBIE's review of EECA's programmes¹ found that

"programme performance, and in particular whether programmes achieved value-for-money, was mixed. The three large-scale, high-impact programmes, "Warm Up New Zealand, Top 200/Next 1000, and E3", delivered the highest return-on-investment ...[and] accounted for just over 70% of EECA's expenditure for the 12 programmes reviewed. Although Warm up New Zealand delivered clear public benefit, this is less clear for the Top 200/Next 1000, and E3 programmes. In particular, we note that the Top 200/Next 1000, and E3 generated a good return on investment, but the additionality and public benefit were unclear."

EECA's three priorities are not consistent with the new Government's priorities, in which energy poverty and climate change mitigation stand out; both are fully within EECA's legislative mandate.

As the only high-impact programme that delivered clear public benefit, Warm Up New Zealand is clearly the most important one to fully restore, and indeed expand. Some 300,000 houses may well have been (perhaps partially) retrofitted, there remain at least twice as many which would benefit from a full restoration of the programme, including Clean Heat. Note in many hard-to-heat houses, the most cost-effective way to remove and protect from damp and mould are through using a generous supply of heating.

Regards, Molly Melhuish
04 568 4873 027 230 5911, melhuish@xtra.co.nz

¹ http://www.mbie.govt.nz/info-services/sectors-industries/energy/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment/energy-efficiency-environment-environment/energy-efficiency-environment-envi



Email info@nzgbc.org.nz Phone +64 9 3793996 Web www.nzgbc.org.nz Post PO Box 5286 / Wellesley St / Auckland / New Zealand



15 December 2017

EECA's 2018/19 levy funding proposal and related work programme

Energy Efficiency and Conservation Authority

levyconsultation@eeca.govt.nz

EECA 2018/19 Levy Consultation: response to comment document

Thank you for the opportunity to comment on the EECA's 2018/19 levy funding proposal and related work programme consultation document.

The New Zealand Green Building Council is the country's leading not-for-profit organisation working for sustainable buildings. We believe that all New Zealanders should live, work and play in safe, healthy and efficient buildings, and we work in a number of ways to achieve this vision. We run education programmes to provide skills and knowledge and we promote the benefits of and advocate for green buildings. We also run verification tools which assess the performance of new buildings, by measuring categories including warmth and insulation, ventilation, energy and water use, and construction and household waste.

This submission builds on a consensus of views and a fair representation of opinions of NZGBC members and building and industry stakeholders, and NZGBC offers the following feedback as a contribution to the development of EECA's 2018/19 levy funding proposal and related work programme. We would be happy to participate in future discussion on proposed options.

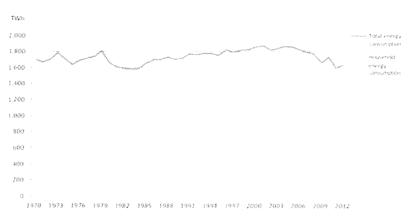
Responses to comment document are:

 Propose EECA to set up higher target for energy efficiency improvements of buildings and homes

Much of the NZEECS focus on renewables. In particular focus 1) Renewable and efficient use of process heat and 2) Innovative and efficient use of electricity – with a target of 90% of electricity being generated from renewable sources by 2025 (in an average hydrological year), providing security of supply is maintained.

Energy efficiency is under rated as an approach in New Zealand compared with producing more renewables. Where homes and buildings are made more energy efficient it is possible to make significant savings meaning less renewables are needed. The following is an illustration

The UK has more or less the same residential energy demand (https://www.gov.uk/government/statistics/united-kingdom-housing-energy-fact-file-2013)) now as it did in 1970:



Graph 2a: Final energy use for housing and all sectors (UK, gross calorific TWh)

This is despite:

- 1) The population increasing from 55M to 66M
- 2) Total number of dwellings increasing from 19M to 28M (https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants)
- 3) The average indoor temperature increasing from 12°C to 17°C (https://www.gov.uk/government/statistics/united-kingdom-housing-energy-fact-file-2013) ...thanks largely to the uptake of central heating increasing from 30% to 96% of homes. (https://www.statista.com/statistics/289137/central-heating-in-households-in-the-uk/)

This has been possible thanks mainly to huge efforts over the period to improve the energy efficiency of the UK housing stock. To give just one example from many:

"Since 1983 the proportion of homes with 80% or more of their rooms double-glazed has increased nine-fold, from 9% to 83% in 2011."

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/345141/uk_housing_fact_file_2013.pdf

As such although not a core focus of this consultation the NZGBC is supportive of the funding for home insulation programmes. NZGBC would advocate that over 50,000 homes should be insulated per year.

NZGBC has always been dedicated to support for warmer, drier and healthier homes for all New Zealanders by successfully developed and delivered Homestar rating tool since 2010, which is widely recognised by building industry and home owners. Better levels of insulation than Building Code requires is one of the most important part in the tool, to reduce energy use and provide warm and healthy living environment to occupants.

 Propose to support for small organisations on metering upgrade with funding for NABERSNZ scheme Lack of funding has been identified as one of the biggest concerns for clients who are looking for upgrading their metering system to be NABERSNZ complied during feasibility studies. It is mentioned in Proport 2016 that: "the absence of motivating information for programme participants (it is difficult for owners and tenants to appreciate the impact of energy efficiency measures)", which makes it worthwhile to have incentives to drive uptake of NABERSNZ. The current EECA funding are designed more focused on energy intensive commercial and industrial sites, and eligibility criteria are set up as energy consumption annum. Most of existing offices buildings couldn't meet the eligibility criteria in terms of energy consumption threshold.

The NZGBC is proposing that amend eligibility criteria for "Monitoring and Targeting" programme, funding up to 40% of the cost of an energy monitoring and targeting system (up to a maximum of \$100,000) for organisations spend a minimum of \$200,000 on energy per year or with floor area of at least 5,000m2. This threshold is proposed based on analysis on certification database of NABERSNZ ratings (base building/whole building/tenancy ratings) and information collected from feasibility studies application list.

 Suggest recognizing Green Star Performance tool under "Efficient commercial buildings" framework

The NZGBC suggests Green Star Performance tool to be included and recognised into the "Efficient commercial buildings" framework, together with NABERSNZ scheme.

Green Star Performance tool assesses the operational performance of all types of existing buildings except residential with reducing Greenhouse Gas Emission as one of key aspects. NABERSNZ is made mandatory for office buildings who want to verify their operation under Green Star Performance tool. This will be of significant contribution to building environmental footprint and support New Zealand's commitment to reduce its greenhouse gas emissions by 30 per cent below 2005 levels by 2030.

Energy use in the building sector contributed 33% of total global energy use in 2010, and are responsible for around 20% of energy-related greenhouse gas emissions in New Zealand, costing businesses NZ\$800million every year.

Recognizing Green Star Performance tool will maximum the uptake of cost effective energy efficiency opportunities across all existing buildings, which the number would be around 41,000. Green Star Performance will help building owners, operators and occupants to measure and monitor the environmental impact and take practical action to improve their buildings' energy efficiency and performance, reduce operation cost and provides highly productive environments for the occupants.

I hope this response has been of use. We very much look forward to working with you throughout the year.

Best regards

Andrew and the NZGBC team.



Submission on EECA's 2018/19 levy funding proposal and related work programme

NZ Wind Energy Association

December 2017

new zealand wind energy association

Submissions EECA PO Box 388 Wellington 6140

Via e-mail: levyconsultation@eeca.govt.nz

Introduction

- 1. The New Zealand Wind Energy Association (NZWEA) appreciates the opportunity to comment on EECA's draft 2018/19 levy funding proposal and related work programme.
- 2. NZWEA also submitted on the draft NZ Energy Efficiency and Conservation Strategy (NZEECS) 2017 2022 and is very supportive of EECA's strategic direction to unlock New Zealand's energy productivity and renewable potential.

Comments

- 3. NZWEA feedback relates to the proposed work programme. The Association does not have any specific feedback on the levy funding proposal other than the level of funding should to be appropriate to ensure NZEECS priority area targets are met.
- 4. The Association notes that the reference point for the work programme is the recently approved NZEECS and the three priority areas of process heat, transport and use of electricity and supports these as being the key areas of focus.
- 5. The NZEECS also contains targets for each of the priority areas which are to be achieved over a multi-year period which ranges through to 2021 for EV's, 2022 for industrial emissions and 2025 for 90% of electricity being generated from renewable sources in an average hydrological year.
- 6. EECA's 2017 / 18 outcome framework in section 3 does not contain reference to the innovative and efficient use of electricity, and its 90% renewable generation target, as an EECA outcome. As this is a key priority area and core to increasing the percentage of renewable electricity generation and reducing emission from electricity generation the Association considers this should be added. We note the other two priority areas of process heat and low emissions transport are included.
- 7. Given the targets are set over a multi-year timeframe, and that the funding proposal and the work programme is set on an annual basis, NZWEA considers there should be a table or chart in the consultation document which shows the annual progress towards the achievement of the longer-term targets.
- 8. Specifically, the 2018 / 19 work programme includes the benefits of each project but does not provide a consolidated view of the total annual contribution or whether activity levels are sufficient to ensure the achievement of all targets.
- 9. NZWEA also notes that the targets have been set in consultation with the previous National Government and therefore may need to be revised given recent changes in policy

settings. In particular the 90% renewable electricity target may be amended or superseded with the coalition government signalling its intention to pursue a 100% renewable electricity target, in a normal hydrology year, by 2035.

- 10. In respect of the individual targets the Association:
 - supports the focus on EV's but notes that the 4,000 EV target for 2017 was reached 5 months early. Given the proposed investment in EV's and progress to date NZWEA considers the 2021 target of 64,000 vehicles should be reviewed.
 - support the proposed productive low carbon business activities work programme but questions whether the level of carbon reductions identified will be sufficient to position EECA to meet the target of at least a 1% per annum decrease in industrial emissions between 2017 and 2022.
 - notes that MBIE's latest Electricity Demand and Generation Scenarios Report published in August 2016 forecasts that the 90% renewable generation target by 2025 will not be achieved under any of the 5 scenarios modelled and the levy funding proposal and related work programme does not contain specific initiatives designed to increase the percentage of renewable electricity generation.
- 11. It would be helpful if EECA could confirm whether, with its work programme, it is on track to meet each of the three NZEECS targets.
- 12. As commented in its submission on the draft NZEECS, the Association considers it would be desirable to have wider energy sector targets set which include the percentage of renewable energy and energy intensity. These targets would directly relate to the areas of greatest opportunity and challenge in transitioning to a low carbon economy and achieving a net zero position by 2050 given New Zealand's already has a high percentage of renewable electricity generation.

About the NZ Wind Energy Association (NZWEA)

- The NZWEA is an industry association that promotes the development of wind as a reliable, sustainable, clean and commercially viable energy source.
- We aim to fairly represent wind energy to the public, Government and energy sector.
- Our members are involved in the wind energy sector and include electricity generators, wind farm developers, lines companies, turbine manufacturers, consulting organisations and other providers of services to the wind sector.
- By being a member of NZWEA you are assisting the development of wind energy in New Zealand and helping to reduce our greenhouse gas emissions to meet climate change targets.

Contact details in relation to this submission:

Grenville Gaskell
Chief Executive
New Zealand Wind Energy Association
PO Box 553
Wellington 6140
grenville@nzwea.org.nz





Energy Efficiency and Conservation Authority Level 8 44 The Terrace P O Box 388 Wellington (via email to <u>levyconsultation@eeca.govt.nz</u>)

15 December 2017

RE: EECA 2018/2019 levy consultation

- 1. This is a submission by the Major Gas Users Group (MGUG) on the Energy Efficiency and Conservation Authority (EECA) paper "Consultation on EECA's 2018/19 levy funding proposal and related work programme, dated 16 November 2017.
- MGUG was established in 2010 as a consumer voice for the interests of a number of industrial companies who are major consumers of natural gas. Membership of MGUG comprises:
 - Ballance Agri-Nutrients Ltd
 - Oji Fibre Solutions (NZ) Ltd
 - Fonterra Co-operative Group
 - New Zealand Steel Ltd
 - Refining NZ
- 3. MGUG members have been consulted in the preparation of this submission. Nothing in this submission is confidential. Some members may make separate submissions.
- 4. Our submission focuses on Gas Safety, Monitoring and Energy Efficiency Levy (GSMEE)
 The total levy will be \$2.9 mln, of which \$1.6 mln is allocated to gas safety and
 monitoring related matters, and the balance (\$1.3 mln) allocated to EECA's work
 programme. We note that bulk of the \$1.3 mln levy allocated (just over \$ 1.054 mln) will
 be applied to the large energy user engagement programme.
- 5. We note the energy user engagement programme has been in existence before the gas levy regulations were repurposed last year to provide more funding from the gas levy for EECA's activities.
- 6. During consultation on that repurposing we expressed our concern to MBIE¹ that the proposed EECA programmes lacked sufficient reasoning to support any of the proposals considered. Furthermore we were critical of the assumptions about intended beneficiaries; it appeared to us the beneficiaries were the wider public and for that reason we argued funding should logically come from general taxation. We continue to have these concerns.

¹ Options for expanding the purpose of existing energy levies submission by Major Gas Users Group dated 7 June 2016

- 7. However we do acknowledge that EECA's consultation document has endeavoured to apply more specific quantification and rigour around its proposals, and to that extent we congratulate EECA on its endeavours to improve accountability. This is an improvement compared to previous years.
- 8. At the same time we would argue that that accountability needs to be supported by a robust measurement framework that:
 - a. Provides a clear line of sight between the expenditure programmes proposed (from fees) and the value to be derived; and
 - b. Demonstrates the benefits derived.
- 9. Ultimately such a framework should be able to demonstrate when maximum benefit has been attained so that fees can be applied to higher value activities or reduced where no longer required.
- 10. We understand EECA shares our concern about the need for a robust measurement framework, to improve accountability for its work programmes. We strongly recommend EECA continues to pursue this and we look forward to continued engagement on this point.
- 11. We believe also that more frequent stakeholder engagement on developing its measurement framework would be a good thing. This should lead to more effective stakeholder engagement when EECA undertakes its annual levy consultation round.

Yours sincerely

Richard Hale/Len Houwers

Hale & Twomey Ltd/Arete Consulting Ltd

Secretariat for the Major Gas Users Group

21)

Powerco Limited

CORPORATE OFFICE 84 Liardet Street Private Bag 2061 New Plymouth T 0800 769 372 F +64 6 758 6818 www.powerco.co.nz

EECA PO BOX 388 Wellington 6140

By email: levyconsultation@eeca.govt.nz





EECA 2018/19 Levy consultation

Powerco appreciates the opportunity to comment on EECA's 2018/19 Levy Consultation published on 16 November 2017.

EECA's initiatives affecting electricity and gas use are of interest to Powerco because we own and operate networks of electricity lines and gas pipelines. We are New Zealand's largest electricity distributor in terms of network length (27,900km) and have the second largest number of electricity connections (330,600). The company also has the second largest gas distribution network (5815km) and the largest number of gas connections (104,400). Our network coverage spans much of the North Island including growing urban centres and rural areas.

We have comments about two of the proposed 2018/19 levy funded activities outlined in Section 5 of the consultation paper:

- Electric Vehicle Programme
- Productive lower carbon business activities

We support and encourage EECA to explore opportunities with large energy users to move from high emitting thermal fuels to gas. The energy trilemma involves balancing affordability, security and environmental sustainability. We support gas remaining a choice for customers as it can tick the boxes in all three aspects of the trilemma relative to other fuels. EECA's "productive low carbon business activities" programme aligns with this balancing act when it describes its role of partnerships for electricity and gas projects (page 23).

EECA's focus on electric vehicles is understandable given the large contribution of domestic vehicle emissions to New Zealand's emissions. We fully support this focus and encourage the increased use of EVs in New Zealand. However, as EV popularity is rising, there are a number of organisations taking on a role of promoting and informing potential customers. Part of EECA's proposed work programme is to commission authoritative reports on the state of EV technology and the implications for New Zealand. We suggest that EECA work closely with industry and EV stakeholders on these reports to minimise duplication and maximise effectiveness. For example, it may be more effective for EECA to part-fund some collaborative research with other parties.

The inclusion of financial tables/tasks in Appendix 3 gives a degree of confidence to the reader that the work plan has been constructed from a bottom-up perspective. To enable constructive comment on the mix and benefits to New Zealand, the spreadsheet could be amended to include an indicative range of direct benefits alongside these costings eg tonnes of CO2e per annum, MW, or MWh per annum. This information would assist with gauging the relative merits of the initiatives on a standalone basis and in conjunction with other costs and benefits eg the value of fuel diversity to customers or additional/deferred infrastructure investment.

We look forward to

If you wish to discuss our submission, please contact me at andrew.kerr@powerco.co.nz.

Yours sincerely

Andrew Kerr

Regulatory Policy Manager

The Sustainable Energy Forum Inc PO Box 11-152 Wellington office@sef.org.nz

Contact for this submission: Ian Shearer office@sef.org.nz

15th December 2017

EECA

Wellington

By email to: levyconsultation@eeca.govt.nz

Submission on the EECA 2018/19 Consultation

Summary

The Levy Consultation documentation offers inadequate evaluation of performance to date or expected outcomes from proposed investments. Effective accountability is essential to facilitate a competent evaluation of the plan and justification for allocation of public funds.

As the proposed activities have implications for private funds, there is a real concern that funded activities are proposed with no clear insight into implications for private citizens or businesses.

EECA's original focus was energy efficiency and conservation in the residential sector. There has been a recent move to a strong industrial focus accompanied by changes to the EECA Board to include representatives of industry.

A return to a strong residential focus is needed, funded by residential power consumer's Energy Levy, to be consistent with the new Government's commitments to social and environmental outcomes.

The outputs and outcomes from the levy proposal are unclear. At best they are indeterminate, at worst they may have perverse outcomes. Therefore, the levy proposal cannot be supported.

Fundamentals are absent

- Treasury Guidelines not met: Better Building Case (BBC) guidelines apply as total funding exceeds 15M (14M levy plus EECA baseline). These are not separately allocated to individual programmes or projects, internal cross-subsidisation occurs. The proposal implies an EECA programme of activities, therefore BBC requirements should apply and the analysis should be provided.
- 2. **EE&C Act 2000 requirements are not met**. There is no evaluation of progress in energy efficiency and renewable energy on which to base assessment of levy (and/or baseline)



- 3. **NZEECS** is deficient. The present NZEECS was developed by a process not based on an analysis of progress from previous NZEECS.
- 4. Levy proposal is inconsistent with accepted activity based accounting principles. We are asked to provide feedback on a proposal with only high-level budget overview information and no accounting of activity level costs or benefits.
- 5. This levy proposal doesn't comply with the levy process described in 2016. That process requires a transparent analysis.
- 6. **No report of MBIE review**. In 2016, MBIE and EECA completed a review of EECA's programmes. The review assessed whether EECA's programmes are fit-for-purpose and are consistent with changing Government priorities.
 - http://www.mbie.govt.nz/info-services/sectors-industries/energy/energy-efficiency-environment/energy-efficiency/2016-review-of-the-eeca-work-programme/

Inadequate analysis of programme investment

- 7. Lack of strategic context and outlook there is no review or update of EECA's assessment of the strategic energy use landscape and the potentials for achieving improvements in energy efficiency, conservation, and renewables in the medium to long term.
- 8. Lack of a clear operating model; the proposal lacks a pragmatic and transparent process for qualifying, evaluating, and ranking programme opportunities based on clear criteria and objectives, including the need for Government intervention and rigorous cost/benefit and risk analysis. Specifically:
- 9. No insight is offered into the baselines used in developing the proposals.
- 10. No analysis of counterfactuals.
- 11. No assessment is offered into autonomous improvements in energy efficiency or renewable energy, nor how the propsed programme build on these to offer an effective and economic investment in energy efficiency and renewable energy.
- 12. No intervention logic is provided.
- 13. No assessment of options evaluated has been offered.
- 14. Lack of a programme portfolio design of a portfolio of programmes focused on the existing Residential and Business markets and on the Transport market, with at least clear five-year targets for changes in market state and 2025 strategic goals in each market.
- 15. It is not clear how the proposal aligns with Government priorities. For example, there is no evaluation of carbon emission mitigation outcomes.
- 16. Provides no confidence for investments: a clear accounting of public costs, public benefits, private costs, and private benefits over the lifetime of the interventions is required. This is not offered and without this, no one can make an informed response to the levy consultation questions.



- 17. There is no clear accounting of how the proposed energy efficiency and renewable energy activities contribute to carbon mitigation in New Zealand and how this underpins New Zealand's carbon policies and NDC commitments.
- 18. The opportunity costs of options that are not included is not clear. In a context where EECA has dropped programmes that were economic (ENERGY STAR was dropped in 2016 despite it's global recognition as a high performing market transformation programme). It is now difficult to have confidence that the levy proposal constitutes a programme of economic market transformation projects that can competently implemented.

Inadequate consultation insights

- 19. No evidence offered into insights gained from consultations undertaken in preparation of this proposal.
- 20. No insights from recent experiences in implementation of programmes.
- 21. With no evaluation of the cost benefit performance of previous Low Emission Vehicles Fund LEVF) projects there is clearly no basis to conclude that a proposal to increase LEVF would be an efficient investment for taxpayers.

NABERS

- 22. National Australian Built Environment Rating System (NABERS) appears to have had success in Australia where it is linked to increased sustainability of buildings and increased capital value of highly rated commercial buildings.
- 23. Given this apparent success, no basis is offered for the comparatively small investment made in NABERS.
- 24. No analysis of progress to date with NABERSNZ activities, nor the attribution to NABERS of any progress in building energy efficiency and renewable energy.
- 25. Without any context or option analysis, there is no basis for supporting or rejecting this.
- 26. It is not obvious whether this is the only activity EECA plans to undertake in the commercial sector; it is not included in the programme portfolio. It is therefore impossible to determine if this is an adequate, effective, or prudent use of levy funds.

CONCLUDING REMARKS

The information provided in the EECA consultation document is inadequate for submitters to review the effectiveness of past EECA programmes or to assess the likely effectiveness of future EECA programmes. The consultation process provides an opportunity for special pleading for funding to be directed towards specific programmes in which the submitter has a vested interest. However, it does not provide sufficient information or analysis to allow organisations such as SEF, with a broad perspective in energy efficiency and conservation, to make positive feedback commentary. Regrettably, this is a missed opportunity.

S.H Goldthorpe, Convenor

On behalf of the Sustainable Energy Forum Inc

Steve Coldthope