

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT HĪKINA WHAKATUTUKI

Options for expanding the purpose of existing energy levies

Consultation on expanding the purpose of an existing levy to recover the costs of encouraging, promoting and supporting energy efficiency, energy conservation and the use of renewable sources of energy



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Making a submission

You are invited to make a written submission on the issues raised in this paper. Submissions should be submitted to the Ministry of Business, Innovation and Employment (MBIE) by 5pm on Tuesday 7 June 2016.

Your submission may respond to any or all of the issues outlined, depending on your interest. In addition, you are welcome to provide other information that you think might be relevant to this consultation. If possible, any views outlined in the submission should be supported by evidence, such as references to independent research, facts and figures, or examples. Please also include your name, or the name of your organisation, and contact details.

You may use the reply form at the back of this document to make a submission, but you may also write a letter if you prefer.

Submissions may be made electronically (preferred) or by post. Electronic submissions should be in Adobe Acrobat, Microsoft Word or compatible format, and sent as an attachment to: energymarkets@mbie.govt.nz.

Postal submissions should be sent to: Energy Markets Policy Energy and Resources Markets Ministry of Business, Innovation and Employment P O Box 1473 Wellington 6140

Use of information

The information provided in submissions will be used to inform our analysis and the advice given to Ministers. We may contact submitters directly if we require clarification of any matters in the submission.

We intend to publish written submissions on MBIE's website, www.mbie.govt.nz. Therefore, please read the advice below regarding confidential or private information. MBIE reserves the right to remove any material from submissions that may be defamatory.

Confidential Information

If your submission contains any confidential information, please indicate this on the front of the submission. In addition, confidential information should be clearly marked within the text; for example, by including the confidential information in square brackets or as a separate appendix.

If you wish to provide a submission with confidential information, we prefer that you also provide a separate, public version of the submission which excludes the confidential information. If provided, the public version will be posted on MBIE's website.

In any case, if MBIE receives a request under the Official Information Act 1982 for a copy of submissions, MBIE will need to make its own assessment of whether the information should be released, including whether it is in the public interest to release the information received. In this event, MBIE will endeavour to consult with submitters that have provided confidential information prior to making its decision on the request.

Personal Information

The Privacy Act 1993 establishes certain principles with respect to the collection, use and disclosure of information about individuals by various agencies, including MBIE. Any personal information you supply to MBIE in the course of making a submission will be used by MBIE only in conjunction with providing its advice on a public interest test. Please clearly indicate in your submission if you do not wish your name or contact details to be posted on MBIE's website or included in any summary of submissions that MBIE may publish.

Introduction

- 1. This discussion paper considers options for expanding the purpose of one or more of the existing levies on electricity, transport fuels and gas. The intention is to enable levy funding of a wider range of activities that encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy.
- 2. The Energy Efficiency and Conservation Authority (EECA) is the government agency that works to improve the energy efficiency of New Zealand's homes and businesses, and encourage the uptake of renewable energy. EECA provides funding, advice, tools and information to homeowners and businesses to invest in more efficient products and systems, and to switch to renewable energy sources.
- 3. EECA receives some levy funding, but it can only be used for 'electricity' efficiency activities¹. The objective of this proposal is to provide more flexibility in the allocation of funding so that activities can focus on areas that will have the greatest impact, such as transport. A current example of this is the newly-created low emission vehicles (LEVs) contestable fund that EECA has been tasked with delivering.
- 4. The paper proposes options for expanding the purpose of one or more existing levies. The options are assessed against the above objective and four key design principles and criteria.

Background

- 5. Building a more competitive and productive economy for New Zealand is one of the Government's key priorities. The Business Growth Agenda (BGA) drives this by ensuring the Government stays focused on what matters to business, to encourage confidence and further investment. The Natural Resources Sector (NRS) stream of the BGA is split into focus areas. Of these, the Energy and Climate focus area aims to improve energy efficiency and use of renewable energy to raise productivity, reduce carbon emissions and promote consumer choice.
- 6. This commitment to the efficient use of energy and diverse resource development (including developing our renewable energy resources and supporting new technologies) is also reflected in the New Zealand Energy Strategy 2011-2021 (NZES). More specific objectives for energy efficiency and renewables are set out in the New Zealand Energy Efficiency and Conservation Strategy 2011-2016² (NZEECS), which is a companion document to the NZES. Those objectives are:
 - Transport A more energy-efficient transport system, with greater diversity of fuels and alternative technologies.
 - Business Enhanced business growth and competitiveness from energy-intensity improvements.

¹ About 50 per cent of the Energy Efficiency and Conservation Authority (EECA's) funding (up to \$17.5m) comes from the levy. The rest of its work is funded from general taxation.

² The Minister of Energy and Resources recently announced his intention to replace the NZEECS with a new strategy, as it expires in August 2016.

- Homes Warm, dry and energy-efficient homes with improved air-quality to avoid ill-health and lost productivity.
- Products Greater business and consumer uptake of energy-efficient products.
- Electricity system An efficient, renewable electricity system supporting New Zealand's global competitiveness.
- Public sector Greater value for money from the public sector through increased energy efficiency.
- 7. There are good reasons for the above objectives. 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.
- 8. 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.
- 9. The change proposed in this document, and the objective it seeks to achieve, align with the objectives of the NZES and NZEECS. Broadening the activities EECA can undertake with its levy funding seeks to better support work to achieve the desired positive outcomes from energy efficiency, conservation and the increased use of renewable energy.

The opportunities – moving beyond electricity efficiency

- 10. The proportion of electricity generated from renewable sources has been increasing towards the Government's target of reaching 90 per cent by 2025. In 2015, it was 81 per cent, which is the highest it has been since 1995. However, electricity only represents about 25 per cent of New Zealand's energy demand. Significant progress has been made in the area of electricity efficiency, and while it remains important, greater gains can be made by focusing on energy use for transport and industrial processes.
- 11. The transport and industrial sectors offer significant opportunities for change toward the objectives of improved energy efficiency and increased use of renewable energy. 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 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 as it is 99 per cent oilbased.
- 12. There is a need to focus on activities that address these sectors if we want to improve energy efficiency and increase the use of renewable energy. 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.

- 13. 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 EECA³, and is guided by the NZEECS. EECA's current funding model limits about half of its funding to electricity (not *energy*) efficiency activities. This is because it comes from a levy on electricity-industry participants that can only be used in relation to the "encouragement, promotion, and support of *electricity* efficiency". 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*.
- 14. The rest of EECA's work is funded from general taxation which is able to be reprioritised, but this can mean other important work on energy efficiency does not occur, such as promoting energy efficient technologies, biofuels, and other fuel-switching options.
- 15. The proposed change to expand an existing levy would provide more flexibility to better prioritise funding towards activities that provide the greatest overall benefit to New Zealand, and reflect changing circumstances and priorities in the energy sector.
- 16. 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.

Scope of consultation

- 17. EECA can recover up to \$17.5 million⁴ each year through the levy on electricity industry participants. This proposal considers alternative ways to recover similar levels of funding using existing levies.
- 18. This paper proposes options for the expansion of the purpose of one or more existing levies. It sets out options for how, and from where, the levy funding could be recovered.
- 19. Specifically, the paper sets out:
 - The existing levies on fuels that could be expanded,
 - Options for consideration,
 - An assessment of the options against the objective and levy design principles and criteria.
- 20. 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), and

³ EECA's functions and powers are set out in the Energy Efficiency and Conservation Act 2000.

⁴ 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.

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- 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.
- 21. 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 2015⁵.
- 22. Coal is considered out of scope. 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 for repurposing. The existing levy⁶ is only on coal extracted at open-cast mines, not on coal consumed in New Zealand⁷, so an expansion would not sufficiently meet the design principles and criteria (discussed below)⁸. 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 recovered⁹.

The existing levies that could be expanded

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

Electricity industry participants levy (the electricity levy)

24. 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"¹⁰.

⁵ Energy in New Zealand 2015. Ministry of Business, Innovation and Employment.

⁶ Under the Energy Resources Levy Act 1976.

⁷ 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.

⁸ 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.

⁹ The amount that would be levied is estimated to be less than \$875,000 per year (based on five percent of \$17.5 million).

¹⁰ In 2015/16 the Electricity Authority received \$77 million and ECCA received \$13 million from the electricity participants levy.

- 25. 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.
- 26. 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.

Petroleum and engine fuels monitoring levy (PEFML)

- 27. The PEFML is provided for in the Energy (Fuels, Levies and References) Act 1989, and is collected on transport fuels (petrol, diesel, ethanol, and biodiesel¹¹). The levy covers fuelquality 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.
- 28. The PEFML is currently set at 0.045 cents per litre, which will increase to 0.2 cents per litre on 1 July 2016. 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

29. 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 feedstock for generation of electricity or liquefied petroleum gas) is two cents per gigajoule. This rate is set in the legislation.

Options for consideration

Status quo: EECA levy funding from electricity levy for electricityefficiency activities

30. 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

¹¹ 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".

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energy-efficiency activities require reprioritisation of its work programme, new funding, or they will not be funded.

Option 1: Electricity levy with expanded purpose

31. This option is to 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. Under this option, EECA would continue to collect its levy-funded revenue only from the electricity levy. EECA would also continue to consult annually on its levy-funded work programme.

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

32. The electricity levy is currently charged as a rate on electricity purchased from the wholesale market per megawatt (MWh). An alternative way to charge the levy could be per customer (revised to an amount per Installation Control Point (ICP)¹². All other design aspects remain the same as the current electricity levy¹³.

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

33. Another way the cost could be reallocated within this levy is if it is charged at a rate on electricity generated. The rate would be charged per megawatt (MWh) generated. All other design aspects remain the same as the current electricity levy.

Option 2: Existing electricity levy + PEFML with expanded purpose

- 34. 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.
- 35. This option expands the purposes of the PEFML levy under the Energy (Fuels, Levies and References) Act to include recovery of some of EECA's costs for performing its functions in relation to the encouragement, promotion, and support of energy efficiency, energy conservation and the use of renewable sources of energy.
- 36. 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.
- 37. This option could include a requirement for the expanded PEFML to be adjusted more often, 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 before decisions are made. The electricity levy would

¹² 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.

¹³ Retailers are already levied by ICP by the Electricity Authority for registry/consumer operations and consumer participation operations.

continue to fund electricity-efficiency activities, and the PEFML would be used to recover the cost of activities related to transport. Any unspent levy would be refunded.

38. 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 or levy payers. An example is the promotion of LEVs, which could be allocated to PEFML levy funding because it promotes the use technology that uses renewable energy for transport, replacing the non-renewable transport fuels that the PEFML levies.

Option 2A: exempt biodiesel and ethanol

39. 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.

Option 3: Existing electricity levy + PEFML with expanded purpose + gas levy with expanded purpose

- 40. 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.
- 41. As with option 2 above, the levy rate would be adjusted annually in a process similar to how the EECA allocation of the electricity levy is currently set. This would mean that, each year, EECA would consult with levy payers on its proposed work programme, and report that consultation to the Minister 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 refunded.
- 42. As above, 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.

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

- 43. 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.
- 44. The 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 that is consulted on annually.

An assessment of the options against the design principles and criteria

Design principles and criteria for assessing options

45. In formulating the discussion document, we have taken into account The Treasury's "Guidelines for Setting Charges in the Public Sector", December 2002 and the Controller and Auditor-General's "Charging fees for public sector goods and services", June 2008. The following criteria are applied to assess the options:

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 and/or that energy is non-renewable. 'Beneficiaries' will be those who benefit from the outcomes of the activities (described in the Background section). These outcomes will benefit all New Zealanders, but there are more group-specific benefits applicable to certain options, such as where there may be a commercial benefit for a particular group. These are discussed for applicable options in the Assessment 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.

46. The options are also assessed 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.

Assessment by option

47. A summary of the below assessment is provided in Table 1.

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

- 48. The status quo is notable for being fairly administratively simple and very 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, and publish the final allocation. Any unspent levy is refunded annually. It is strong for causer pays but only regarding electricity efficiency.
- 49. However, 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. 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.
- 50. 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.

Option 1: Electricity levy with expanded purpose

- 51. Expanding the purpose of the electricity levy meets the criteria of administrative simplicity and transparency for the reasons outlined above.
- 52. The levy is paid by electricity industry participants only and is ultimately passed onto 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.
- 53. However, 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 is assessed as strong in regards to the 'causer pays' principle.
- 54. In regards to the 'beneficiary pays' principle, it could also be argued that electricity consumers 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. There may also be some benefit for electricity retailers if any activities to encourage the use of renewable energy increases the use of electricity (for example, through the accelerated and widespread uptake of EVs).
- 55. This option is moderate in terms of the rationality principle because the strength of the logical link between levy payers and the activities the levy funds would depend on the mix ISBN 978-0-947497-55-2

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.

56. Linked to this, this option is less equitable than the status quo because charging based on consumption means larger consumers pay a larger proportion of the costs. This is not as fair if the levy is funding a range of measures where the causer is non-electrical energy use.

Option 1A: Electricity levy – Expanded purpose – revised design to a rate per customer

57. 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.

Option 1B: Electricity levy - Expanded purpose – revised to a rate on electricity generated

- 58. 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.
- 59. 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 strongly than option 1 or 1A. 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.
- 60. 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.

Option 2: Existing electricity levy + PEFML with expanded purpose

61. 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 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 will apply to all New Zealanders.

- 62. In terms of the rationality principle, using the PEFML is strong because a large portion of the programmes to increase the use of renewables will be directed at transport fuel use. Where activities are about fuel switching for industrial heat, a lot of the fuel being replaced will be diesel. Note that under the design of this option, gas-related activities would continue to be funded from EECA's non-levy funding.
- 63. 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 moderate. 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 reporting requirements as the 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.
- 64. In regards to transport-energy activities, using the PEFML is strong in relation to the equity principal, because the levy is consumption-based (per litre), so consumers are treated equally, in that they pay according to their contribution to emissions.
- 65. 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 users, not relying on electricity to be an indirect proxy for all non-renewable and/or inefficient energy users.
- 66. Maintaining the status quo regarding the fuels that are levied will be the most administratively simple of the two options. However, in terms of rationality, it is arguable that consumption of biofuels should not be levied. This issue is discussed further below.
- 67. Finally, in terms of meeting the objective to provide more flexibility regarding how overall funding is spent, there is some restriction with this option because specific activities can only be allocated where allocation has strong justification e.g. funding of activities to encourage the uptake of renewables will continue to be allocated from EECA's Crown funding, unless justification can be made to allocate costs to a particular group of levy payers.

Option 2A: exempt biodiesel and ethanol

68. 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 emissions¹⁴. Therefore, while the rationality principle is very strong for levying petrol and diesel, it is not as strong for biodiesel and ethanol.

¹⁴ Although the burning of biofuels produces carbon dioxide emissions similar to those from ordinary fossil fuels, the plant feedstock used in the production absorbs carbon dioxide from the atmosphere when it grows. This can be dependent on production methods and the type of feedstock used. In New Zealand, tallow and canola are the main feedstocks used for biodiesel, and these feedstocks contribute much less carbon than fossil fuels (currently, around 80 per cent of the biofuel that New Zealand consumes is produced domestically).

- 69. 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. 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 (typically, 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.
- 70. 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, the mineral fuel but not the biofuel portion, of blended fuel. This does not align with the administrative simplicity criterion.

Option 3: Existing electricity levy + PEFML with expanded purpose + gas levy with expanded purpose

- 71. To align most strongly with the causer pays principle, users of all forms of energy 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.¹⁵
- 72. The issue with levying multiple energy sources is that it is difficult to meet the 'rationality' principle. For example, where levy funds will meet the cost of transport-energy activities, the logical link to gas consumption is much weaker (compared to, say, activities to improve the efficiency of gas appliances).
- 73. However, this rationality principle could be satisfied by applying the existing consultation, reporting and refund 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 before final decisions are made. This would also ensure that the levy was transparent.
- 74. Under this model, the electricity levy would continue to fund electricity-efficiency activities, activities related to transport fuels would be funded from the PEFML, and gas-related activities would be funded from the gas levy.

Option 3A: Existing electricity levy with expanded purpose + PEFML with expanded purpose + gas levy with expanded purpose - set allocation (30:50:20)

75. This option is strongly aligned with the 'causer' or 'beneficiary pays' principle, because it recovers costs from the vast majority of the energy users. It 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 particular groups of levy payers only contribute to the specific activities

¹⁵ This option would only expand the gas portion of this levy because levying electricity participants is better achieved using the electricity participant's levy.

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.

76. 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 ECCA's activities so the activity need not be linked back to a specific fuel levy. This option is also administratively simple. However, there is a trade-off in terms of transparency and meeting the 'rationality' criterion. Some additional review and reporting requirements could be introduced to improve transparency.

Conclusions

- 77. All options for change meet the objective of providing EECA with greater flexibility in terms of how it allocates its existing funding across different activities, with options 1 and its variations, and 3A providing the most flexibility. However, this is at the expense of the rationality principle, which seeks closer links between actual activities and specific fuel levies.
- 78. Option 1 (and its sub-options) more strongly meets the administrative simplicity and transparency criteria, while options 2 and 3 more strongly meet the causer or beneficiary pays criteria, and rationality criteria. Option 3A is strong on meeting the causer or beneficiary pays criteria, and on administrative simplicity criteria, but is lower in terms of transparency and the rationality criteria.
- 79. The measures included in options 2 and 3 to increase the level of transparency and rationality come at the expense of administrative simplicity. There may be alternative ways of providing transparency to improve option 3A.

Next Steps

- 80. We are interested in your views on the options for expanding the purpose of one or more existing levies.
- 81. You may wish to use the reply form on the following page to submit views on this discussion document.

Table 1: Summary of analysis of options

	Objective	Causer pays	Beneficiary pays	Rationality	Administrative simplicity, transparency	Equity
Status quo	Does not meet objective	Strong (for electricity efficiency)	Moderate	Strong	Strong. Consultation requirement increases transparency, but adds administrative complexity	Strong
Option 1 : Electricity levy with expanded purpose	Meets objective strongly, in that any of EECA's activities can be undertaken using levy funding	Strong (indirectly)	Moderate	Moderate	As above	Not strong
Option 1A : Electricity levy with expanded purpose – revised to a rate per customer	As above	Strong (indirectly)	Moderate	Moderate	As above	Stronger than option 1
Option 1B : Electricity levy with expanded purpose – revised to a rate on electricity generated	As above	Strong (indirectly)	Arguably stronger in comparison to options 1 and 1A	Moderate	As above	Mixed – depending on how costs passed on
Option 2 : Existing electricity levy + PEFML with expanded purpose	Meets objective but some restriction	Strong	Strong	Arguably moderate if biofuels levied	Strong on transparency, but adds administrative complexity	Strong
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 (especially if biofuels excluded)	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, but weaker on transparency	Strong

Reply form

Name:	
Email address:	
Organisation:	
Please identify your sector:	
What are your views on the objective of this proposal? Do you agree or disagree with it? Why?	
What do you think is the appropriate balance between 'administrative simplicity/transparency' and the 'causer or beneficiary pays' and 'rationality' criteria? Should more weight be given to one over the others?	
Which option do you think provides the best balance?	
What is your preferred option?	
Why do you consider this the best option?	
Of the options you do not prefer, what issues or reasons do you think are most important for us to consider?	
Are there other options for providing transparency in the use of levy money (besides requiring annual consultation and reporting)?	