

Strategic Waste Review - Wellington Waste Roadmap

A response to the roadmap and a Zero Waste City Plan from Waste Free Welly

Waste Free Welly is an open and collaborative group of individuals and organisations working to progress the vision of zero waste in the Wellington Region. Our group includes enterprises, advocates, educators, researchers, NGOs, and consultants who all share the same vision of a zero waste city.

‘Whītiki te tangata, mārama te kitea’ - By bringing people together, clarity is achieved.

In Te Ao Māori, everything has a circular, reciprocal relationship, interconnected through whakapapa and intergenerational responsibilities. The current approach to resource use and waste is linear, by intentional design. Trying to shift a deeply embedded linear approach to waste towards circular systems requires significant redesign of systems and inputs. However, as we transition towards a complete circular system, it is critical that circular systems are applied wherever possible along the entire linear system to recover resources into circular processes.



Olga Speranskaya, Warren Fitzgerald, Waste Free Welly members

Introduction

Waste Free Welly is heartened by Wellington City Council's recognition that our city's approach to waste really needs to change. We agree that an ambitious rethink will help to align waste policy and practice with the Council's aspirational 'Wellington 2040' vision of an inclusive, sustainable and creative capital, and with an appropriate ground level response to the Council's 2020 declaration of an ecological and climate emergency.

Therefore, we welcome the Strategic Waste Review and its overarching goal for WCC to become a leader in waste minimisation that follows the waste hierarchy. The aspirations contained in the draft document are good; it is very positive that the high level goal, and key performance measures emphasise the need to minimise use of resources and address whole of life carbon/consumption emissions. We are pleased the Council acknowledges that the focus of effort must shift to reuse and other opportunities at the top of the waste hierarchy. We are also pleased that partnership with mana whenua and the community is something that WCC recognises as important for the successful delivery of the plan.

In this spirit of partnership, we thank WCC for including Waste Free Welly in the strategic waste review process to date; we have fully welcomed having some involvement in the process. Members of the group have been included in two workshops and we can see that some of our feedback has been taken onboard in the draft document. We haven't yet been consulted on the roadmap document or its proposed initiatives and workstreams.

This document offers our advice in relation to the recommendations currently before Councillors.

Advice and Recommendations for Consultation Process and Strategic Waste Review

Summary of our main points for Councillors:

- Refer to our attached DRAFT Zero Waste Plan for Welly, and the ZWE and GAIA Masterplans. Commit to further refine the Strategic Waste Review in light of these documents, with a focus on strengthening the proposed initiatives and implementations to better match ambition.
- Align the process for further investigating and analysing waste disposal options, with the development of the strategic waste review roadmap. It does not make strategic nor practical sense to continue dealing with these two matters separately.
- Start to practice partnership now, by requiring a co-design process that involves Waste Free Welly, Para Kore, local residents and mana whenua in the working group.
- Ensure the agreements made in Te Tiriti o Waitangi are applied to the re-design of waste systems that protect taonga and uphold tino rangatiratanga.

- Recognise that effective waste reduction has broader economic, social and environmental benefits for the city that are not fully outlined in the Council papers, and are obscured by siloing the Strategic Waste Review within the infrastructure committee.
- Ensure the vision embraces zero waste and close the gap in the Strategic Review between ambition and implementation
- Reframe the various waste disposal options in relation to a circular economy and acknowledge the trade-offs of each decision to ensure infrastructure decisions are not made in a vacuum.
 - Refine the landfill options, including the ‘no landfill option’, to align with the draft roadmap’s ambitions, i.e. specify concurrent actions to ensure that landfills (wherever they are located) are the destination of last resort.
 - Guarantee that space will be found for composting and resource recovery if the landfill extension goes ahead. Sites for these activities should be located before a final decision on extension is made.

Refer to our attached DRAFT Zero Waste Plan for Welly, and the ZWE and GAIA Masterplans. Commit to further refine the Strategic Waste Review in light of these documents, with a focus on strengthening the proposed initiatives and implementations to better match ambition.

What we have noticed

We are pleased that some of the initiatives recommended in our Draft Zero Waste Plan are reflected in the Council’s draft roadmap. **We would like to see a wider, more comprehensive and ambitious set of initiatives.**

Our recommendation

We wish to share our own draft Zero Waste Plan for Wellington. This zero waste plan combines the knowledge and practice of Waste Free Welly members, with the best international evidence, as contained in the two Zero Waste Masterplan documents produced by Zero Waste Europe (ZWE) and GAIA. These two masterplans offer a comprehensive, practical outline of the tools and strategies that cities can implement to achieve dramatic reductions in waste:

- Joan Marc Simon, Jack McQuibban, Pierre Condamine (2020) *The Zero Waste Masterplan - Turning the vision of circular economy into a reality for Europe* (Zero Waste Europe).
- Aditi Varshneya, Ruth Abbe, and Alex Danovitch (2020) *The Zero Waste Masterplan: A guide to building just and resilient zero waste cities* (Global Alliance for Incinerator Alternatives: Berkeley, CA).

We believe that the suite of actions contained in our plan, and our own internal ability to continue refining and exploring innovative and creative initiatives, could help WCC to bridge the gap we have identified between the high level goals and ambition in the Strategic Review document, and its proposed initiatives and implementation.

In addition to our Zero Waste Plan, we also strongly recommend that WCC consults the ZWE and GAIA masterplans while continuing to develop its Strategic Waste Review. While these masterplans are relevant to all communities, they have been particularly useful for cities in a situation akin to Wellington that face a crossroads due to their waste disposal infrastructure reaching end of life. Arriving at this crossroads offers cities the opportunity to take a leap forward in waste minimisation; the masterplans provide a step-by-step guide to enable cities to grasp this opportunity, rather than squander it.

Align the process for waste disposal options and strategic waste review

What we have noticed

Officers want to continue to investigate and analyse further waste minimisation and waste disposal options and consultation requirements, reporting to Te Pūoro Waihanga Infrastructure Committee in early 2022. The waste disposal options paper and the strategic waste review remain separate documents with separate consultation and decision-making processes.

Our recommendation

We strongly urge the Council to bring together the process on landfill residual waste treatment and the strategic waste review roadmap; a sensible decision on residual waste treatment cannot be taken in isolation from the roadmap. This is especially because zero waste strategies are key to addressing the problem of residual waste by helping to reduce it in the first place. Success in reducing waste has flow-on effects for the infrastructure chosen (or not chosen) to service the bottom of the waste hierarchy. Even in producing this advice, we have found it virtually impossible to comment on the waste disposal options paper, and the Strategic Waste Review paper, separately. We do not believe that Councillors should be put in the position of making decisions that are so interconnected, in separation from each other.

Start to practice partnership now

What we have noticed

The roadmap commentary recognises that the Council cannot achieve its ambitions for waste minimisation alone. However, it remains unclear how stakeholders will be involved in decision-making over both the residual treatment options and the roadmap. Although the Strategic Review sets a strong rhetorical intention about partnership and collaboration, this does not translate into the roadmap initiatives, which remain Council-focused. For example, there is little or no mention of community or Māori enterprise or mana whenua in any sort of business capacity or partnership capacity. There is hardly any recognition of existing best practice, awareness of potential partners, nor adequate discussion about how partners and mana whenua will be resourced. Furthermore, we note that the roadmap identifies that external stakeholders have been consulted on the initiatives, but Waste Free Welly has not yet been involved in this stage of the strategic waste review.

Our recommendations

Even though the Strategic Review is still in draft form, we urge the Council to begin implementing its proposed partnership approach now because the decisions currently being undertaken will affect how Wellington approaches waste for many years to come. Mana whenua, tangata whenua, kaupapa Māori organisations, businesses, waste experts in the city, and the wider community have a lot to offer Council in terms of ideas and support - we agree that it is unrealistic to expect Council to transform how the city approaches waste on its own.

Council can begin acting in partnership by co-designing its waste strategies and action plans with mana whenua, the community and other parts of Council, to ensure solutions aren't siloed in waste operations and infrastructure; to ensure a process that upholds Te Tiriti; and to avoid the Council overlooking or duplicating work already being undertaken at the community level. WCC has successfully adopted a co-design approach for the Aho Tini, Arts Strategy, Brooklyn Bike lanes and now for the economic wellbeing strategy. We note that meaningful co-design requires adequate resourcing.

Going forward, we encourage WCC to establish a vision in the Strategic Review that is inclusive and relevant, and shows true leadership. This should be a vision that ensures Te Tiriti is honoured, includes mana whenua aspirations, and brings the community together through a focus on wellbeing, values, and intergenerational responsibilities. To achieve Council's goals of partnership and collaboration, the roadmap's approach to implementation must focus on **empowering, enabling, resourcing and working together** with everyone to help deliver outcomes: Māori, community and local enterprise, and other organisations and communities of interest.

We also recommend Council does more work to identify potential partners, including strengthening the place-based research in the Strategic Review to identify key actors in Wellington's regional zero waste sector. We know that circular and zero waste activities are not an imaginary future activity that has yet to arrive. Many businesses and organisations are already developing and applying circular and zero waste principles and practices in Wellington City. Their impact could be increased through direct, strategic support from Council, which would also give Council a headstart in implementing its roadmap, while avoiding duplication. Waste Free Welly can play a supporting role in this place-based research by linking Council up with those demonstrating best practice. We note the case studies already highlighted in our Zero Waste Plan, and the working infographic we have created that gives a bird's eye view of current activity in the city.

Regionally, we know other Councils are looking at landfill capacity, community resource recovery centres, resource recovery parks and recycling optimisation. A holistic, regional view is needed to assess existing and future infrastructure assets needs and ensure capital investment is spent in the right way.

Locally, the Council leases land to one of the C&D landfills. We encourage the Council to consider how it can work with this site to support development of recovery facilities and best use of remaining landfill

capacity in Happy Valley. Furthermore, private waste contractors and waste processors are eager to develop reprocessing capacity. We encourage Council to engage with these stakeholders to ascertain what is planned and what could be achieved collaboratively.

Ensure the agreements made in Te Tiriti o Waitangi are applied to the re-design of waste systems that protect taonga and uphold tino rangatiratanga.

What we have noticed

While referenced as a legislative document, Te Tiriti o Waitangi is not acknowledged as a foundational document that can inform best practice when redesigning and designing new systems around waste minimisation.

Understanding and acknowledging that the linear system of resource extraction and waste is fundamentally in contradiction with Te Ao Māori means that in order to uphold rights guaranteed in Te Tiriti, a complete dismantling and re-design of the current waste system is required. When Te Tiriti is upheld, everyone benefits; Māori, pākehā, tangata moana, tauiwi, Ranginui, Papatūānuku, me a rāua uri - all descendants of Rangi and Papa. Maintaining this vision and goal informs best practice and actions, and measures outcomes along the journey towards a Tiriti-centered and waste free future.

Our recommendation

Continue to ensure Te Tiriti remains a core document to inform the Roadmap, as has been identified in the Draft, and that it is utilised to inform any redesign or when designing new systems for waste and waste minimisation.

Recognise and realise the broader economic, social and environmental benefits of zero waste

What we have noticed

The Council papers do not acknowledge the strategic alignment of the strategic waste review with:

- A dynamic and sustainable economy;
- Fit-for-purpose community, creative and cultural spaces;
- Strong partnerships with mana whenua.

Furthermore, decision making on the strategic waste review sits within the infrastructure committee rather than the wider Council.

Our recommendation

As noted in the Waste Free Welly Zero Waste Plan, there are wide benefits from the implementation of a genuine zero waste strategy. We recommend the Council undertake a comprehensive economic and

carbon assessment to gain a more holistic picture of the benefits to Wellington of a well-designed zero waste strategy. The economic assessment needs to consider the additional income that will come to WCC as a result of the increase in the waste levy from MfE. Once these broader benefits of zero waste are understood, the roadmap can both acknowledge them and bring them to life by adopting objectives and key performance measures that go beyond waste reduction, such as community resilience and wellbeing, a sustainable economy, and strong partnerships with mana whenua.

Given the Strategic Waste Review has potential positive implications for Council's work as a whole, WCC should review internal decision making structures and consider how the rest of the organisation is engaged in delivery of the ambition of the roadmap. This is especially important because activity at the top of the waste hierarchy that focuses on preventing waste in the first place will bring the greatest reduction in waste and greenhouse gas emissions, and the widest range of benefits. However, it is important to recognise that many innovations in the areas of waste prevention, reduction and reuse are likely to occur outside the traditional waste and resource recovery sector, and require approaches and relationships that sit outside the usual roles of a waste operations team. Therefore, it is important for the zero waste strategy to be understood and championed by teams in Council beyond the waste team.

Ensure the vision embraces zero waste and close the gap between ambition and implementation

What we have noticed

The draft roadmap incorporates good objectives and key performance indicators, and high-level principles, such as the waste hierarchy, but the ultimate goal is waste minimisation. Furthermore, the potential to divert waste from landfill, and the timeframe over which this can happen is conservative (e.g. halving waste to landfill in 15 years).

We acknowledge and welcome the strongly expressed intention in the Strategic Waste Review to commit more focus to the waste hierarchy, maximise resource use and form meaningful partnerships to deliver outcomes collectively. However, this intention does not successfully translate into the proposed implementation and initiatives.

Both documents appear to underestimate and misunderstand the potential of the circular economy with too much focus on advanced waste management. There is no real recognition of what is already happening in WCC. Many of the initiatives highlighted as areas where Council could lead are already happening on the ground, e.g. waste free events and advice for businesses on how to reduce waste. Meanwhile, areas that suffer from gaps in policy, investment and regulation that Council could fill are under-considered.

Very few of the proposed initiatives target the top of the waste hierarchy, and some critical prevention, reduction and reuse initiatives are not given priority. There is minimal discussion of regulations,

mandates or targets, and the potential scope of procurement is too narrowly defined. There is no mention of new business opportunities in these areas, nor how Council might promote top of the waste hierarchy activity through regulation, infrastructure or investment. Instead, the emphasis is on behaviour change/education, with a tendency to see reduction of upstream waste and emissions as predominantly about “encouraging people to change their approach to purchasing decisions” rather than something that responds to targeted policy and investment at the top of the waste hierarchy.

Our recommendation

We recommend Wellington City Council adopts a zero waste vision, which sets an ambitious benchmark for driving meaningful waste reduction that is tied to practical, people-centric strategies that work. We also urge the Council to aim higher in its waste reduction targets; international case studies show that far more can be achieved than halving waste to landfill over a 15 year period. For example, the Italian city of Parma’s residual waste rate fell by 59% in just four years after implementing an ambitious zero waste plan.¹ A longer term example is Ljubljana in Slovenia, which cut waste to landfill by 95% in 14 years.²

The roadmap must show how Council will move beyond pouring the majority of the city’s waste minimisation resources into residual waste treatment and recycling. We urge Council to propose more initiatives (beyond behaviour change/education) that are directly focused on waste prevention, reduction and reuse, and employ the waste hierarchy as a key measure in conducting multi-criteria analysis. These initiatives should feature a creative combination of procurement, investment and policy and regulatory decisions, alongside education.

Waste minimisation is close to the hearts of everyday people throughout Aotearoa, including Wellingtonians – there is public appetite for change. Nevertheless, the transition to zero waste will not occur spontaneously because the current approach to the economy, procurement, and even waste management, is hardwired for wastefulness. There are real barriers to living and doing business zero waste that must be actively removed for these practices to be widely embraced. Meanwhile, there are already strong pockets of best practice in Wellington City – from community organisations through to local enterprises – that are not receiving the support they deserve for the contribution they already make to reducing waste in the city. Targeted council policy and investment (beyond contestable grants) is needed to improve the long-term viability of these initiatives, and to help make best practice standard practice across the city.

When developing initiatives, we urge Council to explore the methodologies, policies and levers at its disposal to drive activity at the top of the waste hierarchy and send strong signals about the direction

¹ Ferran Rosa (2018). *The Story of Parma*. Zero Waste Europe, <https://zerowastecities.eu/bestpractice/best-practice-the-story-of-parma/>

² Erika Oblak (2019). *The Story of Ljubljana*. Zero Waste Europe, <https://zerowastecities.eu/bestpractice/best-practice-ljubljana/>

of travel. Many such initiatives are included in our draft Zero Waste Plan and we are continuing to engage with our members to develop these further. This includes:

- Regulation, bans, mandates, targets and enforcement – much of which will be possible through the Solid Waste Management and Minimisation Bylaw. This may include restricting waste streams that can be disposed of to landfill, requiring householders and businesses to recycle and separate waste streams at source, and restricting residual waste capacity.
- Allocating levy funds, rates and grants in accordance with the waste hierarchy.
- Acting as an ‘anchor institute’ that enables waste minimisation activities and enterprises to flourish by:
 - Showing leadership on zero waste within its own operations and amongst Council staff, and piloting zero waste initiatives.
 - Leveraging the purchasing power of local government to procure supplies from local low-waste businesses.
 - Strategically using social procurement to support local and community enterprise to deliver roadmap outcomes and realise broader benefits, including contracting community enterprises to deliver core municipal zero waste services.
 - Investing in infrastructure that makes it viable for businesses and communities to prevent and reduce waste and reuse products.
 - Providing affordable and accessible use of Council property and land, and offering rates rebates and peppercorn rentals for targeted activities.

Reframe the various waste disposal options in relation to a circular economy and acknowledge the trade-offs of each decision to ensure infrastructure decisions are not made in a vacuum

What we have noticed

The waste disposal options and the Strategic Waste Review are two critical pieces of work for the future of waste in Wellington City that are being viewed primarily through an infrastructure lens (before the infrastructure committee). We are concerned that the two papers lack nuanced discussion or analysis of the lock-in effect of various infrastructural decisions, and the possible interplay of some of the infrastructure options in different waste reduction scenarios. Furthermore, although the costs and pros and cons are assessed for each option, there is limited transparency about the inter-related nature of the options and the *trade-offs* of choosing one option over another. These broader contextual matters are critical when making decisions about infrastructure to avoid lock-in and other unintended consequences.

Some of the narrow or disjointed analysis we have noticed:

- Although the landfill extension is highlighted as the preferred option, the other residual waste treatment options are identified as reinforcing a circular approach to waste management: “Technological options other than landfill would appear to align with the Council’s objectives

to promote a more circular economy and reduce the social and environmental impacts of waste management” (para 63). This fundamentally misrepresents the concept of the circular economy and the goal of the roadmap. The circular economy is primarily focused on achieving resource conservation by removing system incentives for inefficient resource use. Waste-to-energy is not a circular solution because its technical and financial viability relies on the rapid and continual throughput of feedstock (lots of waste, mostly from non-renewable resources) generated by the linear economy.

- The technological options have been framed as ‘alternative’ options to landfill, but Council has also acknowledged that “these technological options are not alternatives to a landfill on their own.” Furthermore, some of these options (e.g. a dirty MRF) might exist alongside landfill within a broader circular economy/zero waste strategy, depending on different waste reduction scenarios and approaches, but such analysis has not been undertaken.
- The impact of ongoing sewage sludge to landfill is not well-integrated into the analysis. The operational date for the sludge minimisation facility looks to have been delayed to 2026 or even later, creating a lack of clarity about how waste minimisation will be progressed in Wellington in the interim if the sludge continues to be landfilled. Import of waste from other areas has been identified as a potential option to prevent waste minimisation being delayed. The papers do not mention the recent discussions about complementary actions to address sludge led by Beyond the Pipes (aka Poo Breakfast Club), a sub-group of Waste Free Welly.
- The assessment of landfill capacity is a critical factor in decision-making, but there is inconsistency in the data sets used across the different supporting documents and reduction in waste to landfill isn’t properly considered in the residual treatment options. Council has already noted, and we agree, that the “real decision is on the policy settings that support waste minimisation, rather than a simple technological disposal solution” (p. 37).

Our recommendation

We urge the Council to join up its thinking regarding how the different infrastructure options are framed and weighed against each other, and how they are situated in the context of the strategic review. This includes considering the options within a zero waste framework, and we thus recommend that Council refers to some of the “stumbling blocks” to zero waste that cities often encounter in transitional moments such as that which Wellington currently faces, as described in the GAIA Zero Waste Masterplan.³ We note the importance that decisions today do not lock the city into infrastructure that will perpetuate current linear models of waste production. Rather, they should be aligned with the systems and infrastructure that will enable Wellington to hit the ground running with a zero waste plan.

We recommend a more detailed assessment of landfill capacity that takes into account broader context. This includes consideration of whether landfill capacity must be limited to the Southern landfill versus other regional landfills, or whether they could be used in combination. Overall, we believe that despite current data limitations, more modelling is required to understand the current capacity and

³ [GAIA Zero Waste Masterplan](#), Chapter 4, pp.74-87.

future lifespan of the landfill under different options/scenarios, including the predicted impact of the roadmap for each scenario. Ultimately, we ask that Council explores the pathway to eventually stop landfilling waste generated in Wellington in the future (bar a few exceptions), and use all means available to ensure that landfilling is a last resort.

We suggest removing waste-to-energy as an option before Council to send a clear message that this is not an acceptable option for consideration. In keeping with the themes of the Strategic Waste Review, particularly the waste hierarchy, we also recommend that officers reframe the analysis of waste-to-energy to make clear that it is the option that is *least* compatible with the city's circular and low emissions goals, in addition to failing to uphold Te Tiriti.

We call for a guarantee that WCC will progress waste minimisation alongside the sludge solution to ensure bold, creative and courageous waste minimisation isn't stalled while waiting for the sludge minimisation solution to come online. We understand there is no silver bullet. Still, the Council should investigate if there are any other potential short term trade-offs, e.g. a short-term alternative destination for some of the sludge, following appropriate consultation with mana whenua. We would also welcome official Council engagement with novel and complementary approaches to reducing sewage sludge, as were explored during the recent Beyond the Pipes SymPOOsium at Greater Wellington Regional Council. A full report of the event is available.⁴

We suggest Council conducts a more nuanced and transparent analysis of the tradeoffs of the residual waste and disposal options. For example, the landfill extension option should consider what will happen to the existing composting and proposed resource recovery activities should they be displaced by the extension. Having access to land for resource recovery and composting is critical for achieving outcomes in the roadmap, so Council should guarantee (and ideally, locate) a site(s) for these activities before confirming any extension. We also suggest analysing whether the MRF and MBT options could function within and alongside a zero waste approach as the final treatment stage of residual waste prior to landfilling, but only after all possible measures to prevent waste generation, and to reuse and separately collect/recover resources have been implemented - rather than as standalone 'alternative' options.

Appendix and Supporting Documents

- Evidence already submitted to waste operations team
- DRAFT Zero Waste Plan

⁴ Beyond the Pipes (2021) *Report back on the SymPOOsium - Beyond the Pipes: Reimagining sustainable and resilient wastewater and sanitation solutions* (20 September 2021). Accessible at <http://therubbishtrip.co.nz/wp-content/uploads/2021/09/20210920-FINAL-SymPOOsium-Report-Back.pdf>.