

### KOMITI KAUPAPA TAIAO CLIMATE CHANGE AND SUSTAINABILITY COMMITTEE

18 February 2025

Order Paper for the meeting to be held in the **Council Chambers, 2nd Floor, 30 Laings Road, Lower Hutt,** on:

#### Tuesday 25 February 2025 commencing at 2:00 pm

The meeting will be livestreamed on Council's YouTube page.

#### Membership

Cr J Briggs (Chair) Cr C Parkin (Deputy Chair) Cr K Brown Deputy Mayor T Lewis Cr N Shaw

For the dates and times of Council Meetings please visit www.huttcity.govt.nz

#### Have your say

Mayor C Barry

Cr S Edwards

Cr A Mitchell

You can speak under public comment to items on the agenda to the Mayor and Councillors at this meeting. Please let us know by noon the working day before the meeting. You can do this by emailing DemocraticServicesTeam@huttcity.govt.nz or calling the Democratic Services Team on 04 570 6666 | 0800 HUTT CITY



### KOMITI KAUPAPA TAIAO CLIMATE CHANGE AND SUSTAINABILITY COMMITTEE

| Chair:         | Cr Josh Briggs  |
|----------------|---|
| Deputy Chair:  | Cr Chris Parkin   |
| Membership:    | Mayor Campbell Barry  |
|                | Deputy Mayor Tui Lewis  |
|                | Cr Keri Brown   |
|                | Cr Simon Edwards  |
|                | Cr Andy Mitchell  |
|                | Cr Naomi Shaw   |
|                |   |
|                | Refer to Council's Standing Orders (SO 31 Provisions for Mana Whenua) |
| Quorum:        | Half of the membership  |
| Meeting Cycle: | Meets on an eight-weekly basis or at the requisition of the Chair     |
| Reports to:    | Council   |

#### OVERVIEW:

The Komiti Kaupapa Taiao | Climate Change and Sustainability Committee has responsibility for oversight of Council's environment and climate change response.

The committee is aligned with the Environment and Sustainability Directorate.

Its areas of focus are:

- Oversight of Council's plan to reach Carbon Zero
- · Collaborating with Mana Whenua, residents and businesses to decarbonise the city
- Developing and implementing climate and environmental policies and plans including ecology, biodiversity, forestry and biosecurity matters
- Climate adaption and resilience
- Treaty partnerships
- Waste and recycling
- Issues affecting the natural environment including streams, rivers and harbour
- Allocate funding for community climate action

#### **PURPOSE:**

To develop, implement, monitor and review strategies, policies, plans and functions associated with environmental and climate change activities to strengthen the long-term resilience and sustainability of the city through climate change awareness and action.

#### DELEGATIONS FOR THE COMMITTEE'S AREAS OF FOCUS:

• All powers necessary to perform the committee's responsibilities including the activities outlined below.

- Develop required strategies and policies. **Recommend draft and final versions to Council** for adoption where they have a city-wide or strategic focus.
- Implement, monitor and review strategies and policies.
- Oversee the implementation of major projects provided for in the Long Term Plan or Annual Plan.
- Oversee budgetary decisions provided for in the Long Term Plan or Annual Plan.
- Oversee the development and implementation of plans and functions that promote environmental well-being, including Council's plan to reach Carbon Zero.
- Maintain an overview of work programmes carried out by Council's Environment and Sustainability Directorate.
- Address matters related to ecological protection, the protection of biodiversity and biosecurity.
- Address matters related to climate change, including raising awareness of climate-related impacts and issues, advocating for climate change impacts, issues and actions and championing initiatives that reduce carbon emissions.
- Advocate for strong relationships with Council's Mana Whenua partners as outlined in the Tākai Here agreements ensuring the outcomes of the committee are in line with the aspirations of the partners.
- Advocate for the best interests of Māori communities in Lower Hutt having regard to the committee's goals.
- Ensure the committee is operating in a way that is consistent with various pieces of legislation that provide for Te Tiriti o Waitangi.
- **Recommend to Council** the acquisition or disposal of assets unless the acquisition or disposal is provided for specifically in the Long Term Plan.
- Conduct any consultation/engagement processes required on issues before the committee.
- Approve and oversee monitoring of funding for community climate action.
- Approve and forward submissions (other than those delegated to the District Plan Review Committee).
- Any other matters delegated to the committee by Council in accordance with approved policies and bylaws.
- The committee has the power to perform the responsibilities of another committee where it is necessary to make a decision before the next meeting of that other committee. When exercised, the report/minutes of the meeting require a resolution noting that the committee has performed the responsibilities of another committee and the reason/s.
- If a policy or project relates primarily to the responsibilities of the Komiti Kaupapa Taiao | Climate Change and Sustainability Committee, but aspects require additional decisions by the Komiti Hapori Ahurea me ngā Rangapū | Communities, Culture and Partnerships Committee and/or Komiti Hanganga | Infrastructure and Regulatory Committee, then the Komiti Kaupapa Taiao | Climate Change and Sustainability Committee has the powers to make associated decisions on behalf of those other committees. For the avoidance of doubt, this means that matters do not need to be taken to more than one of those committees for decisions.

#### HUTT CITY COUNCIL

#### <u>KOMITI KAUPAPA TAIAO</u> <u>CLIMATE CHANGE AND SUSTAINABILITY COMMITTEE</u>

Meeting to be held in the Council Chambers, 2nd Floor, 30 Laings Road, Lower Hutt on Tuesday 25 February 2025 commencing at 2:00 pm.

#### ORDER PAPER

#### PUBLIC BUSINESS

#### 1. OPENING FORMALITIES - KARAKIA TIMATANGA

Whakataka te hau ki te uru Whakataka te hau ki te tonga Kia mākinakina ki uta Kia mātaratara ki tai E hī ake ana te atakura He tio, he huka, he hau hū Tīhei mauri ora. Cease the winds from the west Cease the winds from the south Let the breeze blow over the land Let the breeze blow over the ocean Let the red-tipped dawn come with a sharpened air. A touch of frost, a promise of a glorious day.

#### 2. <u>APOLOGIES</u>

Mayor Barry and Cr Shaw.

#### 3. <u>PUBLIC COMMENT</u>

Generally up to 30 minutes is set aside for public comment (three minutes per speaker on items appearing on the agenda). Speakers may be asked questions on the matters they raise.

#### 4. <u>CONFLICT OF INTEREST DECLARATIONS</u>

Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as a member and any private or other external interest they might have

#### 5. <u>UPDATE ON SOLID WASTE AND WASTE MINIMISATION</u> <u>MATTERS</u>

Report No. CCASC2025/1/26 by the Senior Advisor Waste - Planning and Strategy

6

#### CHAIR'S RECOMMENDATION:

"That the recommendation contained in the report be endorsed."

#### 6. <u>UPDATE ON REDUCING KERBSIDE RECYCLING</u> <u>CONTAMINATION</u>

Report No. CCASC2025/1/27 by the Senior Advisor Waste - Planning and Strategy

#### CHAIR'S RECOMMENDATION:

"That the recommendation contained in the report be endorsed."

#### 7. UPDATE ON COUNCIL'S CLIMATE CHANGE WORK

Report No. CCASC2025/1/28 by the Senior Advisor - Climate and Sustainability

25

14

#### CHAIR'S RECOMMENDATION:

"That the recommendations contained in the report be endorsed."

#### 8. <u>CLIMATE CHANGE AND SUSTAINABILITY COMMITTEE WORK</u> <u>PROGRAMME 2025</u>

Report No. CCASC2025/1/29 by the Democracy Advisor

40

#### CHAIR'S RECOMMENDATION:

"That the recommendation contained in the report be endorsed."

#### 9. QUESTIONS

With reference to section 32 of Standing Orders, before putting a question a member shall endeavour to obtain the information. Questions shall be concise and in writing and handed to the Chair prior to the commencement of the meeting.

#### 10. CLOSING FORMALITIES - KARAKIA WHAKAMUTUNGA

| Unuhia!  | Release us from the supreme sacredness of our  |
|--|--|
| Unuhia!  | tasks  |
| Unuhia i te uru-tapu-nui   | To be clear and free   |
| Kia wātea, kia māmā  | in heart, body and soul in our continuing  |
| Te ngākau, te tinana, te<br>wairua i te ara takatū<br>Kaja rā a Barras | journey<br>Oh Rongo, raise these words up high<br>so that we be cleansed and be free |
| whakairihia ake ki runga<br>Kia wātea, kia wātea!                      | Yes indeed, we are free!<br>Good and peaceful  |
| Ae rā, kua wātea!  |  |
| Hau, pai mārire.   |  |

Vanessa Gilmour DEMOCRACY ADVISOR

#### HUTTCITY TE AWA KAIRANGI Climate Change and Sustainability Committee

03 February 2025

Report no: CCASC2025/1/26

## Update on Solid Waste and Waste Minimisation matters

6

#### **Purpose of Report**

- 1. This report consolidates information on the status of Council's solid waste management and minimisation initiatives.
- 2. Detailed and regular information on the ongoing development, operation and performance of the Silverstream Landfill is covered in a separate report to the Hutt Valley Services Committee. The latest report from <u>November 2024 is available online (page 32)</u>.

#### Recommendation

That the Committee receives and notes the update on various solid waste management and minimisation matters.

## Implementation of Wellington Region Waste Management and Minimisation Plan 2023-2029 (WMMP)

#### Regional actions

3. WMMP implementation by officers of the Wellington Region councils continues. A <u>progress update</u> was provided to the Wellington Region Waste Management and Minimisation Joint Committee in December 2024, this includes updates on the major regional projects for 2024/2025 (Q2).

#### Lower Hutt actions

- 4. Implementation planning for Council's Local Action Plan under the WMMP is now complete. To provide the Committee with a regular progress update, a project dashboard has been developed, as shown in Appendix 1 attached to the report.
- 5. Going forward, the dashboard will provide updated information on the comprehensive work programme at Hutt City Council to implement the WMMP. The dashboard also includes those regional or sub-regional projects that Hutt City Council has elected to lead.

- 6. A total of 28 projects are set out in the dashboard, the majority of these are in the planning or delivery phase, and the diagram in Appendix 2 attached to the report shows the linkages between those projects and the WMMP targets, alongside the regional projects that Council will also contribute to.
- 7. The bulk of the projects listed in the dashboard are waste levy funded rather than from rates.
- 8. Please note that more detailed information can still be made available on projects in the body of this paper where appropriate.

## Food organics and green organics (FOGO) kerbside collections and processing

9. An update and further advice on this project was provided via a paper to the Long Term Plan/ Annual Plan Subcommittee on 24 February 2025. <u>Report:</u> <u>LTPAP2025/1/36 (page 366)</u>

#### Resource recovery changes at Silverstream Landfill transfer station

#### Diversion

10. In December 2024, 811 vouchers were issued. Since the start of the scheme in April 2023, a total of 5,528 vouchers have been issued. Over the past 12 months, the number of vouchers issued has shown a consistent upward trend (see figure below).



- 11. Regarding the resulting diversion of material, the weighbridge data indicates that diversion is increasing, in particular the material targeted by Earthlink, as shown below in light blue.
- 12. For the month of December 2024, approximately 33 tonnes of materials were diverted because of the improved direct engagement and the voucher discount scheme.



#### Rebranding and education

13. To assist residents and businesses, a flyer was developed that has a step-bystep guide on how to pack trailers/utes/vans before they visit the transfer station. This is to help ensure that all recyclable/repairable/reuseable items are easy to unload at the hub and any residual waste only goes to the pit as the last step.



14. Work is underway for several other actions as part of improvements of the hub such as new signage, further improvements to traffic flow, improving the flyer and a video to promote the discount voucher.

#### **Kerbside Service**

#### Contamination

15. An update on Council's work to reduce recycling contamination is set out in a standalone report (CCASC2025/1/27).

#### **Glass** Collection

- 16. A promotional and education video for glass recycling collection promotional has been released on YouTube, Facebook, Instagram, and LinkedIn. You can view it here: <u>https://www.youtube.com/watch?v=PbAatVMILhc</u>.
- 17. The video aims to educate residents on proper glass recycling practices, including:
  - a. ensuring glass bottles and jars are rinsed and clean, with lids removed.
  - b. avoiding loose lids, broken glass, or other non-glass items in the glass crate.
  - c. keeping the crate filled only up to the rim.

2025 Recycling and waste calendar

- 18. In the last three years, a recycling and waste collection calendar was mailed to every Lower Hutt household. However, the demand for physical calendars has been declining for some time, given the range of alternatives.
- 19. For 2025 households were provided with a range of options to access the calendar, albeit a physical copy of the calendar was only made available upon request.
- 20. The range of options were as follows:
  - a. Download a printable version or check their collection day at <u>www.toogoodtowaste.nz</u>.
  - b. Pick up a copy at their local Neighbourhood Hub or the Laings Road office.
  - c. Request a copy by completing this form: <u>https://form.jotform.com/222776802131048</u>.
- 21. Only approximately 1,000 households requested a physical copy of the calendar, and through this revised approach, more than \$60,000 in costs could be avoided

#### First Fully Electric Side Loader

22. The first fully electric side loader for Council's recycling collection has been in operation since December 2024. A second fully electric side loader is scheduled to commence operation in Q2 of 2025. Further electric side loader trucks are expected to commence operation following this, but the timing of this is yet to be confirmed.

#### **Climate Change Impact and Considerations**

- 23. The matters addressed in this report have been considered in accordance with the process set out in Council's Climate Change Considerations Guide.
- 24. Minimising waste, diverting recyclables from landfill, and recovering reusable materials (such as the potential addition of C&D diversion opportunities, diverting biosolids, etc) contribute to a more circular economy. These activities reduce the need to extract further resources from the environment and the associated energy use.

#### Consultation

25. Not applicable.

#### Legal Considerations

26. There are no legal considerations.

#### **Financial Considerations**

27. There are no current financial considerations at this time.

#### Appendices

| No.        | Title   | Page |
|------------|---|------|
| 1 <u>.</u> | Appendix 1: Local Action Project Dashboard                      | 12   |
| 2 <u>₽</u> | Appendix 2: WMMP Target Linkages of Local and Regional Projects | 13   |

Author: Jessica Hayman

Senior Advisor Waste - Planning and Strategy

**Reviewed By:** Jörn Scherzer Head of Climate, Waste and Resource Recovery

**Approved By:** Alison Geddes Director Environment and Sustainability

#### Appendix 2. Summary of WMMP Local Action Plan Programme Dashboard

There are currently 28 projects, the majority of which are planned or already underway to meet the actions outlined in the WMMP (2023-2029), outlined in the programme summary below.

| Name  | LAP<br>Action* | Regional/Local?                      | Stage       | Project Description   | Start      | End         | Project type     | Subject<br>matter     | Project<br>impact** | Project update  |
|---|----------------|--------------------------------------|-------------|---|------------|-------------|------------------|-----------------------|---------------------|---|
| City wide behaviour change                      | Action 7       | Local Project                        | In progress | Delivering a wide reaching campaign(s) to support waste<br>minimisation.  | 1/10/2024  | 31/12/2028  | Comms/engagement | Behaviour<br>change   | High Weight         | HCC is working to secure resource recovery info   |
| FOGO kerbside collection<br>and processing      | Action 12      | Sub-regional<br>Project              | In progress | Plan and implement a potential new kerbside FOGO service, and identify a suitable processing solution.  | 1/04/2023  | 31/12/2028  | Operational      | Organics              | High Weight         | A detailed project upda   |
| Additional zero waste hub                       | Action 12      | Local Project                        | In progress | Investigate options for a potential additional Zero Waste Hub facility,<br>including working with existing resource recovery partners to expand<br>operations   | 1/01/2025  | 31/12/2028  | Operational      | C&D                   | High Weight         | Work is underway to se<br>Lower Hutt, with a spe  |
| C&D commercial solution                         | Action 13      | Sub-regional<br>Project              | In progress | Investigate and implement diversion pathways for commercial C&D waste.  | 1/01/2025  | 31/12/2028  | Operational      | C&D                   | High Weight         | As part of the Porirua (<br>been allocated central<br>way to scope options a<br>dependent on PCC's ir     |
| Kerbside - Contamination reduction              | Action 19      | Local Project                        | In progress | Investigate and implement a range of actions to address and reduce<br>kerbside contamination.   | 1/07/2024  | 30/06/2026  | Comms/engagement | Kerbside              | High Weight         | A detailed project upda<br>Sustainability Committe  |
| EV Charging Hub and<br>landfill electrification | Action 20      | Local Project                        | In progress | Install EV Charging Hub for heavy vehicles and machinery at the<br>Silverstream Landfill.   | 1/10/2024  | 31/03/2025  | Operational      | Silverstream          | High Weight         | Construction work is u  |
| Soil and aggregate recycling                    | Action 12      | Local Project                        | In progress | Collaborate with partners to potentially develop a soil and aggregate recycling solution at Silverstream Landfill.  | 1/10/2024  | 31/03/2027  | Operational      | C&D                   | High Weight         | Project scoping and pla   |
| Bylaw Implementation (C&D waste)                | Action 9       | Local Project                        | Not started | Implementation of the bylaw requirement to have waste management<br>and minimisation plans for new developments over \$2M in value.   | 1/04/2025  | 1/04/2026   | Operational      | Compliance            | High Weight         | Not yet started.  |
| Future of residual waste                        | Action 11      | Regional Project                     | Planning    | Undertake an investigation to assess the regional flow of waste and<br>the current and future infrastructure and services required to manage<br>known and future residual waste streams (including disposal or<br>alternatives). HCC leads this regional project. | 1/10/2025  | 1/10/2027   | Policy           | Research              | High Weight         | Work is underway to re  |
| Minimising Event Waste                          | Action 2       | Local Project                        | In progress | Establish and embed a process with internal and external stakeholders to minimise waste and litter at community events with more than 1000 attendees.   | 1/04/2024  | 31/12/2025  | Operational      | Events                | Medium Weight       | A trial is under way wit<br>practice waste manage   |
| Silverstream resource recovery improvements     | Action 4       | Local Project                        | In progress | Identify and implement transfer station and Zero Waste Hub<br>improvements to increase diversion of recoverable materials.  | 1/07/2024  | 30/06/2025  | Operational      | Resource<br>recovery  | Medium Weight       | Earthlink's new operati<br>customer engagement<br>engagements has sign<br>Over 800 discount vou           |
| Waste Forum                                     | Action 6       | Regional Project                     | In progress | Provide Secretary and Treasurer support for the Forum and maximise effectiveness.   | 1/01/2023  | 31/12/2029  | Comms/engagement | Events                | Medium Weight       | Planning underway for<br>way to identify opportu  |
| Soil remediation trial                          | Action 12      | Sub-regional<br>Project              | In progress | A partner has proposed a trial of a technology to neutralise recalcitrant soils (eg contaminated with asbestos).  | 1/10/2024  | 30/06/2027  | Operational      | C&D                   | Medium Weight       | Trial preparation contin  |
| Business engagement                             | Action 4       | Regionally<br>Coordinated<br>Project | Not started | Develop a business engagement plan consistent with agreed regional approach.  | 1/04/2025  | 31/03/2026  | Comms/engagement | Business              | Medium Weight       | Not yet started.  |
| Treated timber diversion research               | Action 11      | Local Project                        | On hold     | Research diversion opportunities for treated (and untreated) timber.  | 1/07/2024  | 1/04/2026   | Operational      | Research              | Medium Weight       | Not yet started.  |
| Business waste audits                           | Action 4       | Local Project                        | Planning    | Offer and deliver audits to engaged businesses as part of business<br>engagement plan   | 1/04/2026  | 31/03/2027  | Comms/engagement | Business              | Medium Weight       | Not yet started.  |
| Bylaw review                                    | Action 9       | Regionally<br>Coordinated<br>Project | Planning    | Undertake a review of Council's Solid Waste Management and<br>Minimisation Bylaw 2023-2029 in line with statutory requirements.   | 10/02/2025 | 01/010/2026 | Policy           |                       | Medium Weight       | Not yet started.  |
| Decarbonise landfill contracts                  | Action 3       | Local Project                        | In progress | Ensuring newly awarded waste contracts reduce emissions within<br>contract activity and to report on contract emissions annually in<br>alignment with HCC decarbonisation targets.  | 1/07/2023  | 31/12/2028  | Internal         | Waste<br>minimisation | Medium Weight       | All significant waste-re<br>requirements and/or cr<br>and monitoring contract<br>the closed landfill main |
| Organisational behaviour change                 | Action 2       | Local Project                        | In progress | Implement waste minimisation initiatives internally (at Laing's road<br>administrative building) and across council facilities.   | 1/10/2024  | 1/04/2027   | Internal         | Behaviour<br>change   | Low Weight          | A waste audit is sched<br>inform the next steps.<br>their Green Star rating                               |
| CBD single-use transition<br>engagement         | Action 4       | Local Project                        | In progress | Work to transition Lower Hutt CBD to a single-use free city, with a<br>primary focus on eliminating disposable coffee cups and supporting<br>reuse  | 1/08/2025  | 31/12/2025  | Comms/engagement | Waste<br>minimisation | Low Weight          | Early engagement with<br>campaign and/or imple  |
| Central government advocacy                     | Action 10      | Local Project                        | In progress | Central government advocacy opportunities are approached from a<br>regional perspective or local perspective, if and when appropriate.  | 1/01/2023  | 31/12/2028  | Comms/engagement |                       | Low Weight          | HCC has taken severa<br>Reduction Plan consul<br>product stewardship so<br>advocacy letters regar         |
| Biosolids trial at<br>Silverstream              | Action 15      | Local Project                        | In progress | Trial the reuse of biosolids in borrow areas of Silverstream Landfill.  | 1/07/2024  | 30/06/2025  | Operational      | Silverstream          | Low Weight          | A planting trial is under<br>be reused in the remed   |
| Site remediation                                | Action 21      | Local Project                        | In progress | Identify and implement remediation options for closed landfills.  | 1/10/2024  | 2/10/2027   | Operational      | Research              | Low Weight          | Options for remediation   |
| Stormwater treatment trial                      | Action 18      | Local Project                        | In progress | Trial a Downstream Defender unit to capture gross pollutants, litter,<br>and fine contaminants in stormwater to provide baseline data for<br>waste and pollutants entering waterways.   | 1/10/2024  | 31/12/2025  | Operational      | Litter                | Low Weight          | Work is under way with<br>Defender device.  |
| Battery Recycling                               | Action 2       | Local Project                        | In progress | Investigate options, and if viable implement, accessible battery<br>collection for recycling for Lower Hutt residents.  | 1/01/2025  | 30/06/2025  | Operational      | Resource<br>Recovery  | Low Weight          | Collection options and<br>The timing and scale of   |
| Sustainable Procurement                         | Action 3       | Local Project                        | Not started | Create and implement a policy for reducing waste in contracts and services procured across HCC.   | 30/09/2025 | 31/03/2026  | Internal         | Waste minimisation    | Low Weight          | Not yet started.  |
| Stakeholder CRM<br>initiative                   | Action 5       | Local Project                        | Not started | Establish a database of external stakeholders to enable scope for<br>wider engagement.  | 3/02/2025  | 31/03/2025  | Internal         | Data                  | Low Weight          | Not yet started   |
| Litter reduction campaign                       | Action 18      | Local Project                        | Not started | Implement city-wide campaign on litter and illegal dumping.   | 1/04/2026  | 30/06/2027  | Comms/engagement | Litter                | Low Weight          | Not yet started.  |

\* Projects related to Actions 1 and 17 are delivered through contracts delivered by external providers and are treated as business as usual (Enviroschools contract, Sustainable Coastlines contract). \*\*Project weight is calculated from a weighted formula that includes 'priority', 'diversion potential', 'reach', and 'budget'.

- - Update on Solid Waste and Waste Minimisation matters

cure an agency partner to deliver on various waste minimisation and prmation requirements, and to encourage behaviour change. Procurement d the preferred plan is to be confirmed before the end of Q3. late has been provided to the LTP subcommittee on 24 February 2025.

scope options and/or opportunities for an additional zero waste hub in actific focus on C&D waste and maximising resource recovery.

City Council (PCC) project to develop a C&D processing facility, HCC has I government funding toward a drop-off/consolidation point. Work is under and opportunities at Silverstream transfer station, albeit progress is highly implementation of a processing site.

late has been provided via a separate paper to the Climate Change and tee on 25 February 2025.

inder way. Completion is scheduled for Q4.

lanning is underway.

efine the scope and plan for this project.

th Non-Stop Solutions to partner with event organisers to ensure best ement and minimisation for community events.

ting model at Silverstream (approved April 2024) has increased active t to boost resource diversion. Since mid-2024, the number of nificantly risen, leading to higher material recovery and better outreach. Johers were issued in December 2024.

r hosting the Waste Forum in Lower Hutt in May 2025. Work is also under unities for further improving the effectiveness and reach of the Forum.

nues.

elated procurements have included specific emission reduction riteria. This includes the landfill capex works contract, the landfill design ct, and the regional FOGO processing solution procurement. Planning for ntenance contract is currently under way. Juled for the Laing's Road administration building in Q3, the results will

Uned for the Laing's Road administration building in Q3, the results will Officers have advised on the Naenae Pool waste management plan for

h businesses is underway to inform the development of a potential ementation options.

al opportunities for advocacy including submitting on the second Emissions ultation, disposal of biosolids to land guidelines, and the plastic packaging scheme co-design report. In Q2 and Q3, HCC supported efforts for rding the waste levy and a Container Deposit Scheme. erway at Silverstream Landfill. Its outcome will inform whether biosolids can ediation of borrow areas.

on are under investigation.

h Wellington Water and GWRC to scope the potential trial of Downstream

I costs have been identified, and a preferred option has been selected. of a trial is being scoped.

| local HCC projects                                  | WMMP targets                     | Region                  |
|---|----------------------------------|-------------------------|
| Battery recycling                                   |                                  |                         |
| Central government advocacy                         |                                  |                         |
| Organisational behaviour change                     |                                  |                         |
| Site remediation                                    |                                  |                         |
| Stakeholder CRM initiative                          |                                  |                         |
| Stormwater treatment trial                          | 1 - Reduction of waste to landfi | H                       |
| Beneficial reuse of biosolids                       |                                  |                         |
| CBD single-use transition engagement                |                                  | Prevent                 |
| Business waste audits                               |                                  |                         |
| Soil remediation trial                              |                                  |                         |
| Treated timber diversion research                   |                                  |                         |
| City wide behaviour change                          |                                  | Stren                   |
| Decarbonising contracts and sustainable procurement |                                  |                         |
| Litter reduction campaign                           | 1a - C&D waste processing and    | recovery in Wellington  |
| Enter reduction campaign                            |                                  |                         |
| Silverstream resource recovery improvements         | 1b - Organic processing in Well  | ington F                |
| C&D commercial solution                             | 1c - New resource recovery loc   | babbe anoite            |
| EV charging hub and landfill electrification        | it - New resource recovery loca  | Regio                   |
| EV charging hub and fandim electrification          |                                  |                         |
| Bylaw implementation                                | 2 - Biogenic methane reduction   |                         |
|   |                                  |                         |
| Minimising event waste                              | 3 - Emissions reduction from co  | ollection and transport |
| 5   | 4 - Access to kerbside recycling |                         |
| FOGO kerbside collection and processing             | 5 - Food scraps collection acces | s                       |
|   |                                  |                         |
| Kerbside contamination reduction                    |                                  |                         |
|   |                                  | Count                   |
| Soil and aggregate recycling                        | 6 - Business engagement and su   | ipport Constr           |
|   |                                  |                         |
| Additional zero waste hub                           |                                  |                         |

| onal projects requiring HCC contribution  |  |  |  |  |  |
|---|--|--|--|--|--|
| Regional data framework development 🗖     |  |  |  |  |  |
| Regional framework development 🗖          |  |  |  |  |  |
| Regionally consistent litter monitoring   |  |  |  |  |  |
| Waste management in emergencies           |  |  |  |  |  |
| Future of cleanfill investigation         |  |  |  |  |  |
| ention of environmental harm from litter  |  |  |  |  |  |
| Regional website development              |  |  |  |  |  |
| engthening the Wellington Waste Forum     |  |  |  |  |  |
| 2029 Waste Assessment development         |  |  |  |  |  |
| n 2029-2036 WMMP development              |  |  |  |  |  |
| Contaminated soil investigation           |  |  |  |  |  |
| Regional business engagement support      |  |  |  |  |  |
| gional recycling processing investigation |  |  |  |  |  |
| Future of Residual Waste                  |  |  |  |  |  |
| Regional bylaw review and update          |  |  |  |  |  |
| t Business engagement                     |  |  |  |  |  |
| Regional bylaw implementation             |  |  |  |  |  |
| Regional resource network expansion       |  |  |  |  |  |
| struction and demolition waste recovery   |  |  |  |  |  |
| Organics processing solution              |  |  |  |  |  |

#### HUTTCITY TE AWA KAIRANGI Climate Change and Sustainability Committee

03 February 2025

Report no: CCASC2025/1/27

# Update on reducing kerbside recycling contamination

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#### Purpose of Report

1. This report provides an interim update on officers' investigation into opportunities for kerbside recycling contamination reduction. This relates to the resolutions made by this Committee at its meeting on 4 September 2024 (refer Minute No. CCASC 24401, and Report no: CCASC 2024/4/242).

#### Recommendation

That the Committee receives and notes the update on opportunities and actions to reduce kerbside recycling contamination.

#### Background

- 2. Officers reported to this committee on 4 September 2024 regarding opportunities to drive down contamination in the recycling service.
- 3. Council requested that officers
  - investigate amending Council's bylaw to require suitably sized bins;
  - advocate government for right sized bins to be the right of any tenant of a rental property;
  - consider conducting a trial of engaging face to face with households where repeated contamination has been identified;
  - investigate the highest value opportunities and
  - report back on the outcomes of their investigations at a future meeting of the Committee.

#### Contamination rate update



- 4. The contamination rate remains variable month to month but tracks downwards overall since early 2024 on a three-month rolling average (shown in orange).
- 5. As at 31 December 2024, 654 recycling bins have been removed since November 2022, with 39 bins reinstated.

#### Overview of work progressed following 4 September 2024 meeting

- 6. Officers have progressed a range of actions to address contamination issues in kerbside recycling. This includes continuing work with bin ambassador inspections, stickering and bin removals.
- 7. In November 2024, officers held a workshop with the WM New Zealand team that undertake collections and carry out bin inspections under the kerbside contract. This enabled in depth discussion on what would be needed from each team to progress the work on opportunities for contamination reduction. It also provided a forum for discussion on the barriers and opportunities that bin ambassadors observed while undertaking inspection work and potential communication opportunities with residents. This workshop has informed all subsequent actions.
- 8. Following this workshop, Council's Contracts Officer accompanied the bin ambassador team in their inspection work for a day to provide additional guidance and a further opportunity to clarify and improve on on-the-ground practices to reduce contamination and communicate effectively with residents.
- 9. Officers have also been working to improve data collection and analysis on contamination data in conjunction with Waste Management (WM) New Zealand to ensure consistency, coverage, and an effective base for informing further actions.

#### General waste bin size and overflow contamination actions

Bin audits before actioning a down-size request and mandatory upsizing of general waste bins

- 10. These two opportunities identified in the earlier report from September 2024 relate to the potential interaction of general waste bin sizes and the risk of overflow waste contaminating recycling bins. These two actions would aim to prevent and address overflow issues by auditing the fullness of waste bins before actioning a downsize request and/or upsizing a general waste bin (and therefore the targeted rate that applies) where waste is overflowing to recycling bins.
- 11. To gather more information on the link between full general waste bins and recycling bin contamination due to overflow, bin ambassadors now have a mandatory field to complete in the information portal to identify whether the household's general waste bin at kerbside is full/overflowing when a red or orange sticker is issued to that household's recycling bin. This data collection is increasing and will support trend analysis in due course when this process has run for several months.
- 12. The data collected will assist officers in understanding the scale of the issue. This can also support officers in considering the balance between overflow concerns and the positive waste reduction aspects of residents using less general waste bin capacity.
- 13. For context, officers have received 10 requests for downsizing since September 2024. Officers will continue to work with the legal team to understand any constraints on the power to not action a downsize request.
- 14. Officers also continue to work with the legal team to consider if and/or how mandatory upsizing of general waste bins (and therefore a change in targeted rates for the following year) could be delivered in a manner that is consistent with Council's rating policy and powers.

#### Amending Council bylaw to require suitably sized bins

- 15. Officers will also need to ensure that the Solid Waste Management and Minimisation Bylaw 2021 powers and requirements have the appropriate scope and detail to support blocking a downsize or making an upsizing mandatory.
- 16. Explicit requirements for general waste bins to be sized appropriately relative to household numbers are not currently provided for under the current Solid Waste Management and Minimisation Bylaw 2021. However, the Solid Waste Management and Minimisation Bylaw 2021 will require review by 2026, and as part of the review, a relevant provision could be potentially considered for addition.
- 17. Officers also remain alert to advocacy opportunities on tenancy changes or waste legislation changes where this issue could be most effectively pursued. In essence, it is about ensuring that rental tenants would have the right to have an appropriately sized bin provided.
- 18. This includes opportunities at an industry body level, for example through WasteMINZ working groups and representative local government groups.

#### RFIDs and suspension of service

19. The WM New Zealand collection trucks have a RFID reader above the hopper that can read the bin tags as they are emptied. The tracking software can then show an exact lift time, RFID tag and address information for each bin.

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- 20. This tracking can also show where RFIDs are missing from bins so that the dispatch team can address these issues.
- 21. In theory, there could be advantages of placing the RFID readers on the arm of the collection trucks, so that contamination sticker status could flag that the bin should not be emptied <u>before</u> it is lifted.
- 22. However, officers have been advised that a change of location for the RFID readers can lead to reader breakages and potential cost implications of approximately \$1,200 per reader breakage that may occur more than once per week.
- 23. Officers have also met with other local councils about their contamination reduction experiences including where RFID systems for their kerbside collections are used. Through these discussions, officers were advised that RFID arm readers do have breakage issues and can sometimes identify contamination too late to stop the bin lifting.
- 24. Based on this, implementing such a change is not likely to be cost effective or practical at the present time.
- 25. By way of an alternative improvement, WM New Zealand is looking into whether the contamination sticker status data could be flagged by a light in the cab to the driver (as is done for bins that are flagged as stolen) so that drivers can look for contamination identifiable on the hopper camera feed. In that way, even if contamination has been identified after the lift, the bin could be removed by driver (via the bin brackets installed on trucks).
- 26. Officers will continue to work with WM New Zealand for opportunities to maximise the utilisation of RFID in the existing bin population and ensure that the data collection from inspections can be effectively linked to the RFID system in the most effective way.

#### Artificial intelligence and real time tracking

- 27. Officers have investigated software providers for artificial intelligence and real time tracking that could be applied to recycling collection trucks. There are several providers trialling or using this technology internationally.
- 28. Further, officers contacted and met with officers at Auckland Council to get an understanding of their experience of a trial of AI object recognition for kerbside contamination, with key contaminants being plastic bags and textiles. This trial can narrow the area where these contaminants are identified by the software to help direct follow ups by the on-the-ground inspection team.
- 29. At this stage, the technology appears to be in an early commercial stage in the waste management system here in New Zealand. This means that there is no off-the-shelf solution designed and fully trained for the New Zealand context yet available.

- 30. There are also some key challenges that would need to be addressed before it could be utilised in Lower Hutt, as follows:
  - a. AI training can prioritise the identification of some key contaminants, but not all, in the short to medium term. Hence, it can flag a problematic bin, but a complete picture can only be obtained once a person has either assessed the image separately (if the quality is sufficient to identify other contaminants such as food waste) or via a bin ambassador targeting the bin for physical inspection.
  - b. The use of AI to reduce contamination as part of the warning and removals process is highly dependent on ensuring that there is high certainty that a particular bin is linked to a particular household. That is not always the case. For example, an RFID read may not be successful, or a household may have inadvertently swapped bins with a neighbouring property. Therefore, any data obtained through an AI system would still need to be checked and reviewed.
- 31. This remains a longer-term potential opportunity, and officers can continue to follow and learn from Auckland Council's experience, including any cost and resource implications.

## Trialling increased face to face engagement with residents where repeated contamination is identified

- 32. Officers have worked to increase engagement opportunities with residents with contamination issues in their recycling bins. A key aspect to this is an updated letter that is now being sent to residents (and the ratepayer/landlord for the relevant household if it is a rented property) that receive a second red sticker. An example of this letter is set out in Appendix 1 of the report, and it has been in used consistently since early January 2025.
- 33. This letter has been developed to ensure that residents are aware that officers are here to help and can actively work with them to clarify any issues or confusion they may have.
- 34. Officers have also taken several opportunities to offer one-on-one engagement for other residents that were already engaged in the sticker process before the updated letter was finalised.
- 35. To date, the uptake from affected households has been low, albeit four oneon-one engagements (and two phone calls) have been undertaken so far. The residents were open with their questions in all these engagements and got advice on how to recycle correctly that responded to their household's needs.
- 36. Officers have also found that the more engaging letter has led to residents getting in touch earlier where there are issues with shared driveways or multiple bins kerbside that have led to misattribution of the contamination. This helps officers to ensure that the communication is corrected and reaches the right residents.
- 37. Once more engagements have been undertaken, officers will be in a better position to assess the impact on staff time and resources. In principle it would be positive to see much greater interest and uptake from residents for these one-on-one engagements.

#### Effectiveness of bin ambassadors

#### Empowering the bin ambassadors

38. There have been instances where bin ambassadors have been hesitant to apply orange or red stickers, when in fact it is important to get an accurate overview of contamination. Officers have reviewed the guidance provided to bin ambassadors, including when to apply orange and red stickers. Considering the recent statistics, the share of red and orange stickers has increased, to reflect the more stringent approach.



Shifting the public image of the ambassadors

- 39. While the ambassadors' primary function is to inspect bins, they also have an important educational role. To reflect this, ambassadors have been provided with updated high visibility vests that say, "*Here to help you recycle right*" and a smiley face on the front.
- 40. This is intended to help build on opportunities for engagement with residents that come up as the bin ambassadors undertake their inspections by encouraging residents to ask any questions they may have on recycling. The delivery and roll out of these vests are expected in the next month. The use of a smiley face image is to encourage a more positive response from residents that facilitates questions and engagement with the ambassadors where a high visibility vest alone may not do so.



- - Update on reducing kerbside recycling contamination

#### Reducing significant contamination incidents

41. During the workshop with WM New Zealand and the bin ambassadors, it became clear that there had been several recent examples of contamination in kerbside bins where the waste materials would present a significant health and safety risk if the bin content were to reach the processing facility.

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42. The below images are examples of bins with significant contamination:



Dead birds found during inspection



*Excessive rubbish including sharp broken glass and rusted metal* 



Used nappies

- 43. Notably, while the processing facility utilises a range of sorting technologies, all material is also sorted manually by workers. Council has a duty of care to ensure that those workers are not exposed to undue risk.
- 44. For this reason, bins are now removed on the first incident of contamination, where that contamination is highly offensive and/or potentially hazardous. This includes bins containing dead animals, used syringes and needles, and/or excessive amounts of food waste.
- 45. Guidance on Council website is updated to reference this process, as is the associated material such as letters to households advising of significant contamination incidents.

#### Other actions

- 46. In addition to the actions outlined above, officers are also progressing the following:
  - a. Council's legal team is considering whether there may be benefits for additional changes to Council's Waste Management and Minimisation Bylaw (including additional controls) to assist with the management of contamination.
  - b. Planning for greater community engagement and education about recycling. This includes working with the Connected Communities team to design effective community engagement to support good recycling practices and education. This engagement could also utilise the multilingual materials for recycling information.
  - c. Conducting interactive, fun and educational stalls at some of Lower Hutt's largest events, such as the Petone Rotary Fair and Te Rā o te Raukura.
- 47. Work also continues to support event organisers in hiring professional waste management services, such as Nonstop Solutions, whose visible presence at events including signage, bin educators, and waste sorting into separate streams helps the community see and learn about correct waste management and recycling practices.

#### **Climate Change Impact and Considerations**

- 48. The matters addressed in this report have been considered in accordance with the process set out in Council's Climate Change Considerations Guide.
- 49. Minimising waste, diverting recyclables from landfill, and recovering reusable materials (such as the potential addition of C&D diversion opportunities, diverting biosolids, etc) contribute to a more circular economy. These activities reduce the need to extract further resources from the environment and the associated energy use.

#### Consultation

50. Not applicable.

#### Legal Considerations

51. Legal advice has been requested on actions relating to the Bylaw and general waste bin sizing as it relates to rating policy.

#### **Financial Considerations**

52. There are no current financial considerations at this time.

#### Appendices

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**Reviewed By:** Jörn Scherzer Head of Climate, Waste and Resource Recovery

**Approved By:** Alison Geddes Director Environment and Sustainability



#### 12 January 2025

1 Sample Lane Lower Hutt

#### Kia ora,

We hope that you're doing well. On 10 January, we had to give your yellow-lid recycling bin a second red sticker due to non-accepted items/materials being found inside (after your first red sticker on 27 December 2024).

We want to help you get your recycling right: if we find contamination again, we would need to remove the bin, and that's the last thing we want to do.

#### How can we help you get it right?

Recycling contaminated by items like food waste and rubbish leads to big fees for us to pay, and can lead to good recycling going to landfill.

That's why we want to work with you to make sure that recycling gets done right in our city.

To avoid the removal of your bin, please get in touch with our team within the next week. We can talk either on the phone or in person at your home – whichever you'd prefer.

We'd love to work with your household to help make sure that you have the information and tools to get this right. We can also answer any questions you may have.

We know that each household has different types of waste, and we want to help you make it easier to sort.

#### How to contact us

Let's talk and sort this together. Please call us directly on **027 380 5504** (8am-4pm on weekdays), or email us at <u>waste@huttcity.govt.nz</u>

#### The best ways to get your recycling right



1) Use the 'What goes in the bins?' search bar on <u>www.toogoodtowaste.nz</u> - here, you can look things up to see what bin they should go into.

2) Read through the Too Good To Waste booklet included with this letter. You can get this booklet in Chinese (simplified), Chinese (traditional), Hindi, te reo Māori and Samoan at tgtw.nz/booklet

Ngā mihi,

The Waste Team

#### HUTTCITY TE AWA KARRANGI Climate Change and Sustainability Committee

05 February 2025

#### Report no: CCASC2025/1/28

## Update on Council's climate change work

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#### Purpose of report

- 1. Officers provide a regular update on key climate change work to implement Council's organisational carbon target and <u>Council's Carbon Reduction and</u> <u>Climate Resilience Plan (CRP) 2021-31</u>, facilitate a reduction in city-wide emissions in line with the <u>Lower Hutt Climate Action Pathway</u>, and address climate change impacts.
- To avoid duplication, some work with climate change implications is reported in separate reports and/or other committees. This includes work on waste minimisation, Council's kerbside service, and project-specific updates for RiverLink.

#### Recommendations

That the Committee:

- (1) notes the update on climate change work streams currently underway; and
- (2) notes that updates are only provided for those projects or activities where significant progress has been made, or where significant changes have occurred since the <u>previous update on 12 November 2024</u>.

#### Reducing Council's organisational carbon emissions

#### **Council facilities**

- 3. In parallel to the opening of the new Te Ngaegnae Pool and Fitness facility, the old Huia aquatic facility was closed to allow for the scheduled heating plant change. This work is now under way.
- 4. The heating plant change at the Dowse Museum has been delayed and is now scheduled for mid-2025. This work needs to tie in with the museum's operational and exhibition schedule.

#### Vehicle fleet

5. A number of vehicle replacements are scheduled for the coming three months. This includes replacement of five 4WD diesel utes with new electric models, which will lift Council's EV share from about 70% to 78%.

#### Council's carbon footprint reporting

6. Council's organisational carbon footprint for the 2023/24 financial year was completed in December 2024 and is available on the council's <u>website</u>.



- 7. The figure above shows that Council's total emissions were **72,629** tonnes of carbon dioxide equivalent emissions (tCO2-e). This is a net increase of 13% from the previous year, despite the continued progress made to phase out the use of fossil gas at Council's facilities, and the electrification of the vehicle fleet, emissions.
- 8. The primary drivers of this increase are in two areas: landfill fugitive emissions, and contractor emissions. These two sources alone account for 86% of the increases and are areas of focus for Council.
- 9. **Open landfill fugitive emissions have increased,** due to (i) the overall amount of waste contained in the landfill increasing (and hence emissions continue to increase), and (ii) a temporary reduction in the amount of gas that was able to be destroyed, as a result of engines being replaced in April 2024 and despite the flare operating as expected.
- 10. Under the Waste Management and Minimisation Plan (WMMP) 2023-29, the Wellington region and Lower Hutt have ambitious targets to increase the recovery of resources, reduce the amount of waste that is landfilled, and reduce emissions associated with disposal of waste in landfills.

11. The WMMP contains a range of actions to deliver on these targets. In addition to a regional action plan that the councils within the region are jointly working on, Council has a local action plan. However, there are two waste streams that are of key importance to achieve the WMMP targets:

(1) the increased recovery of food and green/garden organic waste from the residential and commercial sectors, and

(2) the increase recovery of materials from the construction and demolition sector. Unless both are addressed, it is unlikely that Council will be able to achieve the WMMP targets.

- 12. There has also been an **increase in emissions associated with contracts**, which includes the new Te Ngaengae Pool and Fitness as a major building and construction project. While a number of large contractors now report their actual emissions, the majority of emissions associated with contracted services, greater than or equal to \$250,000 NZD, is still estimated by applying industry-wide emission factors to dollars spent. Hence, emissions will correspond to the amount of spending.
- 13. Although this is common practice in scope 3 reporting, there is significant uncertainty associated with those estimates. Officers are continuing to work with our larger contractors to improve reporting, and efforts continue so that carbon reductions are required and embedded in any new large contracts.
- 14. The figure below lists all council's emissions sources and shows their increase or decrease from the previous year. It should be noted that there were a number of decreases as a result of continued efforts on emissions reduction projects, albeit not enough to offset the increases as described above.



Low Carbon Acceleration Fund (LCA Fund)

- 15. The next funding round of the Low Carbon Acceleration fund (LCA fund) is scheduled to open between 28 February and 31 March 2025 with a funding envelope of \$170,000 (including the use of an unallocated \$72,000 from Round #1).
- 16. Staff have hosted two webinars on the LCA fund. The first one, on 20 February 2025 focused on opportunities for businesses. The second one, on 21 February 2025 focused on opportunities for clubs and groups. These were recorded and will be added to the LCA fund webpage as an ongoing resource. These webinars were scheduled to occur following community board briefings that happened earlier in February 2025 to allow community board members to share the webinar information with their communities.
- 17. For Round #2 of the fund the Decision Making Panel will comprise primarily the same group as round #1 except for the high school student who is still being confirmed. These Panel members are:
  - Cr Josh Briggs elected member
  - Cr Naomi Shaw elected member
  - Sigurd Magnusson public representative
  - Kaz Young public representative
  - Hutt Valley High school student (TBC) public representative
  - Patrick McKibbin Business representative
  - Richard Te One Mana Whenua representative
- 18. Councillors are asked to share information about the fund with their communities and encourage any eligible legal entities to apply. Fund details and criteria can be found on the council website <a href="https://www.huttcity.govt.nz/people-and-communities/community-funding/low-carbon-acceleration-fund">https://www.huttcity.govt.nz/people-and-communities/community-funding/low-carbon-acceleration-fund</a>

#### Adapting to climate change impacts

#### Wellington Regional Climate Change Impact Assessment summary

19. A summary report of the Wellington Regional Climate Change Impact assessment was published in December 2024. This is available in Appendix 1, and also online on the <u>GWRC website</u>.

#### Regional climate change project on adaptation

20. Work on the Regional Adaptation Project (RAP) is underway. It seeks to produce five key deliverables, with the aim for these to become comprehensive support mechanisms to guide individual councils in their adaptation work. These deliverables and their status are:

#### • Kaupapa Māori Co-Navigators

Working to secure appropriate kaupapa Māori co-navigation for each deliverable (including strategic adaptation input).

#### • GeoSpatial Resilience Information Tool (GRIT)

Procurement of GRIT is likely to be complete within the next month.

#### • Adaptation Framework

Detailed project planning for this deliverable is underway.

• Toolkit

Detailed project planning for this deliverable is underway.

#### • Communications and Engagement Plan (CEP) and Delivery

Progress on CEP has slowed due to the disestablishment of a dedicated role within Wellington Regional Leadership Committee (WRLC) Secretariat. External resourcing support will be used instead.

21. Overall, RAP project plan is nearing completion, which will enable work to begin on the deliverables.

#### **Climate Change impact and considerations**

22. This report responds directly to the need to reduce carbon emissions and respond to climate change by providing a regular update on Council's key carbon reduction and climate change response initiatives.

#### Consultation

23. Not applicable.

#### Legal Considerations

24. There are currently no legal considerations.

#### **Financial Considerations**

25. There are currently no financial considerations.

#### Appendices

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## Summary of Wellington Regional Climate Change Impact Assessment

December 2024

This summary report synthesises the recent Wellington Regional Climate Change Impact Assessment Report (WRCCIA)<sup>1</sup>. It is the first time climate change projections have been considered together with the things we care about across the region. The target audience for this document is those wanting a plain English, summary version of the full report.



## Introduction

The Wellington region is no stranger to adapting to all kinds of different weather. Prior to colonisation, Māori avoided the land around Te Awa Kairangi /Hutt River as they were aware of the flood risk. In contrast, the first European settlement<sup>2</sup> in the Wellington region was close to the mouth of the Te Awa Kairangi / Hutt River. However, soon after initial settlement, ongoing flooding caused many Pākehā settlers to abandon the site and relocate to Thorndon.

In the future, the Wellington region<sup>3</sup> can expect:

- 1. More intense storms and heavy rainfall, with an increased risk of flooding and rainfall induced landslides.
- 2. More frequent dry periods, which could result in drought and wildfires.
- Sea-level rise in low-lying coastal areas posing an increased chance of flooding, including a heightened risk of storms surging inland, damaging infrastructure and properties, and impacting people's lives.

The future of the Wellington region under climate change will require flexibility, proactive adaptation and cohesion. Entities in the region are doing incremental adaptation work already, but this work lacks a regional focus, instead occurring in ad hoc and inconsistent ways. Adaptation to the impacts of climate change occurs locally, place by place, but each action also occurs as part of a regional and national system. Critical infrastructure, river systems and the way people live their lives are independent of administrative or other boundaries and so collaboration and coordination is essential.

In many ways, it also told us what we already know – the region must plan for the impacts of increasing climate-related hazards and invest in adaptation. However, this is the first time this information has been brought together at this scale, highlighting the interconnected nature of climate-driven risks across the region.

#### The key messages of this report include:

- Even with emissions reductions, adaptation to ongoing climate impacts is necessary and requires appropriate planning and investment.
- Social cohesion across a variety of communities is at risk from hazards exacerbated by climate change, and councils need a better understanding of the potential impacts.
- Understanding and addressing how different hazards interact is vital when making choices about how and where we want to live.
- Council decisions on population growth and development directly influence how communities will live with and adapt to the risks of a changing climate.
- Consistency of knowledge, data and information is an issue nationally and across the region, as is the lack of baseline data in some rohe (geographic areas) and sectors.
- The region's current governance<sup>4</sup> and institutions are hindering adaptation planning and implementation and are not fit for purpose under Te Tiriti.
- There are opportunities to work as Te Tiriti partners with local iwi and hapū on climate adaptation.

2 I WRCCIA Report December 2024

## What does the full WRCCIA report do?

The report seeks to identify opportunities to build the Wellington region's collective capacity to adapt to climate change impacts over the next 100+ years in a way that best supports our people, environment, and economy. It is based on research and data that looks at what could happen in the region under a changing climate and provides an assessment of what is most at risk.

It aims to help local councils, iwi, communities, business and central government better understand:

- The current climate situation in our region and what could happen here by 2050 and 2100 using two different climate scenarios⁵.
- Where and what is at risk including aspects of our society, our natural and built environments, the regional economy, and our institutions.
- How different hazards such as flooding, coastal erosion, landslides, coastal inundation, higher temperatures, sea-level rise, drought, wild-fires, and extreme weather events have different impacts across the region and how these impacts change over time.
- How significant climate change will be for the things we care about.

The full report does not provide assessment at a local scale. Nor does it incorporate a Te Ao Māori world view, which is broader and more holistic than a sectoral, risk-based approach. Because the impact of climate hazards will be felt differently across different parts of the region, this report points to the need to 'ground truth' this regional scale assessment with more specific work at the local level.

The findings of the WRCCIA represent the first important phase of the Regional Adaptation Project. The next phase has already begun and will use these findings to inform a regional approach to adaptation planning that ensures our society and environment become increasingly resilient to the impacts of a changing climate.

#### Working with uncertainty

There is significant scientific uncertainty around what the future climate in the Wellington region might be, especially in the more distant future. However, because we still need to make decisions now, we must work with uncertainty. This is done in a risk assessment by considering the risk generated by a range of changes associated with a changing climate in two possible futures:

- A moderate emissions scenario is the path where emissions peak around 2040 and then begin to decline
- A high emissions scenario is what could ensue if fossil fuels continue to be used as we do today.

Although many futures are possible, picking these two scenarios provides enough variation for us to identify a range of possible risks. In reality, we don't know what the future will hold. However, using a risk assessment means we can find the problem areas ahead of time and implement adaptation to manage the worst risks.

# What does the full WRCCIA say?

The report took a look at the climate risks and impacts in the Wellington region, sector by sector, hazard by hazard under each of the two scenarios above. Similar to the National Climate Change Risk Assessment<sup>6</sup> results were recorded against each of the following domains:

- 1. The natural environment | whenua
- 2. Human | oranga tangata
- 3. Built environment | taiaohanga
- 4. Economy | whairawa
- 5. Governance | kāwanatanga

Overall the assessment identified 363 different risks and 11 opportunities<sup>7</sup>. These were then shortlisted and a further more detailed assessment was carried out on the priority risks.

#### Natural hazards assessed

The report assessed a wide range of natural hazards that are expected to be exacerbated by climate change, key ones identified include:

- **Higher Mean Temperatures:** This includes both air and water temperatures, with implications for ecosystems, human health, and various economic sectors.
- **Heatwaves:** The report anticipates an increase in the persistence, frequency, and magnitude of heatwaves, posing risks to human health, infrastructure, and ecosystems.
- **Drought:** More frequent and longer dry spells are projected, leading to increased drought risk with potential impacts on water resources, agriculture, and fire risk.
- Increased Storminess and Extreme Winds: This includes changes in the frequency and intensity of storms, as well as extreme wind speeds, with potential consequences for infrastructure, coastal erosion, and communities.
- **Heavy Rainfall and Flooding:** Projected changes in rainfall patterns, with an increased risk of both river flooding (fluvial) and surface flooding (pluvial) due to more intense rainfall events.
- **Coastal Hazards:** This encompasses a range of hazards related to sea-level rise, including:
  - *Coastal inundation:* Flooding of low-lying coastal areas due to higher sea levels.
  - *Coastal erosion*: Increased erosion of cliffs and beaches due to the combined effects of sea-level rise, storm surges, and waves.
  - *Salinity intrusion:* Saltwater intrusion into freshwater systems and aquifers due to rising sea levels.
- Landslides: The region's hilly topography makes it susceptible to landslides, which can be triggered by intense rainfall. Landslides can damage infrastructure, disrupt transport networks, and pose risks to communities.
- Reduced Snow and Ice Cover: Higher temperatures are expected to lead to reduced snow and ice cover, with implications for water resources, ecosystems, and tourism.

The report also makes a distinction between risk and impact, as below:

- **Risk:** The potential for negative consequences, considering both the likelihood of a hazard and the vulnerability of what's exposed.
- **Impact:** The actual consequences or effects that could occur.

#### **Key findings**

The key findings of the report, across each domain are detailed in Appendix A of the Report<sup>8</sup> and summarized below:

#### **Built Environment**

- The most significant climate-related hazards to the built environment are coastal erosion, landslides, and flooding (both freshwater and coastal).
- These hazards can cause significant damage to buildings and infrastructure, leading to substantial financial costs and potential disruption to transport networks.

#### **Natural Environment**

- The main climate-related risks to the natural environment are higher temperatures, flooding, and sea-level rise.
- These hazards can alter the composition and functioning of ecosystems, leading to a loss of habitat and biodiversity.
- Freshwater ecosystems are particularly vulnerable to these risks, as are coastal and marine ecosystems.

#### Human Domain

- The key climate-related risks to the human domain are a loss of social cohesion, damage to cultural heritage sites, and an increase in existing inequities.
- These risks can lead to displacement, trauma, and a breakdown of communities.
- Māori are likely to be particularly vulnerable to these risks.

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#### **Economic Domain**

- The main climate-related risks to the economic domain are disruptions to international trade, damage to the tourism and forestry sectors, and an increase in insurance premiums.
- These risks can lead to a decline in economic productivity and job losses.
- Primary industries, including agriculture and forestry, are particularly vulnerable to these risks.

Each council, iwi, hapū, organisation, business and community will experience climate change differently. However, the way we live and work, along with our ecosystems and governance arrangements all transcend administrative boundaries.

#### Governance

The current approach to governance is hindering adaptation planning and implementation. Risks resulting from the current structures of governance were rated extreme in the WRCCIA report. Governance in this context includes:

- the legal and institutional arrangements that govern Council work,
- engagement with community and sector interests across the region,
- partnerships with iwi- Māori, and
- how adaptation-relevant decisions are made.

Unaddressed governance risks could lead to maladaptation<sup>9</sup> as decision-makers like councils and central government continue to use practices, processes, and tools that do not account for uncertainty and the ongoing climate changes.

## Indirect, cascading and compounding risks

The report investigated indirect risks, compounding risks and cascading risks (refer Figure 1A and B) to illustrate the complexity and interconnectedness of the system. It also took a look at risks that may arise during the needed transition to a decarbonised future.

Figure 1: Simplified conceptual diagram explaining (a) compound risks – where more than one event can occur to increase overall risk and (b) cascading risks – where one risk can influence or lead to another risk or series of risks indirectly. Worked examples can be found in the full report. **Compounding risks** are where risks overlap. For example, flooding caused by rain can often occur at the same time and in the same place as storms that bring higher water levels at the coast, leading to even bigger floods.

Consideration of **indirect** and **cascading risks is important** as they provide us an avenue to explore 'so what?' and 'what else?'. They help illustrate the interconnected nature of how an adaptation decision in one place may have a ripple effect somewhere else.



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#### Community

Natural hazards exacerbated by climate change will affect communities by putting homes, property, businesses and facilities at risk. For example, more frequent flooding, or landslides and sea level rise may lead to unreliable or inaccessible infrastructure and services such as power, clean water, and insurance. The report also highlights areas in the Wellington region where people and communities are likely to be repeatedly isolated<sup>10</sup>.

Over time, chronically affected locations may be abandoned by those who can afford to move. Those who leave their community behind and those who stay in place will be affected in different ways. Both will experience the breaking of social and cultural bonds. Those who stay may have fewer and fewer facilities and see a decline in infrastructure service, those who move will experience the challenges of resettlement. The impacts of having to leave may be particularly acute for Māori. A reduced ability to maintain a relationship with whenua will likely affect almost all aspects of Māori wellbeing.

Fractured, less cohesive communities are likely to be less resilient following a disaster event and over time as climate change unfolds. Key indicators for a deterioration in social cohesion include decreasing house prices, increases in the deprivation index, social conflict and anti-social behaviour, increasing turnover of residents and rates of property abandonment.

#### Inequity

In the Wellington region there are existing inequities, with Māori and those who identify as Pacific people over-represented in neighbourhoods of high socio-economic deprivation. While these communities can be resilient, especially when maintaining strong cultural and spiritual connections, they may also experience poor health outcomes, restricted access to education, poor employment and lower levels of home ownership. These factors all increase vulnerability to climate hazards. Other groups within society already under stress, at an economic disadvantage or potentially more vulnerable (such as those living with disabilities) are also at risk of being further affected by the impacts of climate change. Such groups often rely on strong community bonds and are negatively affected when these are strained or fractured.

#### Ecosystems

Many of the region's indigenous ecosystems already face high pressure from introduced species. Ongoing sea-level rise, alteration to river flows, warmer temperatures, and declining ocean productivity (as oceans warm) are likely to threaten many of our indigenous and taonga species. Ongoing gradual changes in climate and extreme weather events will exacerbate the threat of invasive or exotic species acting as predators or competition.

It is likely that sustaining viable populations of our taonga species will require additional conservation interventions in response to increasing climate hazards.

Ecosystems are complex systems with interconnected processes. This makes it difficult to predict the full risks and impacts of climate stressors like changes in rainfall and temperature.

#### Planning

Locally specific challenges need to be considered in a joined-up manner and phased as part of local and regional adaptation actions. This will avoid unnecessary duplication of expenditure and resource, while creating opportunities for efficiencies and mutual benefit. It will also bring a consistent approach to the cross-cutting and interconnected issues involved in risk assessment and adaptation. Current council, iwi and government planning instruments (e.g. Long Term Plans and infrastructure strategies) should also complement each other and take a systematic approach to addressing the impacts of climate change. There is also an opportunity for more aspirational place-based community or neighbourhood development plans to help shape a more climate resilient future.

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#### Need for consistent data

Some notable data gaps constrained a more detailed assessment for the Wellington region at this stage. In addition, the use of different approaches, scenarios, methods and scales for hazard identification, risk assessment, and adaptation planning across the region results in inconsistencies, e.g., where a coarse model shows a property is inundated, but a finer-grained model does not.

Clarity around what kind of information, what level of detail is appropriate for which type of decision is also needed. Consistent information is vital for:

- coherent long-term planning across territorial, iwi, catchment and other boundaries,
- continued operation and planning for critical lifeline utilities such as water, power, and transportation,
- appropriate and integrated central government planning for assets such as schools and housing, and
- reducing the risk of public and media misunderstanding the differences that result from the use of different climate scenarios and information.

National guidance or regional agreement is required to align future modelling and assessment. Those undertaking climate adaptation planning and action need a common language to ensure that decisions made in different spheres are coherent.

## Key recommendations

The report outlined a number of adaptation recommendations throughout the report, key ones are captured below:

- Develop a regional approach to climate change adaptation: This approach should identify the most vulnerable areas and communities and outline specific agreed methods and actions to address risks.
- Improve data collection and monitoring: This will help to better understand the exposure and vulnerability of different elements to climate change impacts.
- Strengthen collaboration between agencies: This is essential for ensuring a coordinated and effective response to climate change.
- **Engage with communities:** This will help to build support for adaptation measures and ensure that they are equitable and effective.

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The report is a call to action for the Wellington region. It is a reminder that climate change is a serious threat that requires urgent attention. By taking proactive steps to adapt to these challenges, the region can build a more resilient and sustainable future.

The full report and supporting documents can be accessed here - <u>https://wrlc.org.nz/project/regional-adaptation-project</u>

<sup>1</sup>See full report and supporting documents here: https://wrlc.org.nz/project/regional-adaptation-project

<sup>2</sup> Britannia "The Town that never was" <u>https://collections.tepapa.govt.nz/topic/1415</u>

<sup>3</sup>The region in this case includes those areas contained within the Greater Wellington Regional Council area – including the Wairarapa and north to Kapiti Coast. Horowhenua which is part of the WRLC region was not included as similar work for this region had previously been undertaken.

<sup>4</sup> Including policy, legislation and decision-making structures

<sup>5</sup>See <u>https://environment.govt.nz/publications/a-guide-to-local-</u> <u>climate-change-risk-assessments/</u> <sup>6</sup>See <u>https://environment.govt.nz/publications/national-climate-change-risk-assessment-for-new-zealand-main-report/</u>

<sup>7</sup> Including those associated with the transition to a decarbonised future (transition risks).

<sup>8</sup>See Appendix A here: <u>https://wrlc.org.nz/wp-content/</u> uploads/2024/06/WRCCIA-Final-Report-Appendix-A-Public.xlsx

<sup>9</sup>Unintended negative outcomes, such as increased risk or structural or policy failure.

<sup>10</sup> Further and more recent work on this has been completed by Urban Intelligence for the Climate Change Commission's progress assessment on the National Adaptation Plan – see <u>https://www.climatecommission.govt.nz/our-work/adaptation/</u> <u>nappa/nappa-2024/</u>

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#### HUTTCITY TE AWA KAIRANGI Climate Change and Sustainability Committee

11 February 2025

Report no: CCASC2025/1/29

## Climate Change and Sustainability Committee Work Programme 2025

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#### Purpose of Report

1. To provide the Committee with a Forward Programme of work planned for the Committee for 2025.

#### Recommendation

That the Committee receives and notes the Forward Programme for 2025 attached as Appendix 1 to the report.

#### Background

- 2. The Terms of Reference for the Committee require the Committee to assist Council in developing, monitoring and reviewing strategies, policies, plans and functions associated with environmental and climate change activities.
- 3. The Forward Programme for 2025 provides a planning tool for both members and officers to co-ordinate programmes of work for the year. The Forward Programme is attached as Appendix 1 to the report.

#### **Forward Programme**

4. The Forward Programme is a working document and is subject to change on a regular basis.

#### Appendices

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Author: Vanessa Gilmour, Democracy Advisor Reviewed By: Kate Glanville, Senior Democracy Advisor Approved By: Kathryn Stannard, Head of Democratic Services

#### Komiti Kaupapa Taiao Climate Change and Sustainability Committee Forward Programme 2025

| Description   | Author                                     | Cycle 2<br>Apr | Cycle 3<br>Jul | Cycle 4<br>Sep | Pending |
|---|--|----------------|----------------|----------------|---------|
| Regular update on climate change<br>work  | Climate, Waste<br>and Resource<br>Recovery | ✓              | ✓              | ✓              |         |
| Regular update on solid waste<br>management and minimisation work<br>streams  | Climate, Waste<br>and Resource<br>Recovery | ✓              | ~              | ~              |         |
| Six-monthly update on implementation of Biodiversity Strategy   | Parks and<br>Reserves                      | $\checkmark$   |                |                |         |
| Te Ara Whakamua Group work<br>update  | Climate, Waste<br>and Resource<br>Recovery | ~              |                | $\checkmark$   |         |
| Low Carbon Acceleration Fund Round #2   | Climate, Waste<br>and Resource<br>Recovery |                | ~              |                |         |
| Retrospective approval for the Call for<br>evidence: National Climate Change<br>Risk Assessment submission  | Climate, Waste<br>and Resource<br>Recovery | $\checkmark$   |                |                |         |
| Food and green organics collection<br>and processing<br>(to be presented to the Long-Term<br>Plan/ Annual Plan Subcommittee<br>before returning to the Climate<br>Change and Sustainability Committee<br>for further consideration) | Climate, Waste<br>and Resource<br>Recovery |                |                |                | ~       |
| Annual report on progress against the<br>Climate Action Pathway, Council's<br>Carbon Reduction Plan and WMMP<br>Local Action Plan   | Climate, Waste<br>and Resource<br>Recovery |                |                | V              |         |