

## **Canterbury Waste Joint Committee**

### **AGENDA**

---

#### **Notice of Meeting:**

A meeting of the Canterbury Waste Joint Committee will be held on:

**Date:** Monday 25 May 2020  
**Time:** 9.30am  
**Venue:** Council Chambers, Civic Offices,  
53 Hereford Street, Christchurch

---

#### **Membership**

Members

- Councillor Stuart Barwood - Mackenzie District Council
- Councillor Robbie Brine - Waimakariri District Council
- Councillor Jimmy Chen - Christchurch City Council
- Councillor Sam MacDonald - Christchurch City Council
- Councillor Liz McMillan - Ashburton District Council
- Councillor Phil Mauger - Christchurch City Council
- Councillor Grant Miller - Selwyn District Council
- Councillor Derrick Millton - Kaikoura District Council
- Councillor Miriam Morton - Waimate District Council
- Councillor Paddy O'Reilly - Timaru District Council
- Councillor Michael Ward - Hurunui District Council

---

**19 May 2020**

Petrea Downey  
Committee Advisor  
941 8999  
petrea.downey@ccc.govt.nz  
[www.ccc.govt.nz](http://www.ccc.govt.nz)

Note: The reports contained within this agenda are for consideration and should not be construed as Council policy unless and until adopted. If you require further information relating to any reports, please contact the person named on the report.

**To view copies of Agendas and Minutes, visit:**

<https://www.ccc.govt.nz/the-council/meetings-agendas-and-minutes/>



## TABLE OF CONTENTS

1.	Apologies / Ngā Whakapāha .....	4
2.	Declarations of Interest / Ngā Whakapuaki Aronga .....	4

## STAFF REPORTS

3.	Appointment of Chairperson and Deputy Chairperson .....	5
4.	Background Report on the Committee .....	17
5.	Alternative Processing for Mixed Fibre (Feasibility Study) .....	23

**1. Apologies / Ngā Whakapāha**

At the close of the agenda no apologies had been received.

**2. Declarations of Interest / Ngā Whakapuaki Aronga**

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

### 3. Appointment of Chairperson and Deputy Chairperson

Reference / Te Tohutoro: 20/228681

Report of / Te Pou

Matua:

Zed Potgieter, Senior Resource Advisor, zp@ccc.govt.nz

General Manager /

Pouwhakarae:

Dave Adamson, General Manager City Services

#### 1. Purpose of Report / Te Pūtake Pūrongo

- 1.1 The purpose of this report is for the Canterbury Waste Joint Committee to appoint a Chairperson and Deputy Chairperson.

#### 2. Officer Recommendations / Ngā Tūtohu

That the Canterbury Waste Joint Committee:

1. Appoint Councillor Jimmy Chen as Chairperson of the Committee.
2. Appoint Councillor Robbie Brine as Deputy Chairperson of the Committee.

#### 3. Background / Te Horopaki

- 3.1 Historically the chairperson and deputy chairperson of the Canterbury Waste Joint Committee has been the same as the appointees made by the Canterbury Regional Landfill Joint Committee. At the 14 February 2020 meeting of the Canterbury Regional Landfill Joint Committee Councillor Jimmy Chen of Christchurch City Council was appointed as Chairperson, and Councillor Robbie Brine of Waimakariri District Council was appointed as Deputy Chairperson.
- 3.2 The Committee's Constituting Agreement (attached) requires that the chairperson be an elected member from Christchurch, and that the deputy chairperson be an elected member from the other member councils.

#### Attachments

No.	Title	Page
A <a href="#">↓</a>	Constituting Agreement	7

#### Confirmation of Statutory Compliance / Te Whakatūtutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).

(a) This report contains:

- (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
- (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

## Signatories / Ngā Kaiwaitohu

<b>Author</b>	Zefanja Potgieter - Senior Resource Advisor
<b>Approved By</b>	Ross Trotter - Manager Resource Recovery Helen Beaumont - Head of Three Waters & Waste David Adamson - General Manager City Services

CONSTITUTING AGREEMENT OF THE  
CANTERBURY WASTE JOINT COMMITTEE  
JUNE 2011

ASHBURTON DISTRICT COUNCIL  
CHRISTCHURCH CITY COUNCIL  
HURUNUI DISTRICT COUNCIL  
KAIKOURA DISTRICT COUNCIL  
MACKENZIE DISTRICT COUNCIL  
SELWYN DISTRICT COUNCIL  
TIMARU DISTRICT COUNCIL  
WAIMAKARIRI DISTRICT COUNCIL  
WAIMATE DISTRICT COUNCIL

## CONSTITUTING AGREEMENT

### CANTERBURY WASTE JOINT COMMITTEE

#### MEMBERS

ASHBURTON DISTRICT COUNCIL, CHRISTCHURCH CITY COUNCIL, HURUNUI DISTRICT COUNCIL, KAIKOURA DISTRICT COUNCIL, MACKENZIE DISTRICT COUNCIL, SELWYN DISTRICT COUNCIL, TIMARU DISTRICT COUNCIL, WAIMAKARIRI DISTRICT COUNCIL, and WAIMATE DISTRICT COUNCIL, and their successors, all local authorities under the Local Government Act 2002 (collectively "the Councils" and individually "a Council")

#### BACKGROUND

The Canterbury Waste Joint Committee is a joint committee under the Local Government Act 2002 with delegated authority to deal with all matters relating to the volumes of solid waste sent for disposal through regional waste minimisation initiatives identified by the Committee, including but not limited to allocating the annual funding of the joint committee as set out in the Constituting Agreement.

A.

#### TERMS OF THIS AGREEMENT:

##### EFFECTIVE DATE

1. This Agreement shall come into effect on 1 July 2011.

##### COMMITTEE

2. Pursuant to clause 30(1) and (5) of Schedule 7 to the Local Government Act 2002 the Councils shall appoint and constitute a joint committee which shall be known as the Canterbury Waste Joint Committee ("the Committee").
3. The Committee shall consist of a maximum of eleven members as follow:
  - (a) three elected members of the Christchurch City Council;
  - (b) eight members made up of one elected member from each of the other Councils.
4. The Committee shall report to the Councils at least annually on the exercise of the Committee's functions.

##### SUBCOMMITTEE

5. The Committee may :
  - (a) appoint a subcommittee of the Committee to be known as the Canterbury Hazardous Waste Subcommittee ("the Subcommittee") pursuant to clause 30(2) of Schedule 7 of the Local Government Act 2002;
  - (b) ensure at least one elected member of each of Christchurch City Council and another Council shall be members of the Subcommittee. The chairperson of the Subcommittee



shall be an elected member of the Committee. In all other respects the composition of the Subcommittee shall be as determined by the Committee from time to time;

- (c) direct the Subcommittee in such manner as it sees fit from time to time as provided for in clause 30(4) of Schedule 7 of the Local Government Act 2002;
- (d) appoint such other subcommittees as it sees fit from time to time.

#### **TERMS AND CONDITIONS OF ENTRY**

- 6. The Councils may only allow other councils to join the Committee on such terms and conditions as are agreed unanimously by the Councils.

#### **WITHDRAWAL OF COUNCIL**

- 7. A Council may only withdraw from the Committee if that Council has complied with all of its obligations under this Constituting Agreement up to the date of withdrawal and agrees to satisfy its continuing obligations (if any) in a manner which is satisfactory to all of the remaining Councils.

#### **AVOIDANCE OF DISCHARGE**

- 8. The Councils declare that they have each resolved that the Committee and the Subcommittee shall continue to function after a triennial election with the same delegated functions, duties, powers and voting rights that existed prior to that election and accordingly the Committee and the Subcommittee shall not be discharged under clause 30(7) of Schedule 7 to the Local Government Act 2002.

#### **QUORUM**

- 9. The quorum for a meeting of the Committee is six members at least one of whom is a member appointed by Christchurch City Council.
- 10. The quorum for a meeting of the Subcommittee shall be:
  - (a) half of the members if the number of members (including vacancies) is even, or
  - (b) a majority of members if the number of members (including vacancies) is odd, and;in both cases at least one of whom is a member of Christchurch City Council and one of whom is a member of another Council.

#### **APPOINTMENT AND DISCHARGE OF MEMBERS**

- 11. The power to discharge a member of the Committee and to appoint another in his or her stead, may only be exercised by the Council that made the appointment.

#### **CHAIRPERSON AND DEPUTY**

- 12. The Committee shall appoint a chairperson (who must be an elected member appointed by Christchurch City Council) and a deputy chairperson (who must be an elected member appointed by another Council other than Christchurch City Council).

#### MEETINGS/STANDING ORDERS

13. Meetings of the Committee shall be held at Christchurch (unless otherwise agreed) at such times as may be appointed and as are necessary for the performance of the functions, duties and powers delegated under this Agreement. The rules regulating the proceedings of the Committee shall be those set out in NZS 9202:2001, "Model Standing Orders for Meetings of Territorial Authorities, Regional Councils and Community Boards" as varied in accordance with this Agreement. For the purposes of clause 25 of the NZS 9202:2001 the "principal administrative officer" means the Chief Executive of the Christchurch City Council or his delegate.
14. Attendance of meetings via telephone or video links from venues outside Christchurch is permitted. Such additional venues will be publicly notified in the same way as the main meeting is notified, and will be open to the public in the same way as the main meeting.
15. Any resolution requiring a decision on a matter of significance to be considered at a meeting of the Committee must be the subject of prior notice which ensures that each member is fully and fairly informed of the background and rationale for any proposal to be considered and the period of notice must be sufficient to enable every member to consult with his or her appointing Council.

#### VOTING

16. Notwithstanding anything to the contrary in Model Standing Orders NZS 9202:2001 voting at meetings of the Committee shall be:
  - (a) in respect of any matter where the decision relates to the setting of policy and/or a commitment to expenditure:
    - (i) by the members appointed to represent the Christchurch City Council, three votes (which votes may only be cast as a block and may not be split);
    - (ii) by the members appointed to represent the other Councils, one vote each;
  - (b) in respect of any matter delegated by any one or more of the Councils on the basis that a specified voting regime will apply, in accordance with that specified regime;
  - (c) in respect of all other matters, on the basis of one vote per member.
17. To the extent that it may be necessary all of the Councils shall procure an amendment to their standing orders to permit voting on the basis set out in clause 16.

#### CASTING VOTE

18. In all cases where there is an equality of votes the chairperson shall have a casting vote. Where a casting vote is to be exercised the following principles shall apply:
  - (a) the casting vote is to be used in the best interests of the Canterbury community represented by the Councils considered together;
  - (b) the casting vote is to be used in the best interests of the Councils considered together;
  - (c) the Committee members shall use their best endeavours to avoid use of a casting vote, by obtaining consensus;
  - (d) the casting vote shall not to be used unreasonably in favour of any one Council.

#### DELEGATIONS

19. All delegations made by the Councils to the Committee shall record the functions, duties and powers that have been delegated in writing and may set out:
- (a) the extent to which the Council may be bound in respect of those delegated functions, duties and powers that are delegated;
  - (b) the limit (if any) to which the Council can be committed to expenditure of funds in pursuance of those delegated functions, duties and powers;
  - (c) the circumstances in which (if any) the Council can withdraw those delegated functions, duties and powers in whole or in part.

#### FUNDING

20. The annual funding amount for regional waste minimisation will be \$112,000 per year. This amount will be adjusted annually for inflation using the annual percentage change in the Consumers Price Index at June of each subsequent year. Should the annual funding amount need to be increased, the Committee will provide a detailed proposal for consideration by all Councils.
21. All Councils will contribute towards the funding of joint regional waste minimisation initiatives, unless otherwise expressly agreed at the time, shared as follows:

Councils	Estimated Population *	Population and Funding %
Christchurch	376,700	66.80
Waimakariri	47,600	8.43
Hurunui	11,100	1.96
Selwyn	39,600	7.01
Ashburton	29,400	5.21
Kaikoura	3,800	0.67
Waimate	7,550	1.33
Mackenzie	4,010	0.71
Timaru	44,400	7.88
<b>TOTAL</b>	564,160	100

2010 Statistics New Zealand Subnational Estimates

The funding obligation of the Councils may be redistributed between them from time to time as decided by the Committee to more accurately reflect the then current population figures.

22. Each Council shall ensure that it pays its due proportion of all such expenditure on the due date for payment, without deduction or set off.

#### ADMINISTRATIVE COSTS

23. Christchurch City Council agrees to provide such management, administrative, secretarial and accounting services as the Committee shall reasonably require at no cost to the other Councils. Nothing in this clause shall prevent any Council agreeing to make a contribution towards those costs. For the avoidance of doubt, where Christchurch City Council is directed to source any such services (ie other than from its own staff) the costs incurred shall be recoverable from the Councils under clause 21.

#### GOOD FAITH NEGOTIATIONS

24. In the event of any circumstances arising that were unforeseen by the Councils at the time of entering into of this Agreement or in the event of a dispute in any way relating to this Agreement the Councils will negotiate in good faith to resolve that dispute or to add to or vary this Agreement in order to resolve the impact of those unforeseen circumstances in the best interests of:
- (a) the Councils represented on the Committee considered together; and
  - (b) the Canterbury community represented by the Councils considered together.

#### ARBITRATION

25. Any dispute arising out of the interpretation of this Agreement, including any question regarding its existence, validity or termination, which cannot be resolved by good faith negotiations under clause 24 shall be referred to arbitration.
26. If the Councils are unable to agree upon the appointment of a single arbitrator within 10 working days of the receipt of written notification of the desire of a party to have a dispute arbitrated, or if any arbitrator agreed upon refuses or fails to act within 10 working days of his or her appointment, then any party may request the President for the time being of the Canterbury District Law Society to appoint an arbitrator and the arbitration shall be carried out in accordance with the Arbitration Act 1996. For the purposes of this clause "working day" has the meaning attributed to those words in Section 2 of the Resource Management Act 1991.
27. In this clause time shall be of the essence and the Councils agree to be bound by any arbitration decision, determination or award.

#### SERVICE OF NOTICES

28. Any notice required to be served under this Agreement may be served in the manner provided in Section 152 of the Property Law Act 1952 and in any event shall be deemed to be served if actually received.
29. A notice under clause 28 must be addressed:
- (a) in the case of Christchurch City Council or the Committee for the attention of the Legal Services Manager at the Civic Offices, 53 Hereford Street, Christchurch (PO Box 73013, Christchurch); and

- (b) in the case of every Council other than Christchurch City Council, for the attention of the Principal Administrative Officer of the Council to whom the notice is addressed, to that Council at its principal administrative office.

EXECUTED by the Councils on the dates set out below

THE COMMON SEAL of )  
ASHBURTON DISTRICT COUNCIL )  
was affixed in the presence of )

\_\_\_\_\_  
\_\_\_\_\_

THE COMMON SEAL of )  
CHRISTCHURCH CITY COUNCIL )  
was affixed in the presence of )

\_\_\_\_\_  
\_\_\_\_\_

THE COMMON SEAL of )  
HURUNUI DISTRICT COUNCIL )  
was affixed in the presence of )

\_\_\_\_\_  
\_\_\_\_\_

THE COMMON SEAL of )  
KAIKOURA DISTRICT COUNCIL )  
was affixed in the presence of )

\_\_\_\_\_  
\_\_\_\_\_

THE COMMON SEAL of )  
MACKENZIE DISTRICT COUNCIL )  
was affixed in the presence of )

\_\_\_\_\_

\_\_\_\_\_

THE COMMON SEAL of )  
SELWYN DISTRICT COUNCIL )  
was affixed in the presence of )

\_\_\_\_\_

\_\_\_\_\_

THE COMMON SEAL of )  
TIMARU DISTRICT COUNCIL )  
was affixed in the presence of )

\_\_\_\_\_

\_\_\_\_\_

THE COMMON SEAL of )  
WAIMAKARIRI DISTRICT COUNCIL )  
was affixed in the presence of )

\_\_\_\_\_

\_\_\_\_\_

THE COMMON SEAL of )  
WAIMATE DISTRICT COUNCIL )  
was affixed in the presence of )

\_\_\_\_\_

\_\_\_\_\_





## 4. Background Report on the Committee

Reference / Te Tohutoro: 20/228952

Report of / Te Pou  
Matua:

Zed Potgieter, Senior Resource Advisor, zp@ccc.govt.nz

General Manager /  
Pouwhakarae:

Dave Adamson, General Manager City Services

### 1. Purpose of Report / Te Pūtake Pūrongo

- 1.1 The purpose of this report is to provide an outline of the history and role of the Committee.

### 2. Officer Recommendations / Ngā Tūtohu

That the Canterbury Waste Joint Committee receive the information in the report.

### 3. Background / Te Horopaki

- 3.1 The following Councils are members of the Committee:

- Ashburton District Council
- Christchurch City Council
- Hurunui District Council
- Kaikoura District Council
- Mackenzie District Council
- Selwyn District Council
- Timaru District Council
- Waimakariri District Council
- Waimate District Council.

- 3.2 The Committee is tasked with advancing and supporting waste minimisation in Canterbury and comprises of 11 elected members, three appointed by Christchurch, and one each by the other eight member councils. The Chair is always an elected member from Christchurch and the deputy is appointed from one of the other councils. (The *Constituting Agreement* of the Committee is attached to the report on appointing chairperson and deputy chairperson in the agenda papers).

- 3.3 The Committee usually meets once a year, in August, to consider staff proposals from all member councils for regional waste minimisation projects and to review projects from the past year. We convene additional meetings if further project proposals come forward. The Committee considers funding of project proposals, from staff or from external applicants, on a case-by-case basis.

- 3.4 The annual budget (\$112,000) for regional waste minimisation projects is funded proportionally from the nine member councils, as set out in the *Constituting Agreement*. The funding may be fully or partly allocated in any one year, depending on the number of qualifying projects. A wide variety of waste minimisation projects have been funded (Attachment A).

- 3.5 The eligibility criteria and procedure for applications to the fund are set out at <https://ccc.govt.nz/environment/sustainability/waste-minimisation-in-canterbury-grant/>. Applications by commercial enterprises are generally referred on to other funding agencies, but have in the past not been excluded from consideration.
- 3.6 The agenda papers and minutes from 2002 onwards are on the Christchurch City Council website <https://ccc.govt.nz/the-council/meetings-agendas-and-minutes>.
- 3.7 In 2000 the Committee adopted the *Canterbury Regional Waste Management Agreement* (Attachment B) which committed Councils to work together regionally on waste management matters.

## Attachments

No.	Title	Page
A <a href="#">↓</a>	CWJC Past Projects	19
B <a href="#">↓</a>	Regional Waste Management Agreement 2000	21

## Confirmation of Statutory Compliance / Te Whakatūturutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).

(a) This report contains:

- (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
- (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

## Signatories / Ngā Kaiwaitohu

<b>Author</b>	Zefanja Potgieter - Senior Resource Advisor
<b>Approved By</b>	Ross Trotter - Manager Resource Recovery Helen Beaumont - Head of Three Waters & Waste David Adamson - General Manager City Services

List of Projects 2002-2019.

Advancing waste minimisation through levies
Arsenic contamination research
Household battery recycling
Business resource efficiency - new projects
Business resource efficiency (outside Christchurch)
Business Resource Efficiency and Paper and Cardboard communications campaign
Clopyralid study
Collaborative Projects Fund (Ministry for the environment)
Collection of used ecobulbs
Commercial organics collection - feasibility study
Compost development and marketing and compost facility resource guidelines
Compost Food Packaging at events (CFPE)
Compost product development
Compost product development - agricultural uses
Compostable Food Packaging
Consumer research- container deposits and plastic bag charges
Designing Out Construction Waste Feasibility Study
Development of National Waste Database
E - book educational resource
Ecrap recycling
Educational resources for primary and secondary school
Evaluation of interactive web based resource
Evaluation of web based education tool for schools
Food Waste Minimisation proposal project
Free materials service
Household batteries
Investigate use in the region of bylaws to restrict disposal when other options are in place
Love Food Hate Waste
Mattress recycling
Medical waste at home
MedSalv
Molten Media
National "Reduce your rubbish" campaign
New Zealand Rural Waste Minimisation
One Planet website
Remote rural transfer stations
Non - natural rural waste management (farmwaste)
On the road recycling project
Participation in recycling
Placing of refuse and recycling bins on through-routes in the region
Plastic bag free Kaikoura
Promote sustainable procurement options to member councils
Promoting sustainable development options to member councils by way of workshops
Promoting worm composting in schools
Promotion of REBRI C&D guidelines
Promotion of waste management at events
REBRI concrete and demolition industry guidelines
Recycling in the work place = Regional initiative to promote sustainable businesses

Recycling promotion via cinema advertising
Redundant plastic bags
ReFill NZ participation
Regional information sharing
Regional Operators Forum
Regional organics study
Remit on need for countrywide waste levies
Rural farm waste
SeatSmart Child Seat Recycling
Study on the reduction of regional construction and demolition waste
Target Zero
Timber to Energy (Holcim)
Treated Timber options – desktop study
Treated Timber Waste Minimisation Project
Trial processing of polypropylene bags, sacks and twine
TV takeback
Tyre recycling study
Use of recycled wood products
Waste free periods
Zero Waste events

## Canterbury Regional Waste Management Agreement

### Purpose

To work together towards promoting waste minimisation.

- To ensure optimum effectiveness of waste management.
- To pursue maximum efficiency in waste management.
- For the benefit of Canterbury's environment and people.

### Guiding Principles

#### Working Together

- We will freely share non-confidential information and resources with Canterbury Councils and others where practicable.
- We will endeavour to ensure the coordination and compatibility of our waste management operations and services.
- We will support equitable access to waste management operations, regardless of district boundaries.

#### What We Will Do

- We will take responsibility for our actions to the wider environment and community both within and outside the region.
- We will lead by example, incorporating waste minimisation into our own operations.
- We will promote reduction as the preferred means of minimising waste.
- We will ensure that waste diversion is our primary aim in managing waste that is already created.
- We will recognise that waste disposal is the last resort and must be undertaken in an environmentally responsible manner.
- We will ensure economic/regulatory policies are consistent with and promote waste minimisation goals.
- We will consider the environmental, social and economic impacts from waste management.
- We will actively promote the principles of waste reduction at source, by working with and influencing industrial and commercial interests and central government.

#### How Will We Do It

- We will involve and support our community in waste management decision making and operations.
- We will encourage people to take responsibility for their own waste and meet the associated costs where practicable.
- We will ensure our community is informed and educated regarding waste management and waste minimisation.
- We will make decisions regarding waste management based on sound information where it is available, and will actively seek it when it is not.

#### Signatories (AUGUST 2000)

Ashburton District Council  
Hurunui District Council  
Mackenzie District Council  
Timaru District Council  
Waimate District Council

Christchurch City Council  
Kaikoura District Council  
Selwyn District Council  
Waimakariri District Council

13/967181

## 5. Alternative Processing for Mixed Fibre (Feasibility Study)

Reference / Te Tohutoro: 20/229771

Report of / Te Pou  
Matua:

Zed Potgieter, Senior Resource Advisor, zp@ccc.govt.nz  
Rowan Latham, Contract and Project Lead,  
rowan.latham@ccc.govt.nz

General Manager /  
Pouwhakarae:

Dave Adamson, General Manager City Services

### 1. Purpose of Report / Te Pūtake Pūrongo

- 1.1 The purpose of this report is for the Committee to consider an additional regional waste minimisation project for 2019/20.

### 2. Officer Recommendations / Ngā Tūtohu

That the Canterbury Waste Joint Committee approves the Alternative Processing for Mixed Fibre Feasibility project as set out in this report.

### 3. Background / Te Horopaki

- 3.1 On 2 September 2019 the Committee approved the following regional waste minimisation projects for 2019/20:

Project	\$ Cost
WasteMinz Collaborative Projects Fund	7,500
Compostable Food Packaging at Events	20,275
RefillNZ	21,596
Medsalv	11,000
Akaroa French Fest	3,738
AgRecovery business case review	5,000
<b>Total</b> (from the annual budget of \$112,000)	<b>69,109</b>

- 3.2 At the next meeting of the Committee (September 2020) there will be written a report back on all of the above approved projects, as is done annually.
- 3.3 With a total of \$42,000 of the \$112,000 budget for 2019/20 not yet allocated, an opportunity exists to consider a feasibility study for processing mixed fibre, a project of importance to all member Councils.

### 4. Alternative Processing for Mixed Fibre (Feasibility Study)

Project	Alternative Processing for Mixed Fibre (Feasibility Study)
Total Cost	\$70,000 excl. GST \$42,000 – CWJC Fund \$28,000 – CCC
Time Frame	Timeframe for the project is 3 months.

Supervisor	Rowan Latham, Christchurch City Council
Region	Canterbury and New Zealand
Outline	<p>The project will investigate the potential alternative processes/outlets for mixed fibre (paper) should international markets for recycling deteriorate further/cease to be available. While additional sorting may yield positive market prices, the required investment would likely only occur in the medium to long-term. This could delay processing of mixed fibre and or result in material being stockpiled or sent to landfill.</p> <p>The study will assess viability of processing mixed fibre through the Living Earth Organics Processing Plant – potentially demonstrating a viable alternative (onshore) methodology applicable throughout New Zealand.</p>
Benefits	<ol style="list-style-type: none"> <li>1. Provide a viable alternative to landfill if recycling markets for fibre fail.</li> <li>2. Environmental benefits associated with soil improvement outputs.</li> <li>3. Localised solution to the global recycling market situation.</li> <li>4. Potential applicability for alternative processing sites (i.e. windrow composting).</li> </ol>
Deliverables	The key deliverable will be a report detailing the viability and methodology of processing of fibre at the Living Earth facility.
Costs Breakdown	<p>Phase 1 – Project outline, specifications and design (\$33,000)</p> <p>Phase 2 – Proposal and plant upgrade requirements (\$37,000)</p>
Evaluation Criteria	Provide as much detail as possible for the evaluation criteria.
Achievability:	Projects must have the potential to succeed.
	High: This project will include a mass balance study to understand the potential introduction of fibre into existing operations (i.e. adaption of the Organics Processing Plant). This information will create a baseline for decisions re the alternative processing of fibre and inform any investment decisions.
Measurability	Project outcomes must be able to be measured to ensure the delivered project outcomes can be evaluated at the completion of the project. ('Measure to Manage')
	<p>The delivery of an achievable alternative option to landfill for mixed fibre will include a report on the costs and necessary improvements to the plant, with consideration for market outputs, contamination and cost of investment.</p> <p>The level of detail provided in the report will be sufficient for investment decisions (including funding applications) towards achieving a robust alternative processing option.</p>
Improving resource efficiency	Projects should have the potential to improve resource efficiency, and to capitalise on potential economic benefits.



	The viability of composting fibre at the organics plant is a preferred alternative to landfill. The option will support greater resource recovery and potential soil improvement associated with application of compost to lower quality soils and or land rehabilitation. Development of a local process option has a number of benefits including reduced reliance on international markets, and reduced transport and processing emissions.
Quantity	Assess what effect the project will have on waste quantities, either tonnes or volumes
	The current volume of mixed fibre processed through EcoCentral is approximately 22,000 tonnes. Approximately 15,000 tonnes could be diverted through the proposed process – with the remaining 7000 tonnes of cardboard still viable for recycling.
Cost effectiveness	Whether the project offers value for money
	Development of a low cost, local, alternative process will reduce the current financial risk to Councils if fibre is sent to landfill.
Reducing the harmful effects of wastes	Assess the risk from wastes of harm on the environment and human health in order to identify and take action on those wastes of greatest concern.
	This option will remove the need to landfill 15,000 tonnes of fibre should markets deteriorate. This will provide a safe alternative disposal option yielding a positive environmental benefit compared to landfill; with the associated benefits of soil improvement and reduced transport emissions.

- 4.1 We will present more detail on this proposal at the meeting.
- 4.2 For background information, the latest information and advice from WasteMINZ re paper recycling and home composting is attached.

## Attachments

No.	Title	Page
A <a href="#">↓</a>	WasteMinz NZ - Paper and cardboard recycling	27

## Confirmation of Statutory Compliance / Te Whakatūrutanga ā-Ture

Compliance with Statutory Decision-making Requirements (ss 76 - 81 Local Government Act 2002).

(a) This report contains:

- (i) sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages; and
- (ii) adequate consideration of the views and preferences of affected and interested persons bearing in mind any proposed or previous community engagement.

(b) The information reflects the level of significance of the matters covered by the report, as determined in accordance with the Council's significance and engagement policy.

## Signatories / Ngā Kaiwaitohu

<b>Authors</b>	Zefanja Potgieter - Senior Resource Advisor Rowan Latham - Contract & Project Lead
<b>Approved By</b>	Ross Trotter - Manager Resource Recovery Helen Beaumont - Head of Three Waters & Waste David Adamson - General Manager City Services

Item 5



## Paper and cardboard kerbside recycling in New Zealand

How much paper and cardboard do we use?

Fibre (mixed paper and cardboard) is in theory a highly recyclable material. Research into the national kerbside recycling of fibre by households shows it makes up approximately 30% (by weight<sup>1</sup>) of all materials in kerbside recycling bins. Of the estimated 193,900\*<sup>2</sup> tonnes of fibre disposed of in kerbside rubbish and recycling collections per year, 71% is sent for recycling and 29% to landfill.

Corrugated cardboard is the most common type of fibre at an estimated 48,083 tonnes every year, followed by newspapers, magazines and flyers.

Fibre in kerbside rubbish and recycling	Kg per household per annum	Tonnes in NZ per annum
Corrugated cardboard	25.7 kg	48,083 T
Newsprint, magazines, flyers	23.8 kg	44,498 T
Paper - all other	24.4 kg	45,679 T
Paper board	22.2 kg	41,468 T
Paper cups	1.1 kg	2,139 T
Pizza boxes	3.2 kg	6,002 T
Tetra Pak® and gable top drink containers	2.3 kg	4,227 T
Tetra Pak® and gable top other containers	0.2 kg	370 T
Non-recyclable fibre	0.8 kg	1,436 T
<b>TOTAL fibre</b>	<b>103.7 kg</b>	<b>193,902 T</b>

How much fibre do we collect for recycling?

We recycle 138,323 tonnes of fibre every year sourced from kerbside recycling. The main type of fibre collected for recycling (by weight) is corrugated cardboard, representing 32% of total fibre in recycling; an estimated 44,079 tonnes per annum in total. The next grouping by percentage is newsprint, magazines and advertising flyers which make up approximately 26% of total fibre in recycling – an estimated 35,788 tonnes per annum.

<sup>1</sup> Source: WasteMINZ TAO Forum, Rethinking Rubbish and Recycling Audit 2019 Note MRF data from Eunomia's situational analysis suggests fibre tonnages from kerbside as being higher, however no analysis has been undertaken by the Ministry to determine what percentage of that material comes from households versus light commercial e.g. playcentres, doctors surgeries, cafes etc and no analysis has been undertaken of contamination levels. Page 3, Table 1 <https://www.mfe.govt.nz/sites/default/files/media/Waste/national-resource-recovery-project-redacted.pdf> so you should also consider any figures from either report in the context of the findings of your own SWAP audits.



Fibre in domestic kerbside recycling	Proportion of fibre in recycling
Corrugated cardboard	31.87%
Newsprint, magazines, flyers	25.87%
Paper - all other	17.78%
Paper board	18.47%
Paper cups (coffee, water, soft drinks)	0.62%
Pizza boxes	3.68%
Tetra Pak® and gable top drink containers	1.30%
Tetra Pak® and gable top other containers	0.11%
Non-recyclable fibre	0.30%
<b>TOTAL fibre</b>	<b>100.00%</b>

It's clear from these audits that we are a nation of pizza lovers. Based on our audit data<sup>3</sup> which we extrapolated to provide a national figure, 33 million pizza boxes are disposed of through kerbside recycling collections every year and the good news is we recycle 85% of them. However, 8% of these still have food inside and a further 8% are too dirty and can't be recycled.

What isn't recycled?

By weight, fibre makes up an estimated 15% of the materials disposed of to kerbside **rubbish** collections - effectively 50,626 tonnes of fibre that could be recycled that isn't. Boxes used for food packaging such as cereal boxes and tea bags are the most common type of fibre that people are putting in rubbish bins by mistake.

Furthermore, 1,272 tonnes of *non-recyclable fibre* is estimated to end up in the kerbside recycling. What is meant by non-recyclable fibre? Sometimes it's non-recyclable because it is paper combined with plastic e.g. laminated paper, paper ream wrappers or photographs, or because it looks like paper but is made from plastic e.g. many receipts are made from plastic. Sometimes it's unrecyclable because it is too small to be recycled e.g. receipts and shredded paper. Finally, it can be unrecyclable if it is too contaminated with food - For example, if the paper from your fish and chips is smeared with tomato sauce.

In addition, an astonishing 85 million<sup>4</sup> disposable cups are placed in recycling per year. Disposable coffee cups are not recyclable in kerbside systems due to their composite materials (i.e. they are fibre lined with plastic so are not able to be recycled with fibre nor with plastic unless expensively separated out). They also tend to have coffee dregs in them (which contaminates other clean fibre, and lowers its value. Contamination can result in fibre exports not being accepted by recyclers overseas due to its high moisture content.

<sup>3</sup> Source: WasteMINZ TAO Forum, Rethinking Rubbish and Recycling Audit 2019

<sup>4</sup> Source: WasteMINZ TAO Forum, Rethinking Rubbish and Recycling Audit 2019



Based on our bin audits, approximately 127.2 million (1,288 tonnes) of disposable cups make their way into kerbside **rubbish** collections. In total households dispose of 212.3 million single-use cups through their combined kerbside recycling and rubbish.

New Zealanders also dispose of approximately 86.5 million<sup>5</sup> gable top containers per annum. These containers are used for UHT milk, non-dairy milk products, stocks and so on. These are made from 3 different materials layered together: paperboard (made from wood), polyethylene (a type of plastic) and aluminium. New Zealand currently has onshore processing facilities which can separate the paperboard from the plastic and aluminium. This means that 34.4 million of the total gable top containers collected through kerbside recycling may end up being landfilled or sent through a recycling process where only some of the paperboard can be recovered.

#### What can households do?

Here are our top tips for reducing the amount of fibre your household needs to dispose of.

- Get a 'no junk mail' sticker for your letterbox and sign up for electronic newsletters instead to reduce the number of flyers you need to recycle.
- Ask companies such as banks, insurance companies and charities to send you information electronically rather than by post.
- Take a break and have your coffee at the café or if you can't, take a reusable cup when buying coffee on the go.
- Don't put tissues, till receipts or post it notes in the recycling - they are too small to be recycled and some till receipts are made from plastic.
- Newspapers, office paper, shredded paper toilet rolls, egg cartons, paper towels and food contaminated paper bags can be home composted. Food packaging printed with soya or non-toxic inks can also be home composted.
- Use newsprint and used office paper on your fire in winter.
- Print double-sided wherever possible and take home any single-sided paper to use as colouring-in paper for your children.
- Where possible avoid products in gable-top containers.
- Make sure that the paper and cardboard you are recycling is as clean as possible.
- Eat all of your pizza and scrape out any remnants from your pizza box before recycling.

#### What can businesses do?

- Encourage customers to sign up for e-newsletters and don't advertise through letterbox flyers.
- Encourage customers to sign up to receive bills and statements electronically.
- If you have a store loyalty programme, offer people the option of having their receipts emailed.
- Encourage your staff to ask customers if they need a receipt.
- Set double-sided printing as the default on your office printer.
- Purchase items made from recycled paper and look to see if your products can be packaged from recycled materials.
- Use non-toxic and soya-based inks to enable your packaging to be composted.

<sup>5</sup> Source: WasteMINZ TAO Forum, Rethinking Rubbish and Recycling Audit 2019



#### Interesting facts you may not know

- Envelopes with a window on them can be recycled but pull off any packing tape from courier boxes before recycling them.
- Birthday and Christmas cards – if they have any glitter on them, they can't be recycled. Also make sure that any batteries or badges they have on them are removed before recycling.
- Shredded paper and post-it notes are too small to be recycled.
- Tissues are made of a very short fibre that turns to mush, so they can't be recycled and turned into another product
- Cotton wool/make up pads are not fibre-based but a form of textile - so they can't be recycled.
- Can a piece of paper be recycled indefinitely?  
No. Every time paper is recycled, the fibres get shorter. After being recycled five to seven times, the fibres become too short to bond into new paper. New fibres are added to replace the unusable fibre that wash out of the pulp during the recycling process. A single sheet of paper may contain new fibres as well as fibres that have already been recycled several times.
- Are staples and paper clips okay to recycle okay to recycle?  
Paper mills that process recovered paper are set up to remove common contaminants such as staples and paper clips from the pulped paper. That means it's not necessary to remove such items before recycling the paper, although paper clips and binder clips can be removed and reused.



**Corrugated cardboard**



**Newsprint, magazines, flyers**



**Paper – all other**





Paper board



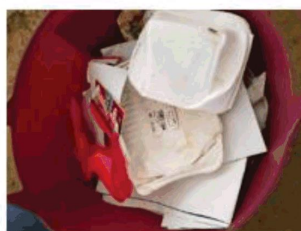
Paper cups



Tetra Pak® and gable top containers



Pizza boxes



All other non-recyclable fibre

