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Integrating Economic and Environmental Policy

Abstract

Integrating environmental policies into economic policy making is vital for environmental sustainability. This article explores three key integration mechanisms: enhanced national state of the environment reporting, expanded environmental target setting, and mainstreaming the environment in fiscal policy and the annual budget cycle. The article discusses environmental reporting, resource management and wellbeing budgeting in New Zealand, including recent reviews and proposed reforms. It outlines the rapidly developing international practices in green budgeting. Entry points are identified for operationalising the current wellbeing budgeting framework by progressively exposing environmentally harmful fiscal policies, highlighting win–win tax and expenditure policies that are good for both the environment and the economy, and exposing trade-offs for more transparent deliberation.

Keywords environmental reporting, environmental targets, mainstreaming, fiscal policy, wellbeing budgets, green budgeting

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Integrating environmental policies into economic policy making has long been recognised as fundamental to the pursuit of environmental sustainability. As long ago as 1987 the Brundtland Commission called for the major central economic agencies of governments to be made directly responsible for ensuring that their policies and budgets support ecologically sustainable development (United Nations, 1987, ch.12, para 26). There was, however, little progress globally in the following 30 years in accountability for the environmental impacts of fiscal policies and budgets, aside from requirements in many countries for environmental impact analysis at the individual public investment project level.

At the strategic, whole-of-government level, fiscal policy and the annual budget cycle is arguably the critical instrument by which to integrate economic and environmental policy. While environmental regulation is also of fundamental importance, there is no government-wide regulatory policy cycle or strategic process through which environmental sustainability can be systematically mainstreamed and regularly updated. The annual budget is typically a government's single most important expression of its strategies and priorities and its most powerful cross-sector policy integration tool (OECD, 2002, p.7; Petrie, 2021). Economic and fiscal strategy setting in most countries, however, remains dominated by assessments of economic and fiscal issues.

Since around 2010 there has been a growing interest in the interfaces between fiscal policies and the environment – often referred to as 'green budgeting' or 'climate budgeting' – which has burgeoned in the last few years. The interest was led initially by increasing concern over climate change and the impacts of fiscal policies on greenhouse gas emissions, as well as the negative impacts of climate change on public finances. More recently, comprehensive approaches have emerged that consider the two-way interactions between fiscal policies and all environmental domains, not just climate change.

This article explores three key elements required to integrate environmental sustainability into government economic strategies and policies (Petrie, 2018, 2021):

- reliable and regular national state of the environment reports on the physical state of the natural environment to establish baselines and identify trends and threats to sustainability;
- expanded setting of environmental targets and regular reporting on progress towards targets, and the integration of these into government strategic planning and in a dashboard of core indicators of social, environmental and economic progress;
- using fiscal policy and the annual budget cycle to progressively expose environmentally harmful tax and expenditure policies, to highlight win–win policies that are good for both the environment and the economy and to promote environmentally sustainable development.

Environmental reporting

New Zealand did not have a statutory requirement for regular national state of the environment reports prior to the Environmental Reporting Act 2015 (ERA) (Chapman et al., 2013). Previously there had been two ad hoc state of the environment reports, in 1997 and 2007. There are several weaknesses in the ERA (Petrie, 2018), some of which reflect weaknesses in the international DPSIR (drivers–pressures–state–impact–response) framework for national environmental reporting. Key deficiencies are that the DPSIR framework is backward looking and does not include forward-looking outlooks and identification of risks; that the ERA and reports under the Act cover only three of the five DPSIR elements (pressures, state and impact); and that governments are not required to respond to reports, seriously limiting their impact.

In his 2019 review of New Zealand's environmental reporting system the parliamentary commissioner for the environment concluded: 'If there is one thing that stands out from the first cycle of reports, it is the extent of what we *don't* know about what's going on with our environment' (Parliamentary Commissioner for the Environment, 2019, p.7). The main recommendations made were to change from three-yearly to six-yearly state of the environment synthesis reports, expand the reporting framework to include drivers and outlooks, refocus domain reports as commentaries on themes, and require ministers to respond within six months to state of the environment synthesis reports, commenting on what new policies are proposed or planned. The commissioner also recommended the establishment, under the Act, of a standing science advisory panel to advise the secretary for the environment on environmental reporting and research, monitoring and data needs.

In response, the Ministry for the Environment published a consultation document in February 2022 (Ministry for the Environment, 2022) containing ten proposed amendments to the ERA, incorporating most of the commissioner's recommendations and also recommending establishing a set of core environmental indicators, strengthening data collection, and requiring reports to describe the impacts that the state of the environment and changes to it may be having on te ao Māori. Perhaps most significant are the proposals to reduce the frequency of synthesis reports to

BOX1 Suggested additional elements to be incorporated into the Environmental Reporting Act 2015

- The content of the forward-looking information in 'outlooks' should be deepened. The ERA should refer – in addition to outlooks – to forecasts of critical indicators, as feasible, and to identification of proximity to targets, limits, and potential thresholds and tipping points.
- A specific provision should be included specifying the technical independence of the secretary for the environment in conducting relevant functions under the Act.
- The technical nature of the proposed standing advisory panel to the secretary for the environment should also be buttressed – e.g., by referring to transparent selection criteria and processes for appointment to the panel.
- The technical independence of the process for producing each synthesis report would also be strengthened by including a requirement for external scientific peer review of a draft of the report at an appropriate stage.
- With respect to the government response to each synthesis report, the Act should refer to the number of years that the government action plan should cover and specify that it include interim milestones, existing and any new targets, and regular annual reports on progress; the government should respond within six months of publication of a report, as recommended by the parliamentary commissioner for the environment, rather than within the 12 months proposed by Ministry for the Environment, which would unduly draw the process out.
- While the parliamentary commissioner for the environment has full discretion under the 1986 Environment Act to comment on any issue he or she wishes, nevertheless the commissioner should be invited to comment on each synthesis report, within three months of its publication, with their assessment of the key trends and risks and recommended actions to address them.

BOX 2 The UK Environment Act 2021: integrating environmental and economic policies

The UK Environment Act 2021 contains strong provisions to integrate the environment into government strategy and economic policies, including:

- mandating the setting of long-term, legally binding targets covering at least air quality, resource efficiency and waste reduction, water and biodiversity;
- mandating net gain in biodiversity through the planning system, requiring a 10% increase in biodiversity after development compared to the level of biodiversity prior to the development taking place;
- legally obliging ministers to ensure that nature and the environment are proactively considered in the policymaking process;
- allowing government to require producers to pay the full net cost of managing their products at end of life and to incentivise them to design their products with sustainability in mind, and to introduce charges for single-use items.

once every six years, require the minister for the environment to respond to each report within 12 months with an action plan, and add drivers and outlooks to the reporting framework.

These are welcome initiatives and if implemented would bring New Zealand more into line with good international practices in national environmental reporting, while also introducing the important innovation of requiring a government response. There are, however, many areas where the ministry consultation document falls short. Some of these arise from or are made more salient by the fact that state of the environment reports would be produced only once every six years, which in a dynamic environment is a relatively long time. While environmental conditions generally change at a relatively slow pace, this is not always the case, and while reducing report frequency may allow more resources to be devoted to improving data and report quality, nevertheless a six-year interval greatly increases the government's flexibility and reduces the frequency of democratic oversight.

The consultation paper states that for other OECD countries the 'most common and maximum reporting cycle is five-yearly'. This is somewhat misleading. Many countries in Europe publish reports every four years, while some publish more frequently (e.g., the Netherlands published an annual report from 1995 to 2010 and a report every two years thereafter). While Australia publishes a report every five years, it is difficult to justify a statement that the most common reporting cycle is five-yearly. Certainly, to the author's knowledge no country publishes as infrequently as six-yearly.

Arguably, the strongest justification for this timing is that it aligns with New Zealand's current three-year general election cycle, so that a six-yearly report would be published in the ordinary course of events every two elections. The attractive feature of this is that the timing of each report could be specified in legislation in relation to the electoral cycle (e.g., midway between elections) so as to promote effective democratic debate and accountability. The ministry discussion document refers to the timing of the six-yearly report in relation to its long-term insights briefing, but this is second order in importance compared to the timing of the report in relation to general elections.

Nevertheless, it may well be preferable for synthesis reports to be published more frequently than every six years, perhaps every four years as is common international practice – and for which there is precedent in New Zealand in terms of the requirements that Treasury publish four-yearly reports on the long-term fiscal position, investment statements and wellbeing reports. The benefits of more frequent reporting seem likely to outweigh the advantage of alignment with the electoral cycle. Alternatively, the current three-yearly synthesis report could be retained and aligned appropriately with the electoral cycle, although the shorter time would represent an additional reporting burden. If the six-year gap is adopted, other elements of the reporting framework become critical. Box 1 sets out proposed additional elements to be incorporated into the ERA, irrespective of the frequency of reports.

A final issue in this review of the ERA is the issue of 'response', the last component in the internationally recognised DPSIR framework. Note that 'response' in the DPSIR framework is different from the proposal that the government respond to a synthesis report, although the two terms are at times confused in discussion of environmental reporting. As described by the ministry in the consultation document, the response component 'would list but not evaluate the current government and community interventions in response to pressures and impacts. Responses, in this case, would not provide alternative policy recommendations, nor would they explicitly remark on the effectiveness of the interventions' (Ministry for the Environment, 2022, p.79). Yet the consultation document rejected the inclusion of this anodyne component of environmental reporting. By some agile manoeuvring it lumped the option of including 'response' in with an option that left out the addition of 'drivers'. It then concluded that 'leaving out drivers and outlooks could imply that these were not to be used at all. Although this option would be an improvement, reporting would not be as effective as it could be' (ibid.).

But there is no reason that the option of including 'response' could not have been incorporated into an option that also added drivers and outlooks. This is either weak option building or an attempt to finesse the awkward issue of why New Zealand, highly unusually among advanced countries using the DPSIR framework, does not have the public sector capacity to publish even such descriptive 'response' material.

New Zealand appears to have a major problem in the capacity and willingness of the public service to provide, and for ministers to receive, advice on how well existing environmental policies are working. Policy evaluation is widely viewed as a critically important component of public management, albeit one that is systematically weak in New Zealand and to varying degrees internationally. The Ministry for the Environment does not have an evaluation capability; nor does any other government entity have a general responsibility for evaluating the effectiveness of environmental policies and interventions. The parliamentary commissioner for the environment does not have an evaluation function or capacity, and arguably it should in any case be the responsibility of the executive branch, with the commissioner providing review, comment and recommendations, not being the primary actor.

One approach would be for a requirement to be inserted in the ERA for the government to publish a periodic report on environmental research, monitoring and evaluation midway between each synthesis report, describing its strategies and plans and reporting on progress in implementing them. The report could be the responsibility of a new independent Crown entity, possibly combining functions under the new Environmental Research Council advocated by the parliamentary commissioner for the environment (Parliamentary Commissioner for the Environment, 2020).

In the meantime, performance audits by the auditor-general appear to be the only current vehicle for Parliament and the public to be presented with independent evaluations of the effectiveness and efficiency of public spending on the environment. Recent value-for-money audits of climate change spending by the National Audit Office in the UK demonstrate the value of such initiatives (see, for instance, National Audit Office, 2020).

Note, however, that the New Zealand government has announced that it will issue sovereign green bonds in 2022. Part of the international framework for sovereign green bond issuers is a requirement to regularly report both on how the funds have been spent (an allocation report) and on the environmental impacts resulting from the activities funded by the bonds (e.g., reductions in greenhouse gas emissions, changes in freshwater quality) (International Capital Markets Association, 2021); see, for instance, the Irish Sovereign Green Bond report 2017/2018 (Government of Ireland, 2018). It is ironic how obstacles to providing the legislature and public with information on the environmental impacts of public spending financed by coercive taxes disappear when it comes to seeking voluntary financing from capital markets.

Environmental target setting and integration in fiscal strategy

The second component explored in this article on integrating environmental and economic policies is expanded setting of environmental targets and their integration into government strategic planning.

New Zealand has extensive and deep outcomes-focused management frameworks and accountability mechanisms for how governments manage fiscal policy and monetary policy. By comparison, for environmental stewardship there is a lack of requirements for ex ante transparency of environmental objectives, limits and targets and reporting against them (climate change mitigation aside). One long-standing exception to this is New Zealand's framework for fisheries management under the quota management system. But in general New Zealand governments have done no more than set longer-term unquantified 'feel good' goals for the environment – such as 'reversing loss of biodiversity', or 'cleaning up waterways' – without the discipline that comes from being required to report regularly to the legislature on the intended path to goals with specific targets, interim milestones and progress.

Internationally, Sweden is recognised as a pioneer in this field. In 1999 Sweden created a system of environmental quality objectives, which are set by Parliament and progress on which is reported annually (OECD, 2014, p.40). More recently, the UK Environment Act 2021 mandated that governments set long-term, legally binding targets for a small set of specific environmental indicators, in addition to other provisions to integrate environmental and economic policies (Box 2).

The international framework to address climate change under the Paris Agreement has resulted in a major global shift towards setting and monitoring targets for environmental outcomes. In New Zealand, the Climate Change Response (Zero Carbon) Amendment Act 2019 set new targets to reduce net emissions of greenhouse gases by 2050, establish a system of emissions budgets, require the government to develop and implement policies for climate change adaptation and mitigation, and establish a new, independent Climate Change Commission to provide expert advice and monitoring. The

Box 3 Possible legislative and regulatory changes to strengthen the integration of environmental and economic policies in New Zealand

The following additional provisions should be considered for incorporation into the Public Finance Act:

- A new principle of responsible fiscal management: 'When formulating fiscal strategy, having regard to the interaction between fiscal policy and the environment, including disclosures of the anticipated impact of existing fiscal policies and new fiscal policies being introduced in the next budget on environmental outcomes, indicators and government objectives.'
- The principles of responsible fiscal management (s26G) refer to having regard to efficiency and fairness when formulating revenue strategy. The section could be amended as follows (proposed new element in italics): 'when formulating revenue strategy, having regard to efficiency, fairness, *and environmental sustainability,* including the predictability and stability of tax rates *and the potential use of the tax system to improve environmental outcomes*'.
- A new provision in section 26J on the contents of the fiscal strategy report, to the effect that the fiscal strategy report must contain a range of specific information on the impacts of fiscal policies on the environment and on fiscal risks from environmental degradation – e.g., a new chapter, 'Fiscal policy and the environment'.
- Section 26NB(2) should be amended to state that the four-yearly wellbeing report is to be prepared by the Treasury, the Ministry for the Environment and the Ministry of Social Development, with specific policy domain responsibilities assigned appropriately. This process might best be conducted through an interdepartmental officials committee chaired by the Department of the Prime Minister and Cabinet.
- More generally, alongside a new requirement (proposed above) that the government disclose the anticipated impact of new budget policies on environmental outcomes, limits and targets, the *Cabinet Manual* should be amended to require the Ministry for the Environment to be consulted on all matters that may have a substantial impact on environmental sustainability.

Table 1: Selected country examples of green budgeting practices by stage of fiscal policy cycle

Stage in fiscal policy cycle	Selected country examples
National planning	
National Development Plan with environmental goals, targets.	China, Indonesia, Ireland, Nepal
Fiscal strategy	
Linked to environmental outcomes, climate change, SDGs.	Finland, Indonesia, NZ, Peru, Sweden
Macro-economic model incorporating climate aspects.	Denmark
Green tax review	Norway
Budget preparation	
Environmental impact assessments of infrastructure projects	Numerous countries
Climate change cost-benefit analysis	Thailand, UK
Climate expenditure tagging	Bangladesh, Kenya, Nepal
Comprehensive green expenditure tagging	France
Tagging of environmentally harmful expenditures	France
Carbon pricing	31 countries (March 2021)
Earmarked carbon tax for green spending	Costa Rica
Green expenditure floor	European Union
Application of green COVID-response criteria	Canada, France
Budget presentation	
Budget documents include environmental goals	Mexico, Norway
Mandatory disclosure of climate effects of new policies	France, Norway, Scotland
Advice to Parliament on budget’s impacts on sustainability	Wales
Performance budgeting in environment sector	Italy, South Africa
Fiscal risk statements incorporate environmental risks	Philippines, UK
Budget financing	
Green bonds	Fiji, Indonesia, Ireland, Poland,
SDG bonds	Mexico
Budget implementation	
Green procurement	China, Japan, South Korea, Netherlands
Monitoring, evaluation, audit	
Performance indicators (green SDGs)	Mexico, Moldova, Nepal
Climate expenditure auditing	Bangladesh
Auditing, independent assessment of environmental effects	Canada, New Zealand
Fiscal reporting	
In-year reporting of climate spending	Mexico
Performance reporting in environment sector	Italy, South Africa
Reporting to green bond holders	Fiji, Indonesia, Ireland, Poland
Public participation in green fiscal policy	
Public engagement on carbon tax	Canada, South Africa
Public engagement on climate change adaptation spending	Fiji

Source: Petrie 2021, Table 4.1

Climate Change Commission delivered its advice to government on its first three emissions budgets and direction for its emissions reduction plan for 2022–25 in June 2021 (Climate Change Commission, 2021). The government deferred setting the first three emissions budgets out to 2035 and releasing the country’s first emissions reduction plan until the 2022 budget in May 2022 (discussed further below). In addition, the government has announced that the public sector will be carbon neutral by 2025 (New Zealand Government, 2020b).

Beyond climate change, the National Policy Statement for Freshwater Management 2020 introduced requirements for councils to set outcome bottom lines and targets to improve degraded water bodies and maintain or improve all others, with regular reporting on progress (New Zealand Government, 2020a). Reforms to the Resource Management Act 1991 (RMA) aim to put in place clear environmental limits and positive outcomes for natural and built environments, with enhanced environmental reporting to track and assess performance in meeting limits and making progress towards environmental targets (Resource Management Review Panel, 2020). Under the RMA governments were enabled to set environmental targets and limits, but in practice they did so only to a very limited extent. An exposure draft of proposed replacement legislation – the Natural and Built Environments Bill – was presented to Parliament in 2021. It would require governments to promote 16 environmental outcomes and mandate that the minister for the environment prescribe environmental limits for six domains: air; biodiversity, habitats and ecosystems; coastal waters; estuaries; freshwater; and soil (Environment Committee, 2021).

Environmental goals, limits and targets then need to be integrated into the medium-term fiscal strategy process that drives the annual budget. Yet fiscal strategy setting around the world remains dominated by assessment of macroeconomic and fiscal goals, targets, statistics and associated risks. Information on environmental outcomes, goals, targets and risks, and interactions between the environment and the economy, need to be integrated into government strategy and decisions on the medium-term fiscal strategy. Few governments have acted in this space (see Table 1).

In New Zealand the 2019 budget was presented as the Wellbeing Budget, in which a wider set of social, economic, environmental and cultural indicators and objectives was integrated into budget decision making (Treasury, 2019). This new approach was institutionalised in 2020 through changes to the Public Finance Act which require that the budget policy statement and the fiscal strategy report state the government's wellbeing objectives and how they will guide and have guided budget decisions. The 2019 budget has been described variously as introducing important new processes to incorporate non-economic goals, on the one hand (McCullough, De Renzio and Huang, 2020), and as being little different in substance to previous budgets (Ball, 2019). Subsequently the Covid-19 pandemic resulted in the government suspending its planned 2020 Wellbeing Budget. Its first Covid response package has been criticised for containing limited 'green' elements (Boston, 2020).

Further amendments to the Public Finance Act should be considered to strengthen the integration of environmental and fiscal policies in New Zealand. Box 3 sets out some proposals.

BOX 4 Parliamentary commissioner for the environment review of wellbeing budgets (Parliamentary Commissioner for the Environment, 2021)

The review's recommendations included:

- Improve the presentation and communication of critical environmental information throughout the budget process, including to ministers.
- Update the Living Standards Framework Dashboard to include an improved set of longitudinal environmental indicators representing the condition of natural capital.
- Develop baseline forecasts or outlooks that provide an indication of how future environmental conditions across different domains of the environment are expected to change over time.
- Develop new exploratory scenarios that describe alternative possible futures capable of identifying key environmental risks and potential mitigation strategies.
- Update the Treasury's wellbeing analysis template to better reflect the importance of the environment.
- Add new environmental values to CBAx for use within cost–benefit analysis.
- Modify the social discount rate to better reflect the longer-term, intergenerational costs and benefits that pertain to the environment.
- Develop a new, structured, multi-criteria analysis tool for scoring the impacts of budget initiatives.

Green budgeting and the progressive greening of fiscal policies

As noted, fiscal policy and the annual budget cycle are arguably the most powerful instrument to mainstream and prioritise environmental policies across the whole of government. In addition, taxation and government spending have major environmental impacts. Some of the impacts are positive: for example, carbon taxes and hybrid fiscal/regulatory instruments such as emissions trading schemes that 'correct' the prices of activities that generate unpriced social costs (externalities), such as the social costs of greenhouse gas emissions or pollution. Environmentally positive public expenditures by central, regional and local governments include environmental protection expenditures, funding of environmental regulation, monitoring and reporting, and environmental research and development. Other environmental impacts of fiscal policies are negative, such as subsidies for fossil fuels, deforestation or over-use of scarce fresh water, and those from public infrastructure projects such as new motorways that lock in environmentally damaging technologies and behaviours. In turn, environmental degradation is creating escalating fiscal risks for governments from the increased incidence of climate-related disasters and transition risks from policy and technological changes (Dunz and Power, 2021).

Reflecting the growing international interest in and recognition of the two-way interactions between fiscal policies and the environment, in 2017 the OECD launched the Paris Collaborative on green budgeting. The OECD green budgeting framework covers how the budget as a whole impacts on the environment, incorporating both taxation and expenditures; includes all environmental domains; incorporates both negative and positive environmental impacts; and uses green budgeting to mainstream environmental policies through integration into governments' core annual budget processes rather than setting up parallel processes (OECD, 2018).

Another important international initiative is the Coalition of Finance Ministers for Climate Action, formed in 2019 to promote national climate action, especially through fiscal policy and the use of public finance. The coalition states: 'Finance Ministers hold the keys to accelerating climate action. They know most clearly the risks posed by climate change, and recognize how taking action could unlock trillions in investments and create millions of jobs through 2030' (Coalition of Finance Ministers for Climate Action, n.d.). The coalition comprises members from 70 countries, including New Zealand. Its 2019 Santiago Action Plan includes work on mainstreaming climate change mitigation and adaptation and developing tools for green budgeting.

The burgeoning international interest in green budgeting is illustrated in Table 1, which presents selected practices that integrate environmental and economic policies at discrete points across the policy and budget cycles by countries at all levels of development.

New Zealand makes relatively little use of economic instruments for environmental management and the OECD has recommended expanding the use of environmentally related taxes, charges and prices such as road tolls, congestion charges, water tariffs and water pollution charges, and ensuring that petrol and diesel tax/charge rates take environmental externalities into account (OECD, 2017). The Ministry for the Environment is currently consulting on proposals to reduce waste, including a deposit refund scheme. New Zealand has, however, been a relatively early adopter of initial attempts to connect environmental

BOX 5 Entry points for green budgeting

- Green medium-term fiscal strategy incorporating environmental limits and targets
- Green budget tagging/issuance of sovereign green bonds
- Green budget tagging of environmentally harmful expenditures
- Disclosing the anticipated environmental impacts of new policies in the annual budget
- Environmentally sensitive public investment management processes
- Reviewing environmentally damaging taxes and subsidies
- Expanding the use of green taxes
- Green fiscal risk analysis
- Oversight of the environmental impacts of the state-owned enterprises sector
- Performance-oriented budgeting in the environment sector
- Periodic green expenditure review

Source: drawn from Petrie, 2021, pp.126–38

sustainability with fiscal policy and budgets. As noted, it has embarked on 'wellbeing budgeting', although the Covid-19 pandemic interrupted this evolution.

In a detailed analysis the parliamentary commissioner for the environment has assessed how environmental considerations were integrated into the 2019, 2020 and 2021 budgets, from the formation of strategic considerations through to the review of existing spending, the development and assessment of bids for new spending, and final decision making (Parliamentary Commissioner for the Environment, 2021). The review concluded that available environmental information is often deficient, and, for all the talk of wellbeing budgeting, the advice that is generated in the budget process is insufficient to facilitate investment in environmental expenditure that is orientated towards intergenerational wellbeing. 'The key message of this report is clear: key long-term environmental issues need to be explicitly acknowledged and responded to as part of the budget process' (ibid., p.10).

Box 4 contains some of the commissioner's key recommendations. The report suggests that at least every three years, officials should be required to provide the minister of finance with a report containing advice on how well existing policies and initiatives are addressing the environmental issues identified in the most recent state of the environment report. This briefing should include how much expenditure is allocated to each of the environmental issues and what is known about the effectiveness of that expenditure. The minister of finance should then, each year at the time of the presentation of the budget, publish a report that outlines how new fiscal initiatives, as well as any changes to baseline expenditure, respond to the environmental issues identified. This report should then be referred to Parliament's Environment Committee.

Looking ahead, the government has acknowledged that to address climate change a new approach to the budget process is required, in particular to enable significant investments across multiple budgets. To drive this, the government is to establish a Climate Emergency Response Fund. For the May 2022 budget this fund will focus on initiatives and programmes aimed at delivering the emissions reductions outlined in the government's first emissions reduction plan (Treasury, 2021).

Beyond that, there is a range of entry points for green budgeting (see Box 5). These point to an agenda for the progressive 'greening' of fiscal policy and the more complete integration of environmental and fiscal policies. They provide a framework for the 'how' of wellbeing budgeting that has been absent to date. How this evolves should depend on the assessed relative costs and benefits of alternative entry points, combined with the political economy of reforms.

Conclusions

Since around 2010 there has been a rapidly growing international interest and practice in more closely integrating environmental and economic policies through use of fiscal policy and the annual budget process. In New Zealand the direction of travel in recent years is positive, if uneven and only in the early stages. Current indications from the government's proposed reforms to the resource management system, the proposals for improving environmental reporting, and the prioritisation of actions to address climate change in the 2022 budget provide some prospect that environmental sustainability will receive more explicit attention in policy decisions. However, the proposals on environmental reporting do not go far enough, the proposed approach for setting environmental limits and targets may yet be watered down, and the promise of wellbeing budgeting is far from being achieved.

The parliamentary commissioner for the environment, in a series of influential reports, has aptly described the situation:

> Governments are elected to make choices. They can't do everything, and allowing environmental deficits to accumulate may well be the outcome of a given budget process. But any such outcome should be an informed one, for which New Zealanders should be able to hold the Government to account. (Parliamentary Commissioner for the Environment, 2021, p.10)

This will require greater transparency around environmental trends, goals and risks alongside economic and fiscal objectives, more attention to the possibility of win–win policies and more information on the nature of trade-offs between environmental and other goals.

There are, in fact, increasing opportunities for win–win policies – illustrated by the solar electricity revolution, the availability of international green finance, and the important role of public research and development of new technologies that catalyse the transformation required in private sector investment. There is growing awareness of the co-benefits of environmental policies, the risks from environmental degradation and the costs and inequities of inaction.

What is required now is to operationalise the wellbeing budgeting framework more fully and effectively. This includes revisiting the objectives of fiscal policy in the Public Finance Act, and progressively implementing a range of practical entry points for green budgeting. In short, the 'how' of integrating environmental and economic policies needs to be progressively implemented to achieve the promise of wellbeing budgeting.

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