# **Regulatory Impact Statement**

Expanding an existing energy levy

# **Agency Disclosure Statement**

- This Regulatory Impact Statement (RIS) has been prepared by the Ministry of Business, Innovation, and Employment (the Ministry). It provides an analysis of options for expanding the purpose of one or more existing energy levies. The objective of this proposal is to provide more flexibility for the Energy Efficiency and Conservation Authority (EECA) in allocating existing funding to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy. This will allow EECA to better align its activities with Government priorities in the energy sector and ensure they are directed at the highest value opportunities.
- This funding work is not being progressed in isolation; The Minister of Energy and Resources has already decided that the New Zealand Energy Efficiency and Conservation Strategy, which sets EECA's strategic direction, be refreshed [CAB-16-MIN-0055]. This will ensure that it reflects Government's priorities and that the programmes are directed to where the greatest gains can be made.
- Decisions regarding funding would ideally follow on from the strategic review, however, in order to meet the Government's timelines to implement the low emission vehicles (LEV) package, specifically the contestable fund to be administered by EECA, it is necessary to progress the funding work ahead of the other stream of work. The Ministry does not consider this poses any issues as the Government's change in emphasis in its approach to energy has been clearly signalled and this funding change is not dependent upon, nor determining of, the other piece of work.
- The Ministry prepared a discussion document, which went out for public consultation from 17 May to 7 June this year. The discussion document did not offer a preferred option and stakeholder feedback has informed the analysis undertaken for this RIS.
- The option of reprioritising activities under EECA's general taxation appropriation is out of scope of this Regulatory Impact Analysis (RIA) because this would not address the inflexibility of the levy funding.
- Nor does the RIA consider EECA's overall funding regime (i.e. the extent to which EECA's activities should be Crown or levy funded.) A Ministerial decision was made that new funding would not be sought to fund new initiatives. Moreover, it is the Ministry's view that where there are industry or club goods, it is appropriate to use a levy<sup>1</sup>. The Ministry's continued monitoring role of the organisation will ensure EECA's levy funded activities are suitable for levy funding.
- 7 The option of creating a new levy was ruled out because several levies on fuels already exist and the outcome can be more easily achieved by expanding one or more of the existing levies.

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<sup>&</sup>lt;sup>1</sup> "Charging fees for public sector good and services". Controller and Auditor-General, June 2008.

- 8 The scope of the levied fuels to be considered in this paper has been limited to those fuels that:
  - a. Are relevant because they would be the focus of activities undertaken by EECA and therefore they link to the objective of the proposal. That is, they are fuels that are not renewable and/or where there are energy efficiency and conservation gains to be made, and
  - b. Represent a significant share of consumer demand and would be worthwhile recovering levy money from, and
  - c. Are already levied by a suitable levy.

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# **Executive Summary**

- The Government has committed to the efficient use of energy and diverse resource development, including the development of our renewable energy resources and support of new technologies. Electricity efficiency has been a major focus of this work. This is reflected in EECA's current funding model, which ring fences almost half of its funding for electricity efficiency activities (recovered through a levy on electricity participants).
- However, the areas where we can now have the most impact are the transport sector where the use of non-renewable energy is the greatest; and the industrial sector where there is the potential for productivity improvements. The industrial sector is our highest user of energy, using 38 per cent of all energy in 2014, followed closely by transport at 36 per cent.
- 11 Under the current funding model EECA's levy funding can only be spent on activities that relate to electricity efficiency. The proposal assessed in this RIS is to make changes to enable EECA's levy-recovered funding to be applied more broadly to energy efficiency activities and renewable energy activities (as opposed to just "electricity efficiency" activities). This would enable EECA to better prioritise across its work programme to focus on activities where there is the greatest gains and to reflect Government's priorities.
- The proposal is to expand the purpose of one or more of three existing energy levies (the Electricity Industry Participants Levy (the electricity levy), the Petroleum or Engine Fuel Monitoring Levy (PEFML), and the Gas Safety Levy (the gas levy) to enable EECA to widen the activities it can undertake with its levy money.
- 13 There are three main options considered:
  - a. expanding the purpose of the existing electricity levy, with sub-options of revising the design to a rate per customer, or revising the design to a rate on electricity generated;
  - b. maintaining the existing electricity levy but also using the PEFML (with an expanded purpose), with the sub option of exempting biodiesel and ethanol;
  - c. maintaining the existing electricity levy, but also using the PEFML and gas levy (with expanded purposes), with the sub option of expanding all three levies to create a pool of levy funds.
- The preferred option is to expand the purpose of all three existing energy levies on electricity, transport fuels and gas, with a set allocation from each to form a pool of funds that can be used across EECA's activities. This will allow EECA to recover from the pool or combined energy levy, funding for *any* of its functions not just *electricity* efficiency. In this way EECA will have the flexibility it needs to prioritise its activities to sectors where the greatest gains can be made toward achieving the desired positive outcomes from energy efficiency, conservation and the increased use of renewable energy.

# Status quo and problem definition

### Status Quo

### Statutory background

- 15 Since The Energy Efficiency and Conservation Act 2000 (the Act) the Government has recognised the need for, and committed to undertake, action to promote energy efficiency, energy conservation, and the use of renewable sources of energy in New Zealand.
- The Act provides that the Minister is responsible for, among other things, promoting public awareness in New Zealand of the importance of energy efficiency and conservation, and the use of renewable sources of energy. The Minister does this by providing information and advice, fostering education programmes, and promoting practices and technologies that further energy efficiency, energy conservation, and the use of renewable sources of energy.
- 17 The Act also provides that a national energy efficiency and conservation strategy must be in place. The New Zealand Energy Efficiency and Conservation Strategy 2011-2016<sup>2</sup> (NZEECS) sets out the current specific objectives for energy efficiency and renewables. These include:
  - a. Transport A more energy-efficient transport system, with greater diversity of fuels and alternative technologies.
  - b. Business Enhanced business growth and competitiveness from energy-intensity improvements.
  - c. Homes Warm, dry and energy-efficient homes with improved air-quality to avoid ill-health and lost productivity.
  - d. Products Greater business and consumer uptake of energy-efficient products.
  - e. Electricity system An efficient, renewable electricity system supporting New Zealand's global competitiveness.
  - f. Public sector Greater value for money from the public sector through increased energy efficiency.
- The Act also established the Energy Efficiency and Conservation Authority (EECA). The Government's work to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy is under taken by EECA<sup>3</sup>. The NZEECS is EECA's guiding document and provides the framework and direction for EECA's work programme.
- 19 EECA's work addresses market failures which prevent or delay market actors from acting. For example imperfect or asymmetric information, or financing/liquidity constraints.

<sup>&</sup>lt;sup>2</sup> The Minister of Energy and Resources recently announced his intention to replace the NZEECS with a new strategy, as it expires in August 2016.

<sup>&</sup>lt;sup>3</sup> EECA's functions and powers are set out in the Energy Efficiency and Conservation Act 2000.

### Current funding framework

- 20 EECA has two funding sources. About half of EECA's funding comes from general taxation (\$16.6 million) and up to \$17.5 million<sup>4</sup> can be recovered each year through a levy. The Electricity Industry Act 2010 sets out the parameters for a levy on electricity industry participants (the electricity levy). Most of this levy recovers the costs of the Electricity Authority, with a portion allocated to EECA for performing its functions in relation to the "encouragement, promotion, and support of electricity efficiency".<sup>5</sup>
- Currently, electricity industry participants that purchase electricity from the wholesale market (which are typically electricity retailers) are charged a levy of \$0.317 per megawatt hour (MWh) purchased for electricity efficiency operations. Retailers will pass this levy on to their customers, and this is estimated to average \$2.33 per household each year.
- This amount is subject to annual consultation and its calculation is set out in the Electricity Industry (Levy of Industry Participants) Regulations 2010. EECA is required to undertake a transparent process when determining its levy-funded work programme. The Electricity Industry Act 2010 requires EECA to consult annually with levy payers on how the levy is proposed to be spent, and to report on that consultation to the Minister of Energy and Resources. Any unspent levy is refunded annually.
- 23 Because the levy funding can only be used in relation to *electricity* efficiency activities, other activities to support the Government's other objectives for broader energy efficiency, energy conservation, and the use of renewable sources of energy such as those set out in the NZEECS, are funded from the money that comes from general taxation.

### Relevant decisions already taken

- This proposed funding change reflects the change in emphasis in the Government's approach to energy efficiency. As mentioned in the Agency Disclosure Statement, this proposal is part of a broader review of the Government's energy efficiency work; Cabinet has already agreed that the New Zealand Energy Efficiency and Conservation Strategy, which sets EECA's strategic direction, be refreshed [CAB-16-MIN-0055]. This will ensure that EECA's work is aligned with the Government's priorities in the energy sector, and that the programmes are directed where the greatest gains can be made toward achieving the desired positive outcomes from energy efficiency, conservation and the increased use of renewable energy.
- The Government has already agreed to establish a contestable fund to encourage the uptake of low emission vehicles (LEVs) [EGI-16-MIN-0069 refers]. This fund is to be administered by EECA. Under current funding arrangements, EECA will need to reprioritise more than a third of its non-levy funding in out-years to support this transport initiative (expected to cost up to \$6 million per year). This is one example of how an expanded levy could be used.

<sup>&</sup>lt;sup>4</sup> Cabinet has approved up to \$17.5m [Cab Min (07)12/1(56) refers] but, to date, EECA has only ever consulted on and drawn down a maximum of \$13m to fund projects in its agreed work plan.

<sup>&</sup>lt;sup>5</sup> In 2015/16 the Electricity Authority received \$77 million and EECA received \$13 million from the electricity participants levy.

### Problem definition

- The proportion of electricity generated from renewable sources has been increasing; it reached 81 per cent in 2015. Further, while electricity efficiency remains important, because it has been a focus since the commencement of the Act, good progress has been made in increasing the efficiency of electricity usage. For example, despite New Zealand's increasing population, and increase in use of electronic devices, residential electricity consumption is static. This has been contributed to by improved electricity efficiency in the design of household appliances, lights, and heating.<sup>6</sup>
- Furthermore, electricity only represents about 25 per cent of New Zealand's energy demand. The industrial sector is our highest user of energy, using 38 per cent of all energy in 2014, followed closely by transport at 36 per cent. Transport accounts for around 17 per cent of our greenhouse gas emissions (44 per cent of the total emissions in the energy sector). The share of renewable energy in our transport sector is less than one per cent.
- The transport and industrial sectors are the areas that now offer significant opportunities for change toward the objectives of improved energy efficiency and increased use of renewable energy. If we want to improve energy efficiency and increase the use of renewable energy there is a need to focus on activities that address these sectors. This could include increasing the uptake of new technologies which will help us to reduce emissions, and energy efficiency initiatives that can improve productivity for businesses. For example, biofuels and LEVs (which include electric vehicles (EVs) and other low-emissions transport technologies) offer opportunities for the transport sector to reduce emissions. Fuel-switching and energy efficient technologies offer similar opportunities for the industrial sector.
- However, under the current funding model EECA cannot prioritise its activities to reflect this change in energy sector priorities. The levy funding can only be spent on activities that relate to electricity efficiency, so almost half of EECA's work programme must continue to be focused solely on that area. Other priority areas such as all transport and industrial heat initiatives need to be funded from the general taxation portion of EECA's funding. The promotion of EVs, for example, cannot be funded by this levy because increased uptake results in greater use of (largely renewable) electricity, not improved electricity efficiency. EECA has no ability in increase its focus where the greatest gains can be made.
- Within its general taxation appropriation, EECA must prioritise which of its energy efficiency and uptake of renewables activities it will undertake, and this can mean other important work does not occur.
- The policy intent underlying the Act and the NZEECS is still sound: improving energy efficiency is a low-cost way to support economic growth; increased business productivity means more can be reinvested to generate jobs; and energy-efficient homes have a positive impact on the health and wellbeing of New Zealanders.
- Increasing the use of renewable energy makes better use of our abundant renewable resources and reduces our reliance on fossil fuels, making us more resilient to fluctuating (fuel) commodity prices, and contributing to reducing our energy-sector emissions. Energy efficiency can also reduce emissions for better environmental and health outcomes.

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<sup>&</sup>lt;sup>6</sup> Since 2006, EECA estimate that they have achieved a cumulative savings of 1,818 GWh per annum and peak demand reduction of 626 MW - \$1,072 million worth of cumulative savings at present value, through electricity levy funded programmes.

- 33 The change proposed, and the objective it seeks to achieve, align with the intent of the Act and with the objectives of the NZEECS. However, the proposal reflects the changing energy sector context and is a response to the change in emphasis in the Government's approach to energy efficiency. Broadening the activities EECA can undertake with its levy funding seeks to allow greater focus on activities and areas where the greatest gains can be made toward achieving the desired positive outcomes from energy efficiency, conservation and the increased use of renewable energy.
- Legislative change is required to expand the purpose of one or more existing levies. Changing the legislation to enable a broad (but relevant) range of activities to be funded, rather than specified projects or programmes will avoid the need for future ad-hoc changes. This means other relevant activities can be funded when technology enables them to become viable options.

### Objectives/criteria

The objective of this proposal is to provide more flexibility in allocating existing funding to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy. The criteria used to assess the options are:

### a. Causer or beneficiary pays

Those who generate the need for, or potentially benefit from, the activities should be contributing towards the costs of activity. This criterion is about identifying the appropriate group of levy payers.

The 'causers' in this context are users of energy where efficiency gains can be made, particularly where there are opportunities to increase business productivity and/or energy is non-renewable, in particular where new technology can be adopted and emissions reduced. 'Beneficiaries' will be those who benefit from the outcomes of the activities. These outcomes will benefit all New Zealanders, for example all citizens will benefit from any measures that encourage switching to renewables-based fuel (in both electricity generation or in other sectors such as transport). This would be through less national reliance on fossil fuels, improved energy security through diversification of fuel supply, and general environmental and health benefits. But there are more group-specific benefits applicable to certain options, such as where there may be a commercial benefit for a particular group. Only these benefits are discussed for applicable options in the RIA section below.

### b. Rationality

There should be a strong or close relationship between the group of levy payers and the service or activity being provided. Sometimes it is necessary to identify a subgroup of levy payers to link the funded activities and the causers or beneficiaries more closely. This criterion is about logically linking the types of activities funded to the group or subgroup of levy payers.

This criterion is different from the causer or beneficiary pays criteria because it relates to the specific activity being funded. For example, while transport fuel users broadly cause the need for programmes that encourage the uptake of renewable fuels, a specific programme to promote switching from gas to biofuels is not directly linked to the use of transport fuel.

### c. Administrative simplicity, transparency

The levy structure should not create undue transaction costs. The purpose should be transparent, easily understood and clear to the levy payers. This criterion is about ensuring accountability and avoiding undue costs.

### d. Equity

Levy payers in similar situations should be treated similarly. The allocation of costs within the group of levy payers should be fair. This criterion is about how the costs are allocated within the group of levy payers.

- Greatest weighting is given to meeting the objective to provide more flexibility in allocating existing funding, to the causer or beneficiary pays criterion (but within this, to the causer), and also to the administrative simplicity and transparency criterion.
- 37 Rationality and equity are given less weight because they are more granular filters which logically sit under the causer or beneficiary pays criterion. Ensuring absolute rationality is not possible, as it would require each levy payer to be a recipient of the service or activity. It is also complicated. The administrative simplicity and transparency criterion is also weighted higher than rationality and equity because it can have a significant impact on the functionality of a levy. However, in our assessment we note that design can be adjusted to mitigate some issues under this criterion.
- With regard to cost, because the existing levy is capped at \$17.5 million and none of the options seek to increase the appropriation (instead options consider different ways to spread the costs across different consumers, rather than minimise cost), cost is not used as a separate criteria. However, examples of how the cost allocations may shift for the various levies under some of the options are given where possible.

# Scope of fuels considered in the proposal

- As mentioned in the Agency Disclosure Statement, the scope of the fuels to be considered in this paper has been limited to those fuels that:
  - a. Are relevant because they would be the focus of activities undertaken by EECA and therefore they link to the objective of the proposal. That is, they are fuels that are not renewable and/or where there are energy efficiency and conservation gains to be made (e.g. direct use of geothermal energy is not considered in scope),
  - b. Represent a significant share of consumer demand and would be worthwhile recovering levy money from, and
  - c. Are already levied by a suitable levy. The option of creating a new levy is not considered because a similar outcome can be more easily achieved by expanding one or more existing levies.
- 40 Oil (petrol and diesel), electricity and gas are in scope because there are opportunities for improved energy efficiency and/or they are non-renewable. There are suitable existing levies for these fuels. Furthermore, these fuels represent the most significant share of consumer energy demand in New Zealand with oil at 44 per cent, electricity at 25 per cent, and gas at 15 per cent in 2015.<sup>7</sup>

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<sup>&</sup>lt;sup>7</sup> Energy in New Zealand 2015. Ministry of Business, Innovation and Employment.

While coal is a non-renewable fuel, it is considered out of scope. This is because while EECA can undertake activities related to coal (such as fuel switching initiatives), it only represents five per cent of energy use, and there is no suitable levy. The existing levy<sup>8</sup> is only on coal extracted at open-cast mines, not on coal consumed in New Zealand<sup>9</sup>, so an expansion would not sufficiently meet any of the objectives discussed above<sup>10</sup>. A new levy would need to be created to levy consumers of coal, and this would be administratively complex and costly relative to the amount of money that would be recovered<sup>11</sup>.

### The existing levies that could be expanded

The options consider three existing levies; the electricity industry participants levy (the electricity levy), the Petroleum or Engine Fuel Monitoring Levy (PEFML), and the gas safety levy (the gas levy).

### **Electricity industry participants levy (the electricity levy)**

- The Electricity Industry Act 2010 provides a framework for the regulation of the electricity industry and, as part of this, sets out the parameters for a levy on electricity industry participants (the electricity levy). Most of this levy recovers the costs of the Electricity Authority, with a portion allocated to EECA for performing its functions in relation to the "encouragement, promotion, and support of electricity efficiency" 12.
- 44 Currently, electricity industry participants that purchase electricity from the wholesale market (which are typically electricity retailers) are charged a levy of \$0.317/MWh purchased. Retailers will pass this levy on to their customers, and this is estimated to average \$2.33 per household each year.
- This amount is subject to annual consultation and its calculation is set out in the Electricity Industry (Levy of Industry Participants) Regulations 2010. EECA is required to undertake a transparent process when determining its levy-funded work programme. The Electricity Industry Act 2010 requires EECA to consult annually with levy payers on how the levy is proposed to be spent, and to report on that consultation to the Minister of Energy and Resources. Any unspent levy is refunded annually.

<sup>&</sup>lt;sup>8</sup> Under the Energy Resources Levy Act 1976.

<sup>&</sup>lt;sup>9</sup> Approximately 50 per cent of coal extracted in New Zealand is exported as it is high-grade coal, and lower grade coal is imported for commercial, industrial and domestic use.

<sup>&</sup>lt;sup>10</sup> Levying coal extraction (production) would partially meet the causer pays criteria because it would levy some coal consumed in New Zealand. Only a sub-group of the causers would be captured by the levy because 50 per cent of coal produced here is exported, and the levy wouldn't cover consumers of the coal we import. This also means that an expanded coal levy would be weak on the rationality and equity criteria – only some coal consumers would pay, and some of them would be consumers outside New Zealand.

<sup>&</sup>lt;sup>11</sup> The amount that would be levied is estimated to be less than \$875,000 per year (based on five percent of \$17.5 million).

<sup>&</sup>lt;sup>12</sup> In 2015/16 the Electricity Authority received \$77 million and EECA received \$13 million from the electricity participants levy.

### Petroleum and engine fuels monitoring levy (PEFML)

- The PEFML is provided for in the Energy (Fuels, Levies and References) Act 1989, and is collected on transport fuels (petrol, diesel, ethanol, and biodiesel<sup>13</sup>). The levy covers fuel-quality and safety monitoring costs, International Energy Agency (IEA) related costs (including acquiring energy data and liaising with the IEA), and was recently expanded to include the cost of compliance with our IEA oil stockholding obligation. The levy is payable by fuel importers (who pass on the cost to consumers). Imported petrol and diesel is levied by New Zealand Customs at the port of import, whereas imported oil is levied at the refinery once processed into the finished product.
- The PEFML is currently set at 0.2 cents per litre. The levy rate (calculated using a Cabinet-approved formula) is specified in the Energy (Petroleum or Engine Fuel Monitoring Levy) Regulations 2015. The rate is recalculated every three years.

### Gas levy

The Energy (Fuels, Levies and References) Act 1989 provides for levies to fund certain WorkSafe and MBIE safety-related services for the electricity and gas industries. Activities include inspection, monitoring and dissemination of safety information. The electricity portion of this levy has also previously been used to part-fund the Powerswitch website. The levy on piped gas (excluding gas sold for feedstock or for the generation of electricity or liquefied petroleum gas) is two cents per gigajoule. This rate is set in the legislation.

## **Options**

The discussion document proposed eight options including the status quo. The specific options were:

- Status quo EECA levy funding from electricity levy for electricity-efficiency activities.
- **Option 1:** Electricity levy with expanded purpose (to enable levy money to be spent on *energy* efficiency and to support to uptake of renewable energy).
- **Option 1A**: Electricity levy with expanded purpose revised to a rate per customer (e.g. Installation Control Point (ICP))<sup>14</sup>.
- **Options 1B:** Electricity levy with expanded purpose revised to a rate on electricity generated.
- Option 2: Existing electricity levy (current limited purpose) + PEFML with expanded purpose.
- **Option 2A:** Existing electricity levy (current limited purpose) + PEFML with expanded purpose but excluding biofuels from the levy.
- Option 3: Existing electricity levy (current limited purpose) + PEFML with expanded purpose + gas levy with expanded purpose.

<sup>&</sup>lt;sup>13</sup> A number of fuels cannot practicably be levied and are not currently covered by the PEFML, including international or domestic aviation fuel, fuel oil and "other petroleum products".

<sup>&</sup>lt;sup>14</sup> An ICP is a physical point of connection on a local network, or an embedded network that the distributor nominates as the point at which a retailer will be deemed to supply electricity to a consumer.

Option 3A: Existing electricity levy with expanded purpose + PEFML with expanded purpose + gas levy with expanded purpose - set allocations: 30:50:20 per cent of total recovery respectively.

# **Regulatory Impact Analysis**

- This RIS assesses the options against the criteria (that is, their ability to meet the objectives of causer/beneficiary pays, rationality, administrative simplicity, transparency and equity), and in terms of the objective of this proposal, which is to provide more flexibility in allocating existing funding to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy.
- 50 The assessment of the options below is summarised in Table 1 at the end of the assessment.

### Summary of feedback from consultation

- This section provides a high level summary of the main themes regarding the objectives and criteria in stakeholder feedback. Submitter's comments on specific options are included in the discussion of each option below.
- Overall feedback from submissions indicates that stakeholders strongly support the proposal to increase the flexibility of EECA's funding so the organisation can focus on activities in sectors where the most gain can be made in terms of energy efficiency, energy conservation and the use of renewable sources of energy. A total of 20 of the 26 submitters agreed with the proposal.
- This broad support stemmed from agreement that many of the opportunities for energy efficiency gains, reduction of emissions, and uptake of renewables, occur outside the electricity sector. It made sense to submitters that EECA, as the agency already tasked with encouraging, supporting, and promoting this broad energy work, should have more flexibility in the allocation of its levy-recovered funding so that activities can focus on areas that will have the greatest impact.
- There was also strong support for the options that spread the cost of activities across the fuels that represent the most significant share of consumer demand in the energy sector (electricity, transport fuels and gas), that is options 3, or 3A.
- 55 The specific breakdown of preferred options from least preferred to most was:
  - No submitters preferred the status quo, option 1 (electricity levy with expanded purpose), or option 1B (electricity levy with expanded purpose, and revised to a rate on electricity generated).
  - One submitter preferred option 2A (existing electricity levy + PEFML with expanded purpose but excluding biofuels from the levy).
  - Two submitters preferred option 1A (electricity levy with expanded purpose, and revised to a rate per customer (e.g. ICP).
  - Two submitters preferred option 2 (existing electricity levy + PEFML with expanded purpose).

- Eight submitters preferred option 3A (existing electricity levy with expanded purpose + PEFML with expanded purpose + gas levy with expanded purpose set allocations: 30:50:20).
- Nine submitters preferred option 3 (existing electricity levy + PEFML with expanded purpose + gas levy with expanded purpose).

# Themes and issues raised in submissions centred around trade-offs between the criteria

We asked submitters what they thought the appropriate balance between the criteria should be. The themes that came through when submitters discussed their preferred options were largely expressed in terms of issues and trade-offs related to the criteria.

### Causer or beneficiary pays

A general theme was the importance of the levy being paid by the causers or beneficiaries of the activities. This is the reason that options 3 and 3A were the most strongly supported options.

### Rationality

Further to this theme, most submitters thought that there fundamentally needed to be a logical link between the activities being funded and the specific group of levy payers. The main reason given was that rationality, or linking activities logically to a sector or fuel, ensures fairness. For example, "It would be unfair to make electricity consumers pay for projects that impact on the transport or industrial heat processing sectors." (Mighty River Power).

### Administrative simplicity and/or transparency

- However, some submitters recognised the complexity of logically linking a programme to one funding source where there is more than one causer or beneficiary. An example given was funding the LEV package where some submitters considered both the electricity sector (beneficiary) and transport sector (causer) should contribute. These submitters generally considered that prioritising the transparency criteria over the causer or beneficiary pays or rationality criteria was pragmatic.
- Transparency was considered important because it was seen as a way to help ensure accountability and a fairer and acceptable spread of levy sources and allocation of funds. In this way it was believed that transparency would increase rationality.

### Six submitters disagreed with the proposal

- Where there was disagreement from stakeholders on the proposal, this was generally on the basis that they thought that the beneficiaries of the funded activities might be a broad enough group to warrant that EECA's programmes be funded from general taxation.
- Several of these submitters also held the position that, as major electricity users, and therefore paying large amounts of the levy, they do not receive equivalent individual benefit back from their contribution to the levy.

- 63 However, charging for public sector goods and services is not limited to a public or private beneficiary split. There is a continuum from private benefit where a fee is appropriate, to full public benefit where general taxation is appropriate. In the middle ground there are industry or club goods where it is appropriate to use a levy.<sup>15</sup>
- Many of EECA's activities fall exactly into this category. The consultation did not revisit EECA's overall funding regime (i.e. the extent to which all of EECA should be Crown or levy funded.)

### Alignment with the new New Zealand Energy Efficiency and Conservation Strategy (NZEECS)

- Some submitters, for whom linking of each programme back to a specific levy source, was considered the most important criteria, commented that it was difficult to clearly assess how strongly this principle is met for each levy option, in the absence of a clear work plan by EECA for specific energy efficiency and renewable activities post-2016. (The new NZEECS and associated work programmes.)
- The Ministry's view is that the level of detail regarding the Government's changing energy priorities contained in the discussion document was adequate for the consultation and that assessing the merits of various levy funding sources does not require a detailed forecast of future activities.

# Status quo: EECA levy funding from electricity levy for electricity-efficiency activities

If there is no change to any existing levies, EECA will continue to fund activities from within its current funding model, which is made up of the revenue collected through the electricity levy (up to \$17.5 million) and \$16.6 million from general taxation. EECA can only spend its levy revenue on electricity-efficiency activities, so any activities that relate to encouraging renewables-based transport fuels, other renewable energy or broader energy-efficiency activities require reprioritisation of its work programme, new funding, or they will not be funded.

### **Increasing flexibility**

- The status quo does not meet the objective of providing the Government, through EECA, with more flexibility in terms of the activities it can undertake to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy. Energy use for transport and industrial heat processes are areas where real gains can now be made, but activities in these areas have to compete with other current programmes.
- 69 Under the current funding model, EECA has to reprioritise its limited non-levy funding to undertake transport and non-electricity efficiency work. This means opportunities will be lost and some important work will not occur.

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<sup>&</sup>lt;sup>15</sup> "Charging fees for public sector good and services". Controller and Auditor-General, June 2008.

### Causer or beneficiary pays

70 The status quo is strong for causer pays (but only regarding electricity efficiency, rather than renewables). In regards to the beneficiary pays objective, all electricity consumers benefit from energy efficiency and the avoided costs of new generation.

### Rationality

Purchasers, or participants that purchase electricity from the wholesale market (which are typically electricity retailers and large electricity users), would continue to be the sub-group who will pay the levy. The link between the retailers (who pass on the levy on to their customers who are the end users) and large users with electricity efficiency activities is strong; therefore the rationality of the status quo is strong.

### Administrative simplicity, transparency

72 The status quo is notable for having moderate administrative complexity and for being transparent. It is transparent because the legislation requires EECA to consult annually on how it proposes to spend the levy, report on that consultation to the Minister of Energy and Resources, and publish the final allocation. Any unspent levy is refunded annually.

### **Equity**

73 Under the status quo, equity is strong because the levy is consumption-based (per MWh), so consumers are levied relative to their electricity consumption.

### Stakeholder feedback

No Stakeholders selected the status quo as their preferred option, but many submitters listed the status quo as an option they did not prefer. The main reason given is that it does not meet the objective of providing more flexibility.

### **Net impact and Conclusion**

The status quo does not address the problem of inflexibility in the current funding arrangements restricting the ability of EECA to prioritise its activities to reflect where the greatest gains towards energy efficiency and uptake of renewables can be made. The Ministry does not support this option.

### Option 1: Electricity levy with expanded purpose

This option is to expand the purpose of the electricity levy to include encouraging, promoting and supporting energy efficiency, energy conservation and the use of renewable sources of energy, so that the levy funding can be used for the full range of EECA's activities. Under this option, EECA would continue to collect its levy-funded revenue only from the electricity participant's levy, and only from purchases, or participants that purchase electricity from the wholesale market (which are typically electricity retailers and large electricity users). EECA would also continue to consult annually on its levy-funded work programme, report on that consultation to the Minister of Energy and Resources, publish the final allocation, and refund any unspent money.

### Increasing flexibility

This option would meet the objective of increasing flexibility for EECA to spend its levy money across a broader range of activities to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy. This is because EECA would be able to spend its levy revenue on any of its activities, for example, activities that relate to encouraging renewables-based transport fuels, other renewable energy or broader energy-efficiency activities. It is therefore an improvement on the status quo for this objective.

### Causer or beneficiary pays

- 78 The levy is paid by electricity industry participants only and is ultimately passed on to all consumers of (largely renewable) electricity. Using this expanded levy alone only captures a subgroup of the causers because it does not directly target the majority of consumers of non-renewable energy who are transport fuel and gas users.
- However, it is arguable that this levy does *indirectly* place the cost with the causers if electricity consumers (including businesses) are seen to represent all energy users in New Zealand. This is because electricity use is universal and people who use electricity generally also use transport fuels. Most gas users also use electricity too. For this reason, it could be assessed as strong in regard to the causer pays principle. However, some stakeholders (e.g. ERANZ) suggested that this argument is weak because it generalises too much. For example, it could also be argued that all electricity users also eat sugar and so the levy could be used to fund obesity campaigns. The Ministry agrees that the argument that this levy *indirectly* places the cost with the causers is too generalised and therefore not strong. For both the reasons explained above we assess this option as not strong and deterioration on the status quo.
- In regards to the 'beneficiary pays' principle, all electricity consumers benefit from energy efficiency and the avoided costs of new generation. There may also be some benefit for electricity retailers if any activities encouraging the use of renewable energy increases the use of electricity (for example, through the accelerated and widespread uptake of EVs). This may be the case in some years, such as funding the LEVs package, but would be less certain in future years. On this criterion, the option is probably not an improvement on the status quo.

### Rationality

In comparison to the status quo, a much broader range of activities can be undertaken with the levy money so there is more chance of a less logical link between the levy payer and the activities. For example, activity to promote fuel switching in industrial heat processing from diesel to biofuel would not have a logical link to electricity consumers. Therefore this option is likely to be a deterioration on the status quo for this objective. However, under this option, the strength of the logical link between levy payers and the activities the levy funds would vary depending on the mix of activities undertaken.

### Administrative simplicity, transparency

Expanding the purpose of the electricity levy meets the criteria of administrative simplicity and transparency. The option does not propose to change the legislative requirement under the Electricity Industry (Levy of Industry Participants) Regulations 2010 for EECA consult annually on how it proposes to spend the levy, report on that consultation to the Minister of Energy and Resources, and publish the final allocation. Any unspent levy is refunded annually. There would be no change to the status quo for this objective.

### **Equity**

Because this option would expand the range of activities able to be undertaken using the levy funding, it is likely to be less equitable than the status quo. This is because businesses that consume a lot of electricity will be paying greater amounts than everyone else (based on volume) for some activities not directly related to electricity efficiency where the causer is non-electrical energy use.

#### Stakeholder feedback

- No submitters said option 1 was their preferred option. One submitter agreed that electricity consumers would benefit from measures that encourage switching to renewables-based fuel, and electricity retailers would benefit if any activities to encourage the use of renewable energy increase the total use of electricity (e.g. the accelerated and widespread uptake of electric vehicles).
- A total of 9 submitters listed option 1 as an option they did not prefer. The main reason given is that while being administratively simple, it only captures a subset of the 'causers' and would result in inequitable allocation of costs to electricity sector participants.

### **Net impact and Conclusion**

While increasing flexibility, this option is overall a deterioration on the status quo in regards to causer pays, and potentially the rationality objective (depending on the specific activities undertaken) and equity. The Ministry does not support this option.

# Option 1A: Electricity levy – expanded purpose – revised to a rate per customer

- This option would also expand the purpose of the electricity levy to include energy efficiency, energy conservation and the use of renewable sources of energy, so that the levy funding can be used for the full range of EECA's activities. It also changes which electricity participants would pay the levy. The electricity levy is currently charged as a rate on electricity purchased from the wholesale market per MWh. An alternative way to charge the levy could be per customer (revised to an amount per ICP. All other design aspects remain the same as the current electricity levy <sup>16</sup>.
- None of the options under consideration propose to increase the levy; however, there would be some reallocation of cost between consumers with this option. Very large consumers would pay less (because they would no longer be paying by volume) and this would increase the cost to smaller consumers. We estimate the move to paying the levy per ICP would mean each household and business would pay about \$3.50 per year. If a large commercial operation has more than one ICP they would pay more.

<sup>16</sup> Retailers are already levied by ICP by the Electricity Authority for registry/consumer operations and consumer participation operations.

### Meets the objective

As with option 1, this option would meet the objective of increasing flexibility for EECA to spend its levy money across a broader range of activities to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy. This is because EECA would be able to spend its levy revenue on any of its activities, for example, activities that relate to encouraging renewables-based transport fuels, other renewable energy or broader energy-efficiency activities. It is therefore an improvement on the status quo.

### Causer or beneficiary pays

This option is also the same as option one in regards to the causer or beneficiary pays objectives because it does not directly target the majority of consumers of non-renewable energy who are transport fuel and gas users. It is also the same as option 1 in regards to indirectly placing the cost with causers and for beneficiary pays. Because it directly charges per ICP, retailers won't be paying so it is not as strong as option 1. For beneficiary pays it is the same as the status quo. Against this objective it is a deterioration on the status quo.

### Rationality

This option is the same as the option above in terms of the rationality principle. The strength of the logical link between levy payers and the activities the levy funds would depend on the mix of activities undertaken. For example, activity to promote fuel switching in industrial heat processing from diesel to biofuel would not have a logical link to electricity consumers. Therefore this option is likely to be a deterioration on the status quo for this objective.

### **Administrative simplicity, transparency**

As with the two previous options there would be no change to the status quo for this objective, administrative simplicity remains moderate and transparency remain very strong.

### **Equity**

This variation on option 1 proposes revising the levy allocation to an amount per customer (rather than a consumption-based allocation) to better meet the equity principle. This would mean that households and commercial properties would pay the same set amount each year (depending on how many ICPs they have). This option recognises that the rationality principle is only moderate for an expanded electricity levy, and a way to address this is to treat all electricity consumers (including businesses) equally. Under this option, businesses that consume a lot of electricity will not be paying greater amounts (based on volume) for activities not directly related to electricity efficiency. Against the status quo, however, there is no improvement. The improvement only occurs where the purpose of the levy has been expanded and thus it balances out the deterioration on this objective for option 1.

### Stakeholder feedback

Two submitters said option 1A was their preferred option. One, who did not agree to the overall proposal, however commented that to the extent the electricity levy continues to be collected they would support a change in the way it is charged from a per MWh consumption basis to a per customer amount per ICP.

A total of 6 submitters listed option 1A as an option they did not prefer. Most of the reasons were similar to option 1 in that it doesn't target the causers.

### **Net impact and Conclusion**

While increasing flexibility, this option is a deterioration on the status quo in regards to causer pays, and potentially the rationality objective (depending on the specific activities undertaken). It increases equity on option 1, but does not improve it against the status quo. Overall this option is not an improvement on the status quo. The Ministry does not support this option.

# Option 1B: Electricity levy – expanded purpose – revised to a rate on electricity generated

- 97 This option would also expand the purpose of the electricity levy to include energy efficiency, energy conservation and the use of renewable sources of energy, so that the levy funding can be used for the full range of EECA's activities. It also changes which electricity participants would pay the levy. This variation on option 1 proposes revising the levy allocation to be based on electricity generated, rather than electricity purchased. This would mean that the levy would be collected from electricity generators, rather than retailers and others that purchase from the wholesale electricity market.
- It is unclear how generators may choose to pass on this cost so we cannot anticipate what redistribution of cost may occur under this option. If generators choose to pass on less of the cost than electricity industry participants that purchase electricity from the wholesale market (which are typically electricity retailers) currently do, there could be some reduction in cost to consumers. (We estimate that retailers will pass on the full levy cost to their customers at an average \$2.33 per household each year).

### Meets the objective

99 As with option 1, this option would meet the objective of increasing flexibility for EECA to spend its levy money across a broader range of activities, and is therefore an improvement on the status quo.

### Causer or beneficiary pays

100 It is the same as option 1 in regards to the causer pays objective, in that using this expanded levy alone only captures a subgroup of the causers because it does not directly target the majority of consumers of non-renewable energy who are transport fuel and gas users. On this objective it is therefore a deterioration on the status quo.

### Rationality

101 Generators stand to benefit from increased demand for electricity that could result from fuel-switching measures funded from an expanded levy, so charging generators potentially meets the 'beneficiary pays' criteria more similarly to option 1. This argument is dependent on the types of activities that the levy funds – to hold true, it would need to include a high proportion of measures that would result in fuel-switching to electricity. This may be the case in some years, such as funding the LEVs package, but would be less certain in future years. Therefore this option is likely to be a deterioration on the status quo for this objective.

### Administrative simplicity, transparency

102 As with the two previous options there would be no change to the status quo for this objective, administrative simplicity remains moderate and transparency remain very strong. There is no improvement on the status quo.

### **Equity**

103 This levy would ultimately be passed on to consumers and the equity of this option would depend on how this is done. It is likely to be consumption-based, which would not be more equitable than option 1.

### Stakeholder feedback

104 No submitters said option 1B was their preferred option. 6 submitters listed option 1B as an option they did not prefer saying it poorly targets the potential causers/ beneficiaries.

### **Net impact and Conclusion**

While increasing flexibility, this option is a deterioration on the status quo in regards to causer pays, and potentially the rationality objective (depending on the specific activities undertaken). Although it may benefit the payers if it increases electricity use. Equity would not be improved against the status quo. Overall it is not an improvement on the status quo. The Ministry does not support this option.

# Option 2: Existing electricity levy17 + PEFML with expanded purpose

- 106 This option proposes to recover some of the levy funding from the electricity levy and some from the PEFML. The PEFML would have an expanded purpose, but the electricity levy could remain for electricity activities only.
- 107 Under this option, the expanded PEFML would continue to levy the same range of fuels currently levied. That is, the expanded PEFML would apply to petrol, diesel, ethanol and biodiesel, but exclude aviation fuel (international and domestic) and other petroleum products.
- This option could include a requirement for the expanded PEFML to be adjusted more often than its current three yearly requirement, and for annual consultation on how it is spent. This would mean that, each year, EECA would consult with levy payers on its proposed work programme and report that consultation to the Minister of Energy and Resources before decisions are made. The electricity levy would continue to fund electricity-efficiency activities, and the PEFML would be used to recover the cost of activities related to transport fuels. Any unspent levy could be accrued with a proportionate reduction in following years, or refunded.
- 109 Under this model, justification will need to be made to allocate the costs of an activity to a particular group of levy payers. Activities would need to continue to be Crown funded unless they can be linked to a group of levy payers. An example is the promotion of LEVs, which could be allocated to PEFML levy funding because it promotes the use of technology that uses renewable energy for transport, replacing the non-renewable transport fuels that the PEFML levies.

<sup>17</sup> Where the purpose of this levy relates it to only electricity efficiency activities is retained.

110 The rate this levy would apply to PEFML would depend on EECA's work programme. However, as an example, if \$6.5 million was recovered from the PEFML levy (which equates to half of the levy funding EECA has recovered each year for the past five years) this would add approximately 0.1 cents per litre to the price of petrol or diesel. This would add 4 cents on a 40 litre tank, bringing the total PEFML cost to approximately 12 cents on a 40 litre tank. This would also have the effect of decreasing the current funding recovered from the electricity efficiency levy by half, or from an average \$2.33 per household each year to \$1.16.

### Meets the objective

In terms of meeting the objective to provide more flexibility regarding how overall funding is spent, overall this option increases what EECA can spend levy money on. However, there is some restriction with this option because specific activities can only be allocated where allocation has strong justification. This means that funding of activities will continue to be from EECA's Crown funding unless justification can be made to allocate costs to a particular group of levy payers. There is, however, an improvement in flexibility on the status quo.

### Causer or beneficiary pays

- 112 The PEFML levies consumers of transport fuels. The transport sector is our second largest consumer of energy, and because more than 99 per cent of transport energy is oil-based, the use of this levy directly targets users of non-renewable energy. This makes it very strong for causer pays. In addition, consumers of transport fuels will also benefit from any measures to switch to renewables-based fuels, in terms of potential reduction in the cost of fuel and less personal reliance on fossil fuels/improved energy security through diversification of fuel supply. The general environmental and health benefits apply to all New Zealanders.
- 113 This option proposes to recover some of the levy funding from the electricity levy and some from the PEFML. In terms of the 'causer pays' and 'beneficiary pays' principle, this option strikes a strong balance because it charges the intense users of non-renewable energy for renewable energy programmes, and will levy electricity participants for electricity-efficiency activities. This reflects the benefits from increased electricity and renewable-energy use across both electricity and petrol and diesel users, not relying on electricity to be an indirect proxy for all non-renewable and/or inefficient energy users.

### **Rationality**

In terms of the rationality principle, using the PEFML is moderate. A large portion of the programmes to increase the use of renewables will be directed at transport fuel use. However, the PEFML also includes biofuels. So arguably it also targets a sub-group which is not logically linked to the activity. To the extent that activities are about fuel switching for industrial heat, much of the fuel being used is diesel<sup>18</sup>. On the rationality criteria this may mean this option is a deterioration on the status quo.

**Administrative simplicity, transparency** 

<sup>&</sup>lt;sup>18</sup> Note that under the design of this option, gas-related activities would continue to be funded from EECA's non-levy funding.

115 The PEFML is calculated every three years, but unlike the electricity levy, does not have a prescribed process for public consultation on how the levy is proposed to be spent and the rate of the levy. In terms of the principle of transparency, using this levy is not strong. However, as suggested earlier, the transparency of the levy could be improved by requiring the EECA funding portion of the levy to be subject to the same consultation requirement as the current electricity levy. However, doing so will impose additional administration costs on EECA because it will need to consult on a wider range of proposed activities with a wider range of levy payers. Against the status quo, this levy would be less simple to administer.

### **Equity**

116 In regards to transport-energy activities, using the PEFML is strong in relation to the equity principal. This is because the levy is consumption-based (per litre), so consumers are treated equally, in that they pay according to their consumption and thus contribution to emissions. For the portion of the levy that would continue to be recovered from the electricity levy, equity under this option remains strong. Therefore this option is the same as the status quo for this criteria.

#### Stakeholder feedback

- 117 A total of 2 submitters said option 2 was their preferred option. The reasons given included its administratively simplicity and that it would be appropriate for the LEV contestable fund to be delivered from the petroleum and engine fuels monitoring levy (PEFML).
- 118 A total of 2 submitters also listed option 2 as an option they did not prefer. The reasons or issues they saw with this option were that it only extends the PEFML levy, the electricity levy will still be restricted to electricity efficiencies and this means the industrial sector is not bearing the cost of the energy efficiency policies despite the opportunity for efficiency gains.

### **Net impact and Conclusion**

119 Overall, this option is an improvement on the status quo. However, it is not the Ministry's preferred option.

# Option 2A: exempt biodiesel and ethanol

120 This option is designed as above, but, in addition to the option to expand the purpose of the PEFML, it builds on the existing exclusions in the levy for aviation fuel, and "other petroleum products", by also excluding biofuel (ethanol and biodiesel) from the expanded PEFML. This option excludes biofuels because they are renewable.

### Meets the objective

As with option 2, in terms of meeting the objective to provide more flexibility regarding how overall funding is spent, this option is an improvement over the status quo.

### Causer or beneficiary pays

122 This option is strong for causer or beneficiary pays for the same reasons option 2 is.

### Rationality

- 123 This variation of option 2 excludes biodiesel and ethanol from the levy. Including petrol and diesel in the expanded PEFML is logical, because they are fossil fuels. However, biofuels are renewable fuels that have the ability to reduce emissions. Therefore, while the rationality principle is very strong for levying petrol and diesel, it is not as strong for biodiesel and ethanol. So rationality is strong for this option, but perhaps not necessarily an improvement on the status quo.
- 124 Further to this, excluding biofuels from the PEFML (for the EECA allocation portion of the levy) may send a signal to encourage the uptake of biofuels, which would advance the long-term energy goal of increased use of renewables and also help reduce emissions. However, New Zealand's overall use of biofuels is small (around 0.1 per cent of fuel demand). Further, biofuels are blended into petroleum-based fuels, and the level of their use is regulated (petrol blends may contain up to 10 per cent ethanol). So, while not levying them is a good signal, its effect on demand for biofuel is likely to be very minor in practice.

### Administrative simplicity, transparency

125 For the same reasons as for option 2, this option would be less simple to administer but transparency could be maintained. However, this option poses an issue. It will also be very administratively complex and costly for New Zealand Customs (which collects the levy) to change the scope and exclude biofuels. There will be increased compliance costs for manufacturers and importers of biofuel blends. This is due to the complex structures that will be required to separate out, and make levy returns on, mineral fuel, but not the biofuel portion, of blended fuel. This does not align with the administrative simplicity criterion. On this criteria, this option is a deterioration on the status quo.

### **Equity**

126 As with option 2, this option is strong on equity, but is only a small improvement on the status quo.

#### Stakeholder feedback

- 127 One submitter said option 2A was their preferred option. The reasons given was because they believe it best meets the objectives of the proposal whilst protecting the interests of electricity customers. Another submitter said; "We are neutral on Option 2A; there is logic in exempting biofuels because they are renewable, but it needs to be 'administratively simple'."
- Only 1 submitter listed option 2A as an option they did not prefer. They said "the size of the levy would be small with a negligible effect on the retail prices, which would not have an impact on consumers that would justify exempting biofuels unless it was easy to administer."

### **Net impact and Conclusion**

129 On most criteria this option is the same as option 2 except for the rationality criteria in which it is stronger. However, it is much more administratively complex. Since we have weighted administratively complexity higher than rationality, this option is not an improvement on option 2, but is an improvement on the status quo.

# Option 3: Existing electricity levy<sup>19</sup> + PEFML with expanded purpose + gas levy with expanded purpose

- 130 This option proposes expanded electricity, PEFML and gas levies. Under this option, the Energy (Fuels, Levies and References) Act 1989 would also be expanded to allow a portion of the gas levy to be allocated to EECA for performing its functions in relation to energy efficiency, conservation and the use of renewable sources of energy.
- As with all the options so far, each year, EECA would consult with levy payers on its proposed work programme, and report that consultation to the Minister of Energy and Resources before decisions are made. The electricity levy would continue to fund electricity-efficiency activities, the PEFML would be used to recover activities related to transport fuels, and only gas-related activities would be recovered from the gas levy. Any unspent levy would be accrued and adjusted or refunded. Additionally, the levy rate could be adjusted annually in a process similar to how the EECA allocation of the electricity levy is currently set.
- As with options 2 and 2A, it is proposed that justification would need to be made for allocating costs to a particular group of levy payers. Where this cannot be done, funding for activities will continue to be allocated from EECA's Crown funding.
- 133 The rate this levy would apply to PEFML and the gas levy would depend on EECA's work programme each year.

### Meets the objective

As with options 2 and 2A, in terms of meeting the objective to provide more flexibility regarding how overall funding is spent, this option is an improvement on the status quo.

### Causer or beneficiary pays

To align most strongly with the causer pays principle, users of all forms of non-renewable energy, or energy where efficiency gains can be made, would be levied to pay for EECA's activities. This option achieves that by levying electricity, transport fuels and gas, which covers the major energy fuels by consumer demand. With regards to beneficiary pays this option is the same as 2 and 2A. Overall this option is an improvement on the status quo.

### Rationality

The rationality principle would be satisfied under this option because it proposes that only those activities related to specific fuels would use funding from those fuels. Justification would need to be made (i.e. a logical link would need to be made to allocate the costs of an activity to a particular group). So rationality is strong, and is an improvement on the status quo.

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<sup>&</sup>lt;sup>19</sup> Purpose relating it to only electricity efficiency activities retained.

### Administrative simplicity, transparency

137 This option would require applying the existing consultation and reporting mechanisms built into the electricity-efficiency levy requirements to all levy-funded activities. This would mean that EECA would consult with levy payers annually on its proposed work programme, and report on that consultation to the Minister of Energy and Resources before final decisions are made. This would also ensure that the levy was transparent. If any levy was unspent this would be refunded. As with option 2, against the status quo this option is more complex to administer but transparency could be maintained.

### **Equity**

138 All the levies are consumption based so would be equitable. Overall this option is the same as the status quo for this criteria.

#### Stakeholder feedback

- 139 Nine submitters said option 3 was their preferred option. Two of whom said they preferred all the levies (including the electricity levy) to have an expanded purpose.
- 140 No submitters specifically listed option 3 as an option they did not prefer. However, one submitter, offered comments questioning expanding the existing levy on gas. In particular they mentioned the importance of the gas market in New Zealand to the production and export of petroleum liquids as well as providing a transitional pathway to a lower carbon economy.

### **Net impact and Conclusion**

141 This option is the same as, or an improvement on, almost all criteria compared to the status quo. However, the Ministry notes that administration would be complicated for EECA and it would inhibit flexibility.

# Option 3A: Existing electricity levy with expanded purpose + PEFML with expanded purpose + gas levy with expanded purpose - set allocations

- This variation on option 3 proposes that all three levies are used, but it proposes a set allocation from all three levies to form a common pool to fund any of EECA's activities.
- 143 A set allocation, could be for example at 30 per cent electricity levy, 50 per cent PEFML, and 20 per cent gas levy, roughly representing each fuel's relative consumer energy demand. A set allocation would replace the design feature whereby the allocation from each levy is based on a work programme of activities that must be linked back to a particular set of levy payers/funding source and consulted on annually.
- 144 Based on the current levy recovery of \$13m, under this option if 30 per cent (\$4.3m) was recovered from the electricity levy, the levy would fall from an average of \$2.33 per household each year to 78 cents per household each year.
- 145 If \$6.5 million (50 per cent) was recovered from the PEFML levy this would add approximately 0.1 cents per litre to the price of petrol or diesel. This would add 4 cents on a 40 litre tank of petrol or diesel, bringing the total PEFML cost to approximately 12 cents on a 40 litre tank.

146 If the gas levy was used to recover 20 per cent of the total levy, then \$2.6 million would need to be raised. The current safety levy is payable on all piped gas (excluding feedstock for generation of electricity or liquid petroleum gas, or where gas sold in the period is less than 10,000gj) and is currently charged at a rate of two cents for each complete gigajoule. This rate would remain for the safety levy and an additional rate would be set in regulations to recover the energy efficiency portion.

### Meets the objective

147 A benefit of this option is that it most strongly meets the objective by providing a high level of flexibility. This is because the pool of funding can be used for any of EECA's activities so the activity need not be linked back to a specific fuel levy.

### Causer or beneficiary pays

148 For the same reason as option 3, this option is strong for the user and beneficiary pays objectives and is overall an improvement on the status quo.

### Rationality

149 This option has a weaker alignment with the 'rationality' principle, because it only attempts to allocate the costs of activities in proportion to the group's contribution to the problem. This is in contrast to the other options, where general groups of levy payers only contribute to the specific activities that logically link to the energy used. Instead, this option provides a pool of levy money that EECA can draw on to undertake any of its activities. In relation to rationality this option is mixed depending on what is on the work programme.

### **Administrative simplicity, transparency**

150 Administratively this option is stronger than options 3, 2 and 2A and because EECA will not have to justify each activity and link it back to a particular funding source, which can be especially complicated if the programme covers multiple fuels. However, EECA's work programme would be consulted on, and that consultation reported to the Minister of Energy and Resources, with the final allocation published. As with option 3, this work programme consultation and reporting would increase transparency.

### **Equity**

151 All the levies are consumption based so would be equitable. Overall this option is the same as the status quo for this criteria.

### Stakeholder feedback

152 Eight submitters said option 3A was their preferred option. The main reasons given for preferring this option were that it meets the objective most strongly, that is it provides the most flexibility, and it is also strongly meets the 'causer pays' and 'beneficiary pays' principles, because it recovers costs from the vast majority of the energy users, and it is fair and equitable.

Two submitters listed option 3A as an option they did not prefer. The main reasons included the weaker alignment with the 'rationality' principle, and lack of transparency. They were concerned a set allocation from all three levies to form a common pool to fund any of EECA's activities would remove the annual consultation on EECA work programmes funded from these levies. One commented; "Simplifying the system by setting allocations compromises the transparency of these allocations and is a concession the EEA does not support". Another noted it is particularly difficult to consult on a set allocation without the work programmes being consulted on; "MBIE suggests this could be addressed by reporting, but the historical nature of the information gives little indication of how the amounts of these levies will change in future and is thus less supportive of investment decision-making."

### **Net impact and conclusion**

- 154 This option is an improvement on the status quo in all but rationality. In comparison to option 3 it is much more flexible, and because of this it is best at addressing this objective. Combined with being strong for causer pays while maintaining simplicity it is a significant improvement on the status quo. Therefore this option is the Ministry's preferred option.
- The Ministry believes transparency could be kept high by EECA's consultation and reporting procedures. However, the trade-off for flexibility and simplicity is rationality (depending on the particular activities being undertaken in any given year). This objective is not weighted by the Ministry as highly as administrational simplicity, flexibility and causer pays. Although many stakeholders were of a similar view, given many others thought rationality was very important, the Ministry considers there are a number of design options under this option that could mitigate the trade-off of weaker alignment with the 'rationality' principle. For example, the allocations could be adjusted periodically and over time to be aligned to reflect more closely EECA's work programme rather than consumer demand for the fuel.

### Feedback from submitters on the trade-offs between options 3 and 3A

- 156 Options 3 and 3A both strongly meet the causer and beneficiary pays principle by levying electricity, transport fuels and gas. The fairly even split in preferred option between options 3 and 3A in submissions represents the key trade-off between rationality/transparency on the one hand, and flexibility/administrative simplicity on the other.
- 157 Option 3 (which proposes using the existing electricity levy (unexpanded), the PEFML with expanded purpose, and the gas levy with expanded purpose) is designed to give more emphasis to meeting the rationality and transparency criteria and consequently trading-off some flexibility and administrative simplicity.
- 158 Rationality is ensured under this option because the electricity levy would continue to only fund electricity-efficiency activities, the PEFML would only be used to recover activities related to transport fuels, and only gas-related activities would be recovered from the gas levy. Justification would need to be made for allocating costs to a particular group of levy payers. Where this cannot be done, funding for activities will continue to be allocated from EECA's Crown funding.
- 159 Under this option the levy rate would be adjusted in a process similar to how the EECA allocation of the electricity levy is currently set. EECA would consult with all levy payers on its proposed work programme, and report that consultation to the Minister of Energy and Resources before decisions are made. The discussion document suggested any unspent levy would be refunded.

- The trade-off with this option is that it does inhibit some of the flexibility possible from expanding the purpose of the levies by requiring strict linking of activities to the specific funding source. Further, having to justify and link each specific activity in the work programme back to one of the three levies, then wash up the actual spend, adjust the levy rate, and refund any unspent money, annually, will increase the administrative complexity for EECA.
- Submitters for whom rationality was a more important criteria argued this trade-off was worthwhile because by ensuring each sub-groups' levy will not be spent on activities for other sub-groups, it will set up a framework that will be more largely supported by the energy sector.
- 162 Option 3A (which proposes using the existing electricity levy with expanded purpose, the PEFML with expanded purpose, and the gas levy with expanded purpose, with a set allocation from each to form a common pool) would replace the design feature whereby the allocation from each levy is based on a work programme of activities that must be linked back to a particular set of levy payers/funding source.
- This design increases flexibility because EECA could spend any of its levy money on any activity. This allows EECA to undertake activities with levy money that may not fit into specific fuel classes. However, in doing so the logical/rational link could be weakened, for example, it may be the case that gas or electricity levy money could be spent on a transport initiative.
- 164 Some submitters considered the more general objective of overall causers and beneficiaries was sufficient linking, particularly given the complexity of truly ensuring rationality. And, as discussed above, if transparency was retained using consultation and reporting mechanisms, then fairness could be ensured. However, submitters who considered rationality the most important criteria were opposed to this trade-off.

165 The assessment of the options is summarized below in Table 1. In the table the following scales are used:

Strongly meets objective	Somewhat meets the objective	Does not meet the objective
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- Significant improvement on status quo
- ✓ Small improvement on status quo
- No change to the status quo
- X A deterioration on the status quo

Table 1: Summary of analysis of options

	Increases flexibility (solves the problem)	Causer pays	Beneficiary pays	Rationality	Administrative simplicity, transparency	Equity	Net impact relative to the status quo
Status quo	Levy funding can only be spent on electricity efficiency related activities	Strong (for electricity efficiency)	Moderate	Strong	Strong. Consultation requirement increases transparency, but adds administrative complexity	Strong	NA
Option 1: Electricity levy with expanded purpose	Meets objective strongly, in that any of EECA's activities can be undertaken using levy funding	Not Strong	Moderate	Moderate	As above	Not strong	Х
	✓	Х	-	X	-	Х	

	Increases flexibility (solves the problem)	Causer pays	Beneficiary pays	Rationality	Administrative simplicity, transparency	Equity	Net impact relative to the status quo
Option 1A: Electricity levy with expanded purpose – revised to a rate per customer	As above   ✓	Not Strong X	Moderate -	Moderate (depends on activities undertaken)	As above	Stronger than option 1	Х
Option 1B: Electricity levy with expanded purpose – revised to a rate on electricity generated	As above   ✓	Not Strong X	Arguably stronger in comparison to options 1 and 1A	Moderate X	As above	Mixed – depending on how costs passed on	X
Option 2: Existing electricity levy + PEFML with expanded purpose	Meets objective but some restriction  ✓	Strong  ✓	Strong ✓	Arguably moderate if biofuels levied X	Strong on transparency, but adds administrative complexity	Strong -	✓

	Increases flexibility (solves the problem)	Causer pays	Beneficiary pays	Rationality	Administrative simplicity, transparency	Equity	Net impact relative to the status quo
Option 2A: As above, but exempt biodiesel and ethanol	As above  ✓	Strong  ✓	Strong  ✓	Arguably stronger than option 2	Strong, but more administratively complex than Option 2	Strong	-
Option 3: Existing electricity levy, PEFML + gas levy with expanded purposes	As above  ✓	Strong ✓	Strong	Strong	Strong on transparency, but adds administrative complexity	Strong -	√√
Option 3A: Electricity levy + PEFML + gas levy, all with expanded purpose, set allocation 30:50:20	Meets objective most strongly, in that any of EECA's activities can be undertaken using levy funding	Strong  ✓	Strong  ✓	Mixed (will depend on what activities are funded with the pool of levy money)	Strong on administrative simplicity, transparency could be maintained	Strong -	<b>* * * *</b>

### **Conclusions and recommendations**

- The status quo does not address the problem of inflexibility in the current funding arrangements restricting the ability of EECA to prioritise its activities to reflect where the greatest gains towards energy efficiency and uptake of renewables can be made.
- 167 While increasing flexibility, option 1 is overall a deterioration on the status quo in regards to causer pays, potentially the rationality objective (depending on the specific activities undertaken) and equity. The Ministry does not support this option.
- 168 While increasing flexibility, option 1A is a deterioration on the status quo in regards to causer pays, and potentially the rationality objective (depending on the specific activities undertaken). It increases equity on option 1, but does not improve it against the status quo. Overall this option is not an improvement on the status quo. The Ministry does not support this option.
- While increasing flexibility, option 1B is a deterioration on the status quo in regards to causer pays, and potentially the rationality objective (depending on the specific activities undertaken). It may benefit the payers if it increases electricity use. Equity would not be improved against the status quo. Overall it is not an improvement on the status quo. The Ministry does not support this option.
- 170 On most criteria option 2 and 2A are similar, except option 2A offers an improvement for the rationality criteria, however this sub-option creates much more administrative complexity. Since we have weighted administratively complexity higher than rationality, this option is not an improvement on option 2. While option 2 is an improvement on the status quo, the Ministry thinks there are options that are stronger.
- 171 Option 3 is the same as, or an improvement on, all criteria, therefore it is an improvement on the status quo. However, the Ministry notes that administration would be complicated for EECA.
- 172 Option 3A is an improvement on the status quo in all but rationality. In comparison to option 3 it is much more flexible, and because of this it is best at addressing this objective. Combined with being strong for causer pays while maintaining simplicity it is a significant improvement on the status quo. Therefore this option is the Ministry's preferred option.
- 173 The Ministry believes transparency could be kept high by using consultation and reporting procedures. However, the trade-off for flexibility and simplicity is rationality (depending on the particular activities being undertaken in any given year). Like many submitters, the Ministry considers the more general objective of overall causers and beneficiaries is sufficient linking, particularly given the complexity of truly ensuring rationality. However, given many stakeholders believe rationality is very important, the Ministry considers there are a number of design options under this option that could mitigate the trade-off of weaker alignment with the 'rationality' principle. For example, the allocations could be adjusted periodically and overtime be aligned to reflect more closely EECA's work programme rather than consumer demand for the fuel.

### Consultation

- 174 The Ministry prepared a discussion document, which went out for public consultation from 17 May to 7 June this year. The discussion document did not offer a preferred option. 26 submissions were received, a summary of submissions report has been prepared by the Ministry and will be available on our website. The breakdown of submitters was as follows:
  - a. 12 business representative organisations/ NGOs (Major Electricity Users' Group (MEUG), Sustainable Business Network, Bioenergy Association, the Electricity Engineers' Association (EEA), BusinessNZ, Business Central, The New Zealand Geothermal Association, Electricity Retailers Association of NZ (ERANZ), Major Gas Users Group (MGUG), Energy Management Association of NZ (EMANZ), Electricity Networks Association (ENA), NZ Automobile Association);
  - b. One energy distributor company (Vector);
  - c. Three gas wholesaler/retailers (Nova, Genesis Energy, Trustpower);
  - d. Four electricity generator/retailers (Nova, Mighty River Power, Genesis Energy, Trustpower);
  - e. One petroleum retailer (BP);
  - f. Two large electricity end users (WPI, Pacific Aluminium (NZAS);
  - g. Three companies from other related sectors (a waste disposal company EnviroNZ, an electric vehicle charging station construction company – ChargeNet NZ, a renewable energy technology company – Greenlane Technologies); and
  - h. Three individuals (Ian McChesney, Molly Melhuish, Robert Tromop).
- 175 Stakeholder feedback from submissions has informed the analysis undertaken for this Regulatory Impact Statement. EECA were supportive of the proposal to improve their levy funding flexibility but not part of the public consultation process and did not express a preferred option.
- 176 The Treasury, the New Zealand Customs Service, the Ministry of Transport, Ministry for the Environment, and EECA have been consulted on the proposal. The Department of the Prime Minister and Cabinet has been informed. These agencies will also be consulted on this RIS and the accompanying Cabinet paper seeking agreement to the preferred option.

## Implementation plan

- 177 The preferred option will seek the agreement of Cabinet in August 2016. The proposal will then be incorporated into an Energy Innovation (Electric Vehicles and Other Matters) Bill planned for introduction to the House in October 2016. It is proposed the any changes will come into force mid-2017.
- 178 All parties liable for the levy will be notified in advance of the change.

### Monitoring, evaluation and review

179 EECA will continue to develop a work programme, consult with levy payers and report on that consultation to the Minister of Energy and Resources. The final levy allocations and work programme will be published. EECA also has an independent board, which reviews its work programme and corresponding proposed expenditure.

- 180 The Ministry has a monitoring role of EECA as a Crown entity. As part of this role the Ministry reports to the Minister of Energy and Resources on the performance of EECA, including the efficiency and effectiveness of its spending, at regular intervals; engages with EECA in the development of its strategic intentions and strategic documents, such as its work programme; and administers appropriations in relation to EECA.
- As mentioned in the ADS, this funding work is not being progressed in isolation; The Minister of Energy and Resources has already decided that the New Zealand Energy Efficiency and Conservation Strategy, which sets EECA's strategic direction, be refreshed [CAB-16-MIN-0055]. However, decisions regarding funding are occurring ahead of the strategic review in order to meet the Government's timelines to implement the low emission vehicles (LEV) package, specifically the contestable fund to be administered by EECA. The Ministry does not consider this poses any issues as the Government's change in emphasis in its approach to energy has been clearly signalled. Further, the Ministry is working closely with EECA and stakeholders on the refresh of strategic direction and will be able to ensure that both pieces of work are aligned and activities are focused where the greatest gains can be made toward achieving the desired positive outcomes from energy efficiency, conservation and the increased use of renewable energy.