

# OECD rates NZ's environmental performance – Expert Reaction

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3/21/2017

**The OECD's latest report on New Zealand's environmental performance warns that the country's growth is starting to show environmental limits, including increased greenhouse gas emissions, freshwater contamination and threats to biodiversity.**

The third OECD *Environmental Performance Review of New Zealand* made 50 recommendations and noted the country has the largest share of greenhouse gas emissions from agriculture in the OECD.

The report also considered sustainable urban development and recommended improving the housing stock through incentives for insulation and modern heating in rental buildings.

**The report has been widely covered by local media, including:**

**Stuff.co.nz:** [Farming, emissions and waste putting NZ's 'green' reputation at risk, OECD says](#)

**NZ Herald:** [National's economic strategy not to blame for environmental decline in NZ – English](#)

**TVNZ:** [NZ's greenhouse emissions getting worse, new report finds](#)

**Radio NZ:** [NZ's economic growth model pushing environmental limits – report](#)

**Newshub:** [OECD environmental report: NZ reaching ecological limits](#)

**Stuff.co.nz:** [OECD keen on road tolls, congestion charging, taxing work parking spaces](#)

**Otago Daily Times:** ['Fail grade' for NZ's environmental future](#)

**Newsroom:** [OECD: NZ must tackle cow emissions](#)



**The SMC gathered expert reaction on the report, please feel free to use these comments in your reporting. The report is available [on the OECD's website](#).**

**Professor Ralph Sims, director, Centre for Energy Research, Massey University, comments:**

"The OECD *Environment Performance Review* of New Zealand gives us another 'fail' grade, especially regarding our greenhouse gas emissions. It follows the recent country review by the International Energy Agency (IEA) that gave a similar grade.

"Our emissions continue to rise (6% since 2010, whereas the OECD average dropped by 5%); car ownership is the highest in the OECD as are road transport emissions per person; there is no strategic plan to reduce emissions to meet our target under the Paris Climate Agreement; the emissions trading scheme (ETS) has been ineffective and cannot solve the problem without the implementation of other policies; agriculture will have to play a part; many local councils are valiantly trying to reduce their local emissions by various means but with little guidance from Government; and so it goes on.

"Surely by now the Government must have received the message, loud and clear, that we are NOT doing our fair share to prevent the global temperature rising above a level where we will all be worse off, and that the costs of climate impacts (for example, sea level rise in South Dunedin and more extreme weather events) will soon become highly significant issues as will the need for investments in adaptation to become more resilient to future climate impacts.

"Many practical solutions for achieving zero emissions by mid-century (starting from now) were presented in the 2016 Royal Society's report "*Transition to a low-carbon economy for New Zealand*" after a comprehensive study by the panel of authors and many reviewers.

“Most of these recommendations have been reinforced in this OECD report (for example, introduce vehicle fuel efficiency standards and strengthen the building code); in the IEA analysis (for example, providing heat for industry from geothermal, solar and bioenergy sources instead of coal and gas); and most recently by the independent analysis undertaken by Vivid Economics from the UK (for the cross-party parliamentarian members of GLOBE-NZ) that provides several scenarios as to how we might best meet zero net emissions.

“In addition, due to their concerns at the slow progress to date by Government, Generation Zero is developing a draft “NZ Carbon Act” that, if implemented, would help enable the country to achieve a future low-carbon economy. At the current rate of progress, we will never be world leading, but at least we might be able to keep up with other countries.

“Simon Upton has been the Environment Director of the OCED for several years. He pulls no punches in the report when stating that New Zealanders cannot take our natural environment for granted and that ‘it is vital to make full use of existing tools to curb environmental pressures’. As summarised in the OECD report, the next steps for climate change mitigation in New Zealand should be to:

- develop a strategic plan to achieve the 2030 climate mitigation target;
- design and put into action a comprehensive package of greenhouse gas emission mitigation measures to complement the ETS;
- assess vulnerability of all major economic sectors to develop specific strategies for climate change adaptation; and
- help local communities mainstream climate resilience into land-use planning.

“There have been more than enough reports on New Zealand’s mitigation opportunities but lack of progress. It is now time to get on with cost-effectively reducing our greenhouse gas emissions and reaping the co-benefits – starting from now.”

**Dr Marc Schallenberg, freshwater scientist, University of Otago, president, NZ Freshwater Sciences Society, comments:**

“The 2017 OECD *Environmental Performance Review* for New Zealand is a thorough summary of New Zealand’s environmental policy and action in comparison to other OECD countries and to our environmental position in 2007. It also shows both where we have and where we haven’t made progress in relation to recommendations made in the 2007 OECD Review.

“Compiled by the OECD Environment Directorate (which is led by Simon Upton, former New Zealand Environment Minister), the researchers of the Directorate gleaned information from Government Ministries, reports by the Parliamentary Commissioner for the Environment, and from consulting with a wide range of interested parties.

“Overall, the data comparing New Zealand to other OECD countries shows that New Zealanders have a large per capita environmental footprint, reflecting an economy that consists largely of resource-extractive, primary industries and which exports high volumes of low-value-added commodities.

“In terms of our performance in the realm of freshwaters, the report discusses some innovative approaches that New Zealand has adopted. These include the Taupo nitrogen cap and trading scheme, the collaborative Waikato River Authority (which aims to restore the health of the Waikato River), the Land and Water Forum (a collaborative stakeholder group set up by government to advise on water policy), as well as our widespread reliance on a farm-scale nutrient leaching model (OVERSEER) to help manage diffuse nutrient pollution to waterways.

“The Report discusses the links between increasing nitrate pollution in surface waters and aquifers and the increase in high-intensity dairy farming. It also mentions increasing levels of pathogenic faecal organisms in our waters due to high-intensity agriculture and links faecal contamination of our waters with our extremely high rates of gastrointestinal disease.

“The report states that to improve water quality in New Zealand, substantial changes in land use management will be required because our typically intensive, pasture-based farming systems are currently the key sources of these pollutants to waters.

“The government should take note that the report points out some contradictions between policies like, on the one hand, the NPSFM which aims to maintain or improve water quality and, on the other, central government's \$400M irrigation investment fund. As irrigation leads to agricultural intensification, the report states that irrigation projects should focus on increasing water use efficiency rather than promoting more intensification of agriculture and associated water pollution.

“Furthermore, it suggests that irrigation funding should be contingent on providing demonstrable environmental outcomes. It is suggested that this contingency should enable fruitful collaborations between the agricultural sector, research institutes and universities to foster technological improvements to raise irrigation efficiency and add value to current agricultural production.

“The OECD Environment Directorate proposes a number of economic instruments which it suggests could help New Zealand reduce its environmental footprint by making better use of its resources. It recommends putting a price on water, which could result in more efficient allocation of scarce water resources, but to do this the report acknowledges that the issue of Maori claims on water needs to be addressed.

“I note that Bill English stated just yesterday (March 20) that the government may indeed be ready to negotiate water pricing.

“The report also recommends that pollution charges be instigated, which could be used to more efficiently allocate the water pollution footprint and to strategically refinance clean-up funds, giving some relief to taxpayers. It also encourages the use of natural capital accounting, whereby ecosystem services are given realistic dollar values and these values are then employed in cost-benefit analyses applied to polluting activities and industries.

“The report recognises New Zealand's serious decline in native freshwater species (especially fish) highlighting problems with pollution, habitat loss and the serious negative impacts of some non-native invasive species on our native freshwater biodiversity.

“While we have developed significant expertise in terrestrial pest control, unfortunately, our abilities to control freshwater pests have been far less effective.

“In general, the OECD Environmental Performance Review for New Zealand is a detailed, well-researched and well-considered environmental report. It points out some of our creative solutions and successes and also gives the government much thoughtful advice towards improving the management of the environment and reducing New Zealand's large per capita environmental footprint.”

**Dr Marie Brown, author of *Last Line of Defence*, comments:**

“The newly-released EPR [Environmental Performance Review] accurately identifies New Zealand's most pressing environmental challenges and posits a range of useful solutions (such as greater use of economic instruments). A strength is that it focuses on the meaningful outcomes of policy, rather than cheerleading for good intentions alone. It raises concerns about the slow implementation of the NPS [National Policy Statement] Freshwater Management, the heel-dragging related to the promulgation of the NPS Biodiversity and the need for better resourcing for compliance monitoring and enforcement of environmental law. All very timely observations.

“A consistent theme of the report is that it highlights over and over the absence of long-term strategies to safeguard the environment – whether in respect of climate change, biodiversity loss or any other significant pressure. The test for New Zealand will be how to retain the strengths of our system (public participation for example) while rising to these ever more pressing challenges in the most strategic and effective way: this will demand long-term strategy as above, but also a critical examination of local government funding models, the information basis upon which we make decisions and the long overdue review of our aging environmental legislation among other things.”

**Prof Philippa Howden-Chapman, director, New Zealand Centre for Sustainable Cities, University of Otago, comments:**

*Improving the built environment*

“The OECD has identified the *Warm Up New Zealand* programme, which offers subsidies to help households improve their insulation and heating, as one of New Zealand’s flagship programmes. The programme clearly improves energy efficiency and protects the occupants’ health, particularly the very young and old. They note that while the programme has retrofitted 300,000 homes – around 20% of the housing stock – an estimated 30% of the housing stock, mostly rental housing, remains uninsulated.

“The OECD team notes that the 2016 Residential Tenancies Amendment Act introduced requirements for floor and roof insulation in residential properties. They do not directly raise the perverse consequences of the current Government curtailing the programme next year, when the retrofitted insulation programme has only half been completed, but encourage ongoing support of the programme.

“They highlight the fact that because of our minimal insulation standards, we are already having to retrofit insulation in houses built up until 2000, despite the first thermal insulation requirements were introduced in 1978. This is because New Zealand’s standards are much less stringent than those of many other OECD countries. They recommend the use of policy instruments, such as the incentives WCC uses to encourage earthquake strengthening, should be used to raise the quality of rental properties.

“This is a valuable and enlightened scorecard of New Zealand’s performance in this area relative to the rest of the OECD.”

*Urban development*

“The OECD notes that New Zealand, despite being one of the most urbanised countries in the world, has no policy statement for urban development. Indeed, there a number of areas where New Zealand is an outlier, compared to the rest of the OECD, in making necessary improvements to the urban environment.

“For example, the National Environment Standards on Air Quality do not include maximum concentrations for PM<sub>2.5</sub>. Diesel, which is most likely to produce these fine particles, increasingly recognised as harmful to cardiovascular and respiratory health, unlike petrol, is subject to road user charges, but not excise tax.

“New Zealand’s high level of land transport spending is heavily tilted to roads; only 10% of the revenue from petrol tax and road user charges is used to fund public transport, cycling and walking infrastructure. However, the ACTIVE evaluation of the model communities, undertaken by the NZ Centre for Sustainable Cities centred at the University of Otago, Wellington has shown that this latter infrastructure relatively increases by 30% walking and cycling, which is associated with lower rates of diabetes, compared to unfunded neighbouring regions.

“Denser land-use is needed to reduce carbon emissions, whereas investing in roads, which as in Auckland do not have road tolls or congestion charges, encourages urban sprawl. The OECD suggests that betterment taxes should be used to capture some of the added value to land from rezoning.

“Moreover, they recommend that increasing the supply of housing should not be to the advantage of vested interests at the expense of more compact urban form. They also recommend that there should be an expansion of efforts to reduce the health risks associated with poor indoor air quality, substandard housing and unsafe heating.

“I think these enlightened recommendations highlight the need for urban developments where transport, housing and public amenities are planned in concert with heightened consciousness of the effects of spatial inequalities.”

**Dr Andrea Byrom, director, Biological Heritage National Science Challenge, comments:**

“New Zealand has much to celebrate in this, the latest *Environmental Performance Review* from the OECD. On the other hand, there are several red flags and warning signals that we would do well to pay heed to. If this was a report card, we’d probably get about a C+.

“Not surprisingly, the impact of agricultural intensification on our environment receives a great deal of attention in this report: both in terms of its impact on greenhouse gas production as well as the implications it has for the protection of native biodiversity on private land. The lack of adoption of a National Policy Statement on Biodiversity and our inability to legislate with ‘teeth’ to protect biodiversity on private land is noted as a weakness, as is New Zealand’s large number of native biota under threat from invasive pests.

“And while a large proportion (32%) of our land area is under some form of protection compared to other OECD countries, not all ecosystem types are represented. Not coincidentally, these under-represented ecosystems fall within some of our most productive land, which (to come full circle) has a pretty big impact on our climate change statistics such as an increase in greenhouse gas emissions.

“In terms of environmental governance, regulation and democracy, New Zealand has some work to do, with the effectiveness of the Resource Management Act, participation in environmental management by Māori, and national monitoring and reporting initiatives all coming under the spotlight. And as we’ve heard a lot in the media recently, we have work to do around management of our freshwater ecosystems, in developing meaningful indicators of freshwater ecosystem ‘health’, and in mitigating nutrient runoff which contributes to eutrophication of freshwater systems.

“What this ‘report card’ points to is the need to take a much more integrated and future-focussed approach to environmental management. While New Zealand’s R&D expenditure is pleasingly at the higher end of public R&D budget going to the environment, overall our expenditure on R&D remains stubbornly low at 1.2% – half the OECD average, according to the report. At that level of expenditure, we will simply fail to make headway on some of our most pressing environmental problems.

“The report identifies several opportunities for New Zealand to be a world leader in the transformation to a green, low-carbon economy. Integrating biodiversity protection more strongly into current and future legislation, and adoption of economic instruments to promote innovation, are just two tools that could be used to ensure that our environment and our economy are more tightly interwoven in future.”