

Health benefits and savings of equitable climate mitigation in New Zealand

A Zero Carbon Act will need to set targets and action that are fast, fair, firm and founded on Te Tiriti o Waitangi.

Climate change has been identified as both the greatest threat to global public health and the greatest opportunity to address our biggest causes of mortality and morbidity.[1] Proactively combating climate change is one of the most important actions the New Zealand government can take to improve outcomes for health. Climate protection can also help with many of the government's other social and health priorities, including reducing health inequities and eliminating child poverty.

If climate change continues unchecked, the burden of disease, disability and premature death from climate change will continue to accelerate globally. New Zealand will not be immune. Conversely, potential win-wins for health (co-benefits) exist in addressing climate change across New Zealand's main climate polluting sectors: transport, housing, energy, agriculture and food, and health.

Health co-benefits of climate action [1,2,4-8]

The building blocks for health lie well outside the health sector and, like health services, are unjustly distributed by income and ethnicity. In particular, this undermines the Treaty and other rights to health for Māori.[2,3]

Climate actions that are timely, well-designed and fairly implemented, can lead to a healthier nation, a healthier environment and alleviate growing financial pressures on the health sector in New Zealand.[1,2,4-8] Financial costs of responding to climate change will be offset by the costsavings of health co-benefits. There are actions and policies that can be valued, included in costbenefit assessments and implemented now.

Specific examples are in the table below.

Emissions reduction measure (mitigation)	Health benefits
Zero-carbon public and active transport by rebalancing the transport investment	Physical activity-related including obesity, air pollution-related, road traffic injuries, equitable access to education and employment, improved social connection, improved economic resilience, and more [9-15]
Housing-related energy efficiency through investment in housing insulation and quality and zero-net carbon heating including in private rental housing	Reductions in lung cancer, cardiovascular and respiratory disease, extreme temperature related deaths including cold-related deaths, asthma, child poverty [16-19]
Reducing production and consumption of animal products through pricing, removal of perverse incentives and health promotion	Ischaemic heart disease, cancer, obesity, freshwater quality, food and waterborne infectious disease, antimicrobial resistance, food insecurity [20-22]
Zero-carbon energy generation through no new fossil fuel exploration, putting climate change back in the RMA and taxing pollution	Air pollution related (cardiopulmonary mortality, cancer), occupational injury, social and health equity [4]

Health equity and harms [1-3,8]

Climate action that prioritises health equity has significant potential to reduce health inequities for Māori, Pacific people, and low-income New Zealanders. For example, recycling carbon penalty

revenue back to low-income families would remove the risk of an extra carbon-cost burden, and could provide revenue for initiatives that improve health (and lower emissions) for low-income New Zealanders (eg. retrofitting insulation to make homes warm and dry can reduce childhood asthma and chest infections, being leading causes of hospital admissions, particularly for Māori and Pacific children).

These win-wins (co-benefits) will not come automatically. There is also potential for co-harms to health and health equity from mitigation and adaptation actions (examples include: food crop biofuels, incentivising expensive electric private cars at the expense of public and active transport, an Emissions Trading Scheme from which only corporations profit, and poorly managed retreat from sea level rise). Many health equity risks of climate policy can be reduced through the effective government hypothecation (directed recycling) of carbon price revenues – making it crucial that carbon price instruments enable this.[23]

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