

Greenpeace New Zealand
30 April 2018

Hon Sir Michael Cullen
Tax Working Group Secretariat
PO Box 3724
Wellington 6140
New Zealand

Greenpeace submission to the New Zealand Government's Tax Working Group on the Future of Tax

Summary:

New Zealand's water quality, soil health, and biodiversity are in decline, and emissions of dangerous greenhouse gases are increasing. We have a moral obligation to future generations to curb this degradation and restore our natural environment.

Perverse environmental outcomes have often resulted from market failures. These failures unjustly place the cost of environmental degradation onto society, rather than those responsible. Greenpeace supports the Government using taxation as a way to correct for these failures for the benefit of the environment and the New Zealand public.

The OECD acknowledges that many environmental taxes implemented by its member countries are poorly designed and targeted. Too often, big polluters are exempt from an environmental tax due to unjustified competitiveness claims, compromising its environmental effectiveness and leaving the wider public to cover the cost. Greenpeace urges the Government to stand up to lobbyists and polluters and implement environmental taxes with as few exemptions as possible, and at rates which drive behaviour change.

Greenpeace advocates that the revenues from new environmental taxes be used to provide an income tax free threshold.

Submission:

Dear Hon Sir Michael Cullen,

Greenpeace New Zealand, Inc. (Greenpeace) thanks you for the invitation to provide our views on ways to improve the fairness, balance and structure of the tax system in New Zealand over the next 10 years. The following submission will focus on environmental taxes.

The case for environmental taxes

Nearly all of New Zealand's state of the environment reports, such as Our Land 2018 reportⁱ, Our Fresh Water 2017 reportⁱⁱ and New Zealand's Greenhouse Gas Inventory 1990-2016ⁱⁱⁱ show that we now face multiple worsening environmental crises. These New Zealand trends are symptomatic of world-wide trends, which threaten ecosystem services and life on earth. This is a moral challenge with intergenerational implications – our current actions are threatening the

very existence of future generations – which calls for system-wide interventions on multiple levels and taxation can play a key role.

Systemically damaging outcomes are often the result of the failure of markets to price the environmental costs of economic activity. Because of the normalisation of societal values that treat environmental costs as externalities, polluting activities are underpriced in the market. Society is left to pick up the tab for environmental clean-up, often at taxpayers' expense.

A well-designed environmental tax can adjust the price of a good or activity to reflect its true cost, including the environmental impacts that it creates over its full life-cycle. Essentially environmental taxation cost-effectively encourages consumers, primary producers and firms to take account of the cost to society of their pollution, driving behavioural change.^{iv} Furthermore, environmental taxes lead to increased resource efficiency, thus decreasing resource demand and reducing environmental change.

Environmental taxes have the advantage of giving businesses, state sector and households the flexibility to determine how to reduce their pollution, which enables lowest-cost solutions and provides an incentive for innovation.^v This can complement regulatory approaches which involve the Government specifying how or who should reduce pollution.

Greenpeace urges the Government to use this *Future of Tax* review as an opportunity to implement a system of taxation that directly and openly addresses our environmental degradation and its unsustainable and unjust consequences.

Greenpeace is heartened to see that the future of tax is being considered within the context of a commitment by the Prime Minister and Finance Minister to measure the economy in a new way.^{vi} As noted in the Submissions Background Paper, GDP can be an important enabler of higher living standards, but it is not designed to be a measure of wellbeing. Perversely, the cost of cleaning up the environment is counted as a positive in GDP measurements. In an extreme example, this has led BP to try to justify drilling in the Great Australian Bight by saying, should there be an oil spill, "in most instances the increased activity associated with cleanup operations will be a welcome boost to local economies."^{vii}

We welcome the Government's use of the Living Standards Framework which identifies that wellbeing is generated by the combination of four interdependent capital stocks: financial/physical capital, human capital, social capital and natural capital. Using this approach to contextualise the last three decades of Government policy – it becomes clear that successive Governments have been privileging financial capital in economic decision making while overlooking the social, human and environmental impacts. Growing environmental degradation and social inequity provide compelling evidence that it's time to rebalance our economic decision-making in favour of human, social and environmental health.

When we take stock of our environment – the fact that the majority of our monitored lowland rivers are unsafe for swimming, that our species loss is among the highest in the world, and that we are losing soil at an alarming rate – it becomes obvious that we haven't been valuing natural capital enough. Our natural environment is our life support system: not only is it important for our wellbeing, it is essential for our survival. It's important that our national conversation about the economy in general and our tax system in particular, places greater emphasis on environmental health. Therefore, Greenpeace welcomes the Government's stated intention to fully adopt the Living Standards Framework.

Principles of good environmental tax design

The OECD acknowledges that many environmental taxes implemented by its member countries are poorly designed and targeted.^{viii} To illustrate, quite a number of taxes that are defined by the OECD as environmental taxes are not designed for the purpose of influencing pro-environmental behavior but rather for generating revenue. These taxes are nevertheless defined as environmental taxes because they are levied on tax bases that have negative impacts on the environment. For example, in some countries, such as New Zealand, petrol taxes are levied to generate revenue for transport infrastructure, predominantly roads.

Furthermore, a study of EU member states found that the competitive position of affected sectors is the major concern expressed in relation to the design of environmental taxes, and as a result, the largest polluters are frequently exempt from the tax, compromising its environmental effectiveness.^{ix} This is despite evidence that, "in relation to carbon and energy taxes, there is growing econometric evidence that the immediate competitiveness impacts of existing carbon pricing mechanisms are negligible or nil."^{ibid} And a study of environmentally related taxes and charges on nitrous oxide, water abstractions, waste water discharges, pesticides, fertiliser, landfill, aggregates, packaging and batteries, showed that "exemptions were too often granted based on a static assessment of the effects of market-based policies, ignoring their dynamic efficiency effects."^{ibid}

The purpose of environmental taxes should be to improve environmental outcomes. As such, the following principles of design should apply:

- the tax should be levied as close to the environmentally damaging pollutant or activity as possible;
- the tax should be broadly applicable (i.e. as few exceptions as possible);
- and the tax should be set at an adequate rate.^{x, xi}

Environmental taxation in New Zealand

Environmental taxation in New Zealand accounts for 4.2% of revenue and 1.3% of GDP, which is below the OECD average.^{xii} Most of this revenue is collected through taxes on consumption of energy products (54%) and vehicle ownership (45%).^{xiii} Taxes on pollution and resource use aren't employed much in New Zealand: the Government has only implemented the Waste Disposal Levy on waste to landfill and the Synthetic Greenhouse Gas (Goods) Levy on imported products

containing the greenhouse gases hydrofluorocarbon and perfluorocarbons.

As noted in the Submissions Background Paper, New Zealand's resource-based economy and the wellbeing of our population are heavily dependent on protecting our natural environment. However, the New Zealand Government has historically shown a highly permissive attitude to environmentally-damaging activities and forms of pollution. The effect has been a substantial erosion of our natural environment, as evidenced by rising greenhouse gas emissions, increasing freshwater pollution and scarcity in some regions, species extinction rates among the highest in the world, and increasing emissions of major air pollutants.^{xiv}

In order to address the market failure and lack of regulation that have enabled this environmental degradation in New Zealand, we recommend that the Tax Working Group consider implementing the environmental taxes explored below. We have focused our recommendations on addressing the issues of climate change, freshwater degradation and ocean health, because these are particular priority issues for Greenpeace. However, we welcome the use of environmental taxes to achieve other environmental objectives as well.

Climate change

New Zealand is not pulling its weight when it comes to addressing climate change: on a per capita basis, New Zealand's emissions are the fifth highest in the OECD, and our emissions are growing. This brings up equity issues. Our inaction now will mean forcing other countries or future generations of New Zealanders to pick up our tab, or face the consequences of catastrophic climate change. Greenpeace sees a vital role for taxation in addressing our climate change obligations.

Price agricultural emissions

Greenpeace is concerned with the market distortion resulting from agriculture's exemption from the ETS. By not exposing agriculture, in particular dairying, to the ETS, the New Zealand public is subsidising and incentivising polluting land uses and polluting land use practices, as well as sending the wrong investment signals. Since 1990 the number of dairy cows has nearly doubled, and the use of synthetic nitrogen fertiliser has increased seven-fold.^{xv} The dairy industry alone is now responsible for nearly a quarter of all of our greenhouse gas emissions. This industry, and the wider agriculture industry, must be brought into the ETS immediately. Greenpeace advocates for an "all gases, all sectors" approach to the ETS which is administratively easier than a scheme which differentiates between short-lived and long-lived greenhouse gases. Given that agriculture is New Zealand's largest emitter and is responsible for 49% of gross emissions (38.7 Mt CO₂-e)^{xvi} exposing agriculture to 100% of its emissions would lift the Crown accounts by billions. In 2016, when the two-for-one ETS subsidy was removed, the Government calculated that it would "positively impact the operating balance by \$356 million over the next four years, based on a New Zealand Unit price of \$12."^{xvii}

Failing to bring agriculture into the ETS places a disproportionate burden on other sectors of the economy and slows agriculture's adjustment to a low carbon future. The argument that there are not yet sufficient technological solutions for reducing ruminant livestock emissions as grounds for not being included in the ETS is spurious. Reducing the dairy herd would be an obvious solution and won't necessarily impact on farmer profit. Between 2003 and 2013 the average dairy farmer added 100 cows to their herd, but Dairy NZ scientist John Roche says they're no better-off financially because they have had to spend more on supplementary feed and are damaging the environment in the process.^{xviii} A price on agricultural emissions would incentivise profitable business models with fewer cows and fewer inputs.

Price carbon to incentivise forestry

Greenpeace supports any changes to the ETS that increase the price of carbon, such as instituting a price floor, removing the price cap, leaving the ETS closed to international markets and auctioning of units.

A stronger price signal will incentivise afforestation which will be essential if we are to meet our climate targets. Research by the NZ School of Forestry at University of Canterbury forecast limited afforestation beneath a carbon price of \$15/NZU but forecast a planting rate of 13,900 ha/year at \$15/NZU increasing to 27,600 ha/year at \$30/NZU and to 50,500 ha/year at \$50/NZU.^{xix}

Greenpeace advocates for the Government to incentivise planting of permanent biodiverse forests, which have significantly higher ecological benefits than radiata pine. We also support changes to the ETS that would recognise the carbon sequestration of agro-forestry – the practice of planting trees into grazing pasture.

Furthermore, we would recommend that the Government consider opening the NZ ETS to credible Pacific carbon credits at some point as a way to support projects in the Pacific.

Implement a coherent system of fuel and vehicle taxes and charges

New Zealand's transport-related greenhouse gas emissions are high and increasing.^{xx} New Zealand's vehicle fleet is old and carbon intensive and the current transport tax/charge system isn't geared to improve transport's environmental impacts. For example, New Zealand is the only OECD country not to have a fuel excise duty on diesel, which is instead subject to road user charges. The road user charges are structured so that all light vehicles (weighing less than 3.5 tonnes) face the same rate, and so there is no incentive for New Zealanders to move to using lower-emission and more fuel-efficient vehicles. Furthermore, New Zealand's fuel excise duty is comparatively low. New Zealand's tax rates on road fuels are among the lowest in the OECD.^{xxi}

Both the fuel excise duty and the road user charges for diesel vehicles are set according to the fiscal requirements of new land transport projects, and do not attempt to internalise the environmental externalities of road transport. Diesel, for example, generates harmful NOx emissions and fine particulate matter which are associated with adverse human health effects. In New Zealand, national air quality

standards are exceeded near busy roads in some urban areas, and the number and cost of premature deaths from exposure to particulate matter is projected to rise over the next 50 years.^{xxii} In line with OECD recommendations, Greenpeace suggests that the Government introduce an excise duty on diesel and increase the tax rate for both petrol and diesel to ensure that the rates account for the environmental costs of transport.^{xxiii}

Further, Greenpeace suggests a fiscally neutral change to the way that vehicle registration fees are set. Currently all road vehicles are subject to a one-off registration fee and periodic licensing fee which do not account for the vehicles' environmental performance. Greenpeace suggests making these fees vary according to environmental performance in order to incentivise the uptake of vehicles with greater fuel-efficiency and fewer emissions.

Analysis by the OECD shows that fringe benefit tax has negative environmental consequences because it favourably taxes the benefits derived from the personal use of company cars and does not incentivise employees to limit company car use or to choose more fuel-efficient vehicles. They estimate that this favourable tax treatment led to approximately \$253 million in lost revenue in 2012.^{xxiv} Greenpeace suggests taxing company car benefits fully, in order to create more Government revenue and eliminate the associated environmental externalities caused by the preferential tax treatment of personal company car use.

Eliminate environmentally harmful subsidies

Greenpeace strongly urges the Government to end all support for fossil fuels, because this support runs counter to our efforts and obligations to address climate change.

The Government could increase its fiscal position by \$30 to \$40 million per year and reduce carbon emissions by eliminating refunds for excise duty payments for off-road users of fuels.^{xxv} Up to \$20 million of further revenue could be obtained by eliminating all further environmentally harmful subsidies for the petroleum industry, such as the non-resident drilling rig and seismic ship tax exemption, indemnity for mining land remediation, research and development funding for the oil industry, tax deductions for petroleum-mining expenditures, and the petroleum tax and royalty regime.^{ibid}

The tax and royalty regime for petroleum is designed to attract investment in oil and gas exploration, but there is no justification for supporting petroleum exploration when the reality of climate change means we can't burn most of the fossil fuels that have already been discovered. Our Government take (royalties plus taxes) for petroleum is the fourth lowest in the world,^{xxvi} well below the 61-65% average among OECD countries with appreciable petroleum exploration activities.^{xxvii} We therefore recommend that the Government take for petroleum double from 42% to 84% to ensure that New Zealanders receive their fair share of profits generated from this common resource, as well as incentivizing the shift away from fossil fuels towards renewable energy.^{xxviii} If production remained the same as 2017 levels, then

petroleum royalties would increase yearly Government revenue by around \$170 million.^{xxix}

Freshwater

New Zealand's freshwater is in crisis. 70% of monitored rivers are unsafe for swimming,^{xxx} 44% of monitored lakes are in heavily polluted (eutrophic) states,^{xxx1} and 72% of native freshwater fish are threatened with extinction.^{xxxii} Aquifers are also in decline. According to the Ministry for the Environment, 71% of monitored groundwater sites did not meet the drinking water standard for *E. coli* at least once. For nitrate-nitrogen, the figure was 13%.^{xxxiii}

Driven by conversion of land into intensive dairying and other agricultural intensification, the nitrogen balance between 1998 and 2009 worsened more than in any other OECD country. Nitrate pollution is worsening in over half of monitored rivers, with dairying being the main source of nitrogen pollution.

Greenpeace supports the OECD recommendation that New Zealand expand the use of economic instruments to internalize environmental costs, promote innovation and encourage the efficient use of water (quality and quantity).^{xxxiv} Greenpeace acknowledges that taxation must be supported by a strengthened regulatory environment, increasing bottom lines for water quality and quantity so that they protect human and ecosystem health, and must be done while fulfilling obligations to Māori as Treaty partners.

Capital gains tax

Greenpeace supports a comprehensive capital gains tax. Not only does a capital gains tax improve equity, it will also improve environmental outcomes because many New Zealand farmers are farming for capital gains rather than production. Without a capital gains tax we have a situation where farmers are incentivised to borrow heavily for farms and then claim the cost of the interest payments against their tax bill, so they pay little tax. They can then make a tidy profit which is tax-free capital gains when they sell the farm.^{xxxv} A 2008 survey of dairy farmers in the Canterbury and North Otago regions identified that 64% of dairy farmers ranked farming for capital gains as "very important" or "important".^{xxxvi} These areas are particularly prone to water quality and over-abstraction issues, which highlights the importance of introducing a capital gains tax to stop people from farming for capital gains rather than production.

Pollution tax

Greenpeace recommends the introduction of a pollution tax on nitrogen and phosphorous that is leached from farms, levied at a rate that reflects the significant social costs of the pollution and leads to improvements in water quality by incentivising a significant transition away from high intensity farming and damaging land-use practices like overstocking and intensive chemical fertiliser use.

According to the Ministry for the Environment, dairy cattle contributed 50 million kilograms of nitrogen leachate in the soil in 2012, while sheep accounted for around 40 million kilograms and beef cattle around 20-25 million kilograms.^{xxxvii}

Removing nitrogen and phosphorous from freshwater is extremely costly. For example, costs for the removal of nitrogen from the Rotorua Lakes using constructed floating wetlands range from NZ\$14,000/tonne N (\$14 kg/N)^{xxxviii} to \$4 million/tonne N (\$4,000 Kg/N) and around \$250,000/tonne P (\$250 Kg/P).^{xxxix}

Currently, diffuse pollution outputs are measured with OVERSEER, a proprietary system (owned by the Ministry for Primary Industries, AgResearch Limited and the Fertiliser Association of New Zealand)^{xi} that models on farm flows of nutrients and estimates nutrient loss to air, soil and across the land. It has not been validated on the majority of New Zealand soils.

In order for a taxation system for farm pollution to be effective, the nutrient modelling instrument must be validated on New Zealand soils and must not be owned or influenced by the fertiliser industry which has a vested interest in selling more chemical nitrogen and phosphorous fertilisers. Greenpeace recommends either replacing OVERSEER or amending it so that is a fully publically owned, open-source nutrient loss accounting system that is validated on New Zealand soils.

Fertiliser tax

Greenpeace also recommends a tax on chemical fertiliser use. The application of nitrogen has increased seven-fold between 1990 and 2016, having increased from 59,200 tonnes in 1990 to 432,000 tonnes in 2016.^{xii} Chemical nitrogen fertiliser and superphosphate are key drivers of intensive agriculture and the climate and freshwater impacts associated with this industry.

In the mid to late 1990s Sweden levied a nitrogen tax on fertilisers which amounted to about 20% of the price of the fertilisers, and used the revenue to finance deintensification programmes and research. Evaluations of the levy indicated that the charge had some impact on fertiliser use, but the main benefit to water quality was the financing of de-intensification programmes.^{xiii}

Greenpeace suggests the introduction of a New Zealand tax on synthetic nitrogen and superphosphate fertilisers that is designed to result in a major decrease in their use and creates positive environmental outcomes. Experience from overseas suggests that complementing these taxes with policies to encourage regenerative farming practices would likely result in even greater environmental outcomes.

Pesticide tax

A number of countries, such as Norway, France, Demark, Sweden, and Italy have taxed the use of pesticides – each with differing tax schemes. For example, Norway's tax was levied on the negative human health and environmental effects and taxed per kilogram or litre of pesticide, while France had categories of pesticide with differing rates. Evaluation of these taxes showed a significant decrease in pesticide use was only achieved in those Scandinavian countries where the pesticide tax was higher and accompanied by complementary policies encouraging sustainable agriculture.^{xiiii}

Comprehensive and reliable data on pesticide use in New Zealand is difficult to obtain because importation classifications are too broad and the sector's membership organisation captures incomplete information. However, a Government study estimates that pesticide imports grew 12% between 1999 to 2003 and in 2003 were valued at US\$72m. Over this period pesticide imports constituted about 1% of the annual value of New Zealand's agricultural exports (US\$8b).^{xliv}

Greenpeace suggests the introduction of a New Zealand pesticide tax that is based on health and environmental effects and is levied at a rate that leads to a decrease in use and environmental outcomes.

Volumetric water charge

Greenpeace recognises that water ownership issues in New Zealand have not been resolved and acknowledges Māori interests in water as a Treaty partner. We agree with the OECD which says that New Zealand needs to further clarify and recognize Māori community rights and interests in water before the Government can ensure effective water policies.^{xlv} Provided that these issues are resolved, Greenpeace suggests putting a charge on commercial water use, including for irrigation, in order to drive water use efficiency.

Oceans

New Zealand's marine environment is under pressure from both extractive industries, such as mining and fishing, and pollution discharges such as plastic pollution. For example, 17% of our fish stocks have been over-fished and 6% have collapsed, despite having a large and comprehensive quota management system (QMS).^{xlvi} Furthermore, ongoing research by the Auckland University Institute of Marine Science has shown that seven of eight fish species common in New Zealand ate plastic on a regular basis.^{xlvii} This risks New Zealanders' health and our fisheries, as well as our international reputation. We also have a moral responsibility to look after the wildlife with which we share this planet. Greenpeace advocates for taxes that can help address these issues.

Resource rental on fish

New Zealand imposes royalties on the extraction of natural resources such as petroleum, and minerals such as gold and silver. As the Submission Background Paper states, this is often an attempt to capture a "rent" on the profit generated by a miner over and above a reasonable economic return, and ensures that the public gets a fair share of the profits generated from the use of the country's resources. Although fishing companies are profiting from a common resource, they do not currently pay royalties or a resource rental tax.

Iceland has a system of individual transferable quota, similar to our quota management system. Historically, Icelandic fishing firms paid fees to the Government to finance the fisheries management system, but starting in 2012, Icelandic fishing firms began paying a resource rent tax which was composed of a general part that replaced the previous fishing fees, and a special part aimed at collecting part of the resource rent.^{xlviii} According to Dr Glenn Simmons of Auckland University, the Icelandic resource rental tax was an important catalyst

for innovation and helped shift Icelandic fishing firms away from a business model of producing commodity products and towards a value add business model.^{xlix} The OECD says, “the fact that the Icelandic fishing industry can pay a special resource rent tax on top of other taxes and at the same time receives no subsidies, can be seen as a sign of its economic efficiency.”^l

In the early days of the QMS, New Zealand fishers paid a resource rent, determined on the basis of quota values, the expected net returns of fishers and other factors considered important by the regulator.^{li} However, New Zealand then moved away from the resource rental and adopted a cost recovery approach. Mindful of the need to work through Treaty implications, Greenpeace recommends that the New Zealand Government re-introduces a resource rent on commercially caught fish to ensure that the public receive a return on the private use of a common resource.

Waste levy

Incentivising the diversion of waste to landfill is increasingly important given that, earlier this year, China banned the import of certain types of waste that we have previously exported for recycling.^{lv} Last year, New Zealand sent \$21m worth of waste to China, of which \$8.2m was plastic waste.^{lvi} Currently, some New Zealand waste companies are stockpiling plastics, waiting for new Asian markets to become available,^{lvii} and the concern is that this waste will end up in landfill. Currently half of the funds generated by the waste levy go into the Waste Minimisation Fund, so increasing the levy to an adequate level could create the funds for onshore processing of products that were formerly recycled in China, preventing them from ending up in our landfills.^{lviii}

Container deposit scheme

To help increase the recovery of single-use plastic bottles and reduce virgin plastic production, Greenpeace supports Kiwi Bottle Drive’s campaign for a container deposit scheme whereby a 10c levy is included in the price of a drink and this amount is refunded when the container is returned to a drop-off point.

Marine plastic pollution is impacting on our oceans, and a container deposit scheme can help address the problem. A study of container deposit schemes in the United States and Australia found that the proportion of containers found in coastal debris surveys in states with a container deposit scheme was approximately 40% lower than in states without such schemes.^{lviii} This is strong evidence that container deposit schemes can be an effective management tool for reducing coastal plastic waste.

New Zealand’s recycling rates for beverage containers are estimated to be less than 40%, which means the majority of the bottles end up in landfill or as litter. Container deposit schemes can increase recovery rates to 82%, as was achieved by the South Australian container deposit scheme. According to a model developed by Envision, a container deposit scheme can be implemented in New Zealand with no fiscal costs if the Government takes certain steps available to it under

the Waste Minimisation Act 2008. Estimated system costs of \$10 million would either be absorbed by beverage producers or passed on to consumers in beverage prices - equating to about 0.5 cents per beverage container.^{lix}

There is widespread support for a deposit-refund scheme for beverage containers in New Zealand: 83% of New Zealanders support a scheme and the recent Local Government Waste Manifesto has named it among the top five priorities for councils.^{lx} This support is unsurprising considering that modeling suggests a container deposit scheme will at least double the quantities of all beverage containers recovered, divert at least 45,865 tonnes of containers from landfill, and save New Zealand ratepayers between \$26 million and \$40 million per annum.^{lxi}

Revenue – opportunity for “double dividend”

Greenpeace advocates for the revenues from new environmental taxes to be used to provide an income tax free threshold, in order to ensure that environmental taxation is paired with socially just outcomes. This would have the effect of shifting tax from “goods” such as taxing labour, to “bads” such as pollution. This is considered economically efficient and creates a “double dividend” through both a positive environmental outcome as well as a positive social outcome. This type of tax shift is often referred to as environmental fiscal reform or a green tax shift. Environmental tax shifts have been implemented in European countries such as Sweden and Germany.

Environmental taxes are designed to influence producer and/or consumer behavior away from the taxed good or service, so if they are effective, they will lead to tax base erosion over the long term. This implies a need to review taxes periodically and increase them if additional revenue is needed. Further, environmental taxes are likely to reduce in efficacy if they are not increased with inflation. Greenpeace suggests that the Government set up an Environmental Taxation Committee in order to evaluate and refine environmental taxes as needed.

Conclusion

Environmental taxes function most effectively when they have a broad base with as few exceptions as possible. However, we see that in many cases exceptions are made for the biggest polluters who cite competitiveness concerns. We urge the Government to stand up to the narrowly-defined self-interest of polluters and implement strong environmental taxes that lead to measurable positive environmental effects. Not requiring polluters to pay simply means the cost of their pollution falls onto the rest of society, resulting in a taxpayer subsidy for polluting industries.

As you well know, the economy is a subset of the environment, and we depend on our environment for our survival. We simply cannot continue on our current path of environmental degradation. We hope that you will take this opportunity to rebalance the tax system for the sake of intergenerational equity and wellbeing.

ⁱ <http://www.mfe.govt.nz/sites/default/files/media/Environmental%20reporting/Our-land-2018.pdf>

ⁱⁱ http://www.mfe.govt.nz/sites/default/files/media/Environmental%20reporting/our-fresh-water-2017_1.pdf

ⁱⁱⁱ <http://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/National%20GHG%20Inventory%20Report%201990-2016-final.pdf>

^{iv} <https://www.oecd.org/tax/tax-policy/environmental-fiscal-reform-G7-environment-ministerial-meeting-june-2017.pdf>

^v <https://www.oecd.org/env/tools-evaluation/48164926.pdf>

^{vi} http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12035576

^{vii} <https://thenewdaily.com.au/news/world/2018/04/06/bp-oil-spill-australia-good/>

^{viii} <https://taxworkinggroup.govt.nz/sites/default/files/2018-03/twg-subm-bgrd-paper-mar18.pdf>, p 49.

^{ix} <https://www.oecd.org/tax/tax-policy/environmental-fiscal-reform-G7-environment-ministerial-meeting-june-2017.pdf>, p 14.

^x <https://www.oecd.org/env/tools-evaluation/48164926.pdf>, p 12

^{xi} <https://www.oecd.org/tax/tax-policy/environmental-fiscal-reform-G7-environment-ministerial-meeting-june-2017.pdf>, p 41

^{xii} <https://taxworkinggroup.govt.nz/sites/default/files/2018-03/twg-subm-bgrd-paper-mar18.pdf>, p 49

^{xiii} https://read.oecd-ilibrary.org/environment/oecd-environmental-performance-reviews-new-zealand-2017_9789264268203-en#page140

^{xiv} <http://www.eds.org.nz/assets/MediaReleases/2017%20Releases/OECD%20Enviromental%20Performance%20Review%20NZ%202017%20HIGHLIGHTS.pdf>

^{xv} <http://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/National%20GHG%20Inventory%20Report%201990-2016-final.pdf>, p 145, 187.

^{xvi} <http://www.mfe.govt.nz/climate-change/state-of-our-atmosphere-and-climate/new-zealands-greenhouse-gas-inventory>

^{xvii} <http://www.scoop.co.nz/stories/PA1605/S00499/ets-one-for-two-subsidy-to-be-phased-out.htm>

^{xviii} <http://www.radionz.co.nz/national/programmes/ninetonoon/audio/201753835/does-increasing-herd-sizes-really-get-farmers-any-extra-money>

^{xix} <https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/Afforestation%20responses%20to%20carbon%20price%20changes%20and%20market%20certainties.pdf>

^{xx} <http://www.eds.org.nz/assets/MediaReleases/2017%20Releases/OECD%20Enviromental%20Performance%20Review%20NZ%202017%20HIGHLIGHTS.pdf>

^{xxi} https://read.oecd-ilibrary.org/environment/oecd-environmental-performance-reviews-new-zealand-2017_9789264268203-en#page123

^{xxii} https://read.oecd-ilibrary.org/environment/oecd-environmental-performance-reviews-new-zealand-2017_9789264268203-en#page83

^{xxiii} https://read.oecd-ilibrary.org/environment/oecd-environmental-performance-reviews-new-zealand-2017_9789264268203-en#page124

^{xxiv} https://read.oecd-ilibrary.org/environment/oecd-environmental-performance-reviews-new-zealand-2017_9789264268203-en#page127; \$US205 is \$NZ253 using 31 Dec 2012 exchange rate of 1.23492 from <https://www.ofx.com/en-nz/forex-news/historical-exchange-rates/>

^{xxv} https://read.oecd-ilibrary.org/environment/oecd-environmental-performance-reviews-new-zealand-2017_9789264268203-en#page133

^{xxvi} <http://www.ipaa.org/wp-content/uploads/2017/01/InternatIPetroTaxSupp.pdf>

^{xxvii} https://read.oecd-ilibrary.org/economics/oecd-economic-surveys-new-zealand-2013_eco_surveys-nzl-2013-en#page90

^{xxix} <https://treasury.govt.nz/sites/default/files/2018-04/b17-revenue-data.xls>

^{xxx} http://www.mfe.govt.nz/sites/default/files/media/Environmental%20reporting/our-fresh-water-2017_1.pdf

- ^{xxxix} <http://www.mfe.govt.nz/publications/fresh-water-environmental-reporting/lake-water-quality-new-zealand-2010-status-and-2>
- ^{xxxixii} http://www.mfe.govt.nz/sites/default/files/media/Environmental%20reporting/ou-r-fresh-water-2017_1.pdf
- ^{xxxixiii} <http://www.mfe.govt.nz/publications/fresh-water/fresh-water-report-2017-water-quality/monitored-groundwater-quality>
- ^{xxxixiv} The OECD recommends that New Zealand expand the use of economic instruments to internalize environmental and opportunity costs, promote innovation and encourage the efficient use of water (quality and quantity).
- ^{xxxixv} https://www.stuff.co.nz/business/farming/82696726/better-incentives-needed-to-encourage-forestry_2
- ^{xxxixvi} Source: <http://www.sidc.org.nz/assets/Research/SIDDC-Past-Research/impact-of-ludf.pdf>
- ^{xxxixvii} <https://www.stuff.co.nz/business/industries/97755574/how-much-nitrogen-leaches-from-the-soil-in-new-zealand>
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- ^{xli} <http://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/National%20GHG%20Inventory%20Report%201990-2016-final.pdf>, p 187.
- ^{xlii} http://ec.europa.eu/environment/enveco/taxation/pdf/ch9_fertilisers.pdf
- ^{xliiii} <http://www.undp.org/content/sdfinance/en/home/solutions/taxes-pesticides-chemicalfertilizers.html>
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- ^{xlivi} <https://taxworkinggroup.govt.nz/sites/default/files/2018-03/twg-subm-bgrd-paper-mar18.pdf>, p 40.
- ^{xliivii} <https://www.stuff.co.nz/business/farming/aquaculture/94814758/plastic-being-regularly-ingested-by-fish-consumed-in-new-zealand>
- ^{xliiviii} https://read.oecd-ilibrary.org/environment/the-political-economy-of-effective-biodiversity-policy-reform_9789264269545-en#page109, p 107.
- ^{xlix} Personal Communication with Dr Glenn Simmons.
- ^l https://read.oecd-ilibrary.org/environment/the-political-economy-of-effective-biodiversity-policy-reform_9789264269545-en#page109, p 108.
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