

Wasting Opportunities: New Zealand's Circular Economy at a Crossroads

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New Zealand stands at a crossroads where policy decisions ripple across multiple sectors, yet our government's approach to biofuels appears increasingly siloed.

Recent changes to waste management and emissions reduction policies raise questions about how holistically we assess the long-term impacts of environmental decisions on our economy, society, and international reputation.

The two recent government decisions about waste highlight the government's inability to combine climate change, waste management and renewable energy policies.

The second Emissions Reduction Plan's initiative to enable offsite biogas use from landfills could unlock the equivalent of a third of natural gas used by residential applications.

However, this has been negated by simultaneous cancellation of mandatory kerbside food waste collection. These decisions reveal potential conflicts between immediate cost savings and long-term environmental and economic opportunities.

The decision to cancel the mandate for kerbside organics



collection provides immediate relief to councils from implementation costs. But it will have dire consequences for our waste management infrastructure.

Alternative technologies like composting and anaerobic digestion, which offer lower carbon footprints and recover valuable nutrients and energy, now face increased market uncertainty.

The monetisation of offsite biogas from landfills, viewed in isolation, represents a positive step toward utilising waste-generated energy. However, when combined with the cancellation of mandatory kerbside food waste collection, these policies create an unbalanced market dynamic. The two policy changes combined strengthen economic position for landfills, making it increasingly difficult for sustainable alternatives like composting and anaerobic digestion facilities to compete for organic waste



Clockwise from top left: Organic waste handling in an odour-controlled facility; Successful kerbside organics collections in large centres like Auckland, Tauranga, Hamilton and Christchurch; Auckland Council kerbside food collection; Ecogas Organics Processing Facility in Reporoa.

resources. The compounded effect of these policy decisions inadvertently provides additional momentum to the least environmentally preferable option in our waste hierarchy, potentially locking NZ in a landfill-dependent waste management system for the foreseeable future.

While landfills serve an important role in our waste management system, strengthening their market position at the expense of more sustainable alternatives seems at odds with our circular economy ambitions and climate

commitments. For ratepayers, the immediate impact may be neutral, as landfill fees are unlikely to decrease. Local councils regain flexibility in waste management decisions with the pathway to landfill remaining available for organics, though this will come at the cost of long-term environmental benefits. Businesses seeking sustainable waste solutions will find their options limited due to existing infrastructure constraints.

The situation isn't without hope, however.

The recent energy crisis has highlighted the potential of biomethane and renewable gas, drawing unprecedented attention to these alternatives. This market driver, combined with growing corporate sustainability commitments, could help offset some of the policy changes' impacts.

To create a more balanced approach, several additions could be considered. The government could implement incentives for businesses that voluntarily adopt sustainable waste management practices, either as part of the ETS scheme or independently.

Developing public-private partnerships to support infrastructure development will provide supply security essential for investment into new infrastructure. This was exemplified by Auckland Council's partnership with Ecogas for their

kerbside organics processing at the Reporoa anaerobic digestion facility.

Ultimately the household, manufacturing and commercial organic waste produced in NZ offer the potential to create as much as 20 PJ of renewable gas. This is a ten-fold increase from current production and sufficient to cover 100% of the hard-to-abate applications such as restaurants and hospitality, and also cover peak electricity generation from wind and solar.

The success of our transition to a circular bioeconomy will depend on collaborative efforts between government, industry, and communities to develop practical, sustainable solutions that work for all stakeholders.

While the path forward may have changed, the destination remains crucial for NZ's environmental and economic future.