

Refuse Minimisation and Disposal

Refuse Minimisation and Disposal: Activities, Rationale and Negative Effects

Activities included in Refuse Minimisation and Disposal

- Residual waste collection and disposal
- Recyclable materials collection and processing
- Organic material collection and composting

Refuse Minimisation and Disposal contribute to these community outcomes

- Injuries and risks to public health are minimised
- Convenient, reliable and safe residual waste collection services are provided
- Public have access to transfer stations and community collection points in the city and across Banks Peninsula for dropping off residual waste.
- Earthquake demolition waste is safely disposed of with minimal adverse effects
- Statutory obligations are met by the council.
- City assets, financial resources and infrastructure are well managed, now and in the future.
- Groundwater is safeguarded from the effects of land use.
- Christchurch's infrastructure supports sustainable economic growth.

Refuse Minimisation and Disposal has these negative effects:

Effect	Council's Mitigation Measure
Continued use of red bins to dispose of recyclable and organic material	An audit of the red bins in 2011-2012 showed that there is still approx 3.8kg per bin – or 32% which could be composted and 1.6 kg per bin – or 14% which could be recycled instead of going to landfill. We will continue to promote the use of the green and yellow bins correctly in order maximise diversion from landfill while keeping contamination at a minimum. Council continues to fund promotions and education programme in order to further reduce waste going to Kate Valley. This will in turn reduce disposal costs.
Use of biodegradable and compostable plastics	We continue to be concerned at the increased use and promotion of biodegradable and compostable plastic packaging by manufacturers and suppliers who do not consider the life cycle of the product. These products can not easily be identified or separated from 'real' plastic – resulting in downgrade of product and reduced sale price of recyclable plastics. They also cannot be handled at the compost plant
Organic material still being placed in the red bin	An audit of the red bins in 2011-2012 showed that there is still approx 3.8 kg per bin – or 32% of the contents of the red bins – which could be composted instead of going to landfill. We will continue to promote the use of the green and yellow bins correctly in order maximise diversion from landfill while keeping contamination at a minimum.

Effect	Council's Mitigation Measure
Organics bin contamination	Clopyralid and arsenic contaminate the final compost product which must achieve NZS Compost standard. Continuing education programme to increase public awareness is required.

Refuse Minimisation and Disposal Statement of Service Provision

Activity	Services provided	Performance Measures	Performance Targets				
			Current	2015-16	2016-17	2017-18	2018-2025
Residual waste collection and disposal	Domestic kerbside collection service or community collection points for residual waste (refuse) for households and businesses (domestic quantities only)	Tonnage of residual waste collected by Council services	No more than 120 kg / person / year from collection services disposed to Kate Valley	No more than 120 kg / person / year from collection services disposed to Kate Valley	No more than 120 kg / person / year from collection services disposed to Kate Valley	No more than 120 kg / person / year from collection services disposed to Kate Valley	No more than 120 kg / person / year from collection services disposed to Kate Valley
		Kerbside residual waste collection – emptied by Council services	At least 99.5% collection achieved when items correctly presented for collection	At least 99.5% collection achieved when items correctly presented for collection	At least 99.5% collection achieved when items correctly presented for collection	At least 99.5% collection achieved when items correctly presented for collection	At least 99.5% collection achieved when items correctly presented for collection
		Customer satisfaction with kerbside collection service for residual waste	At least 90% customers satisfied with Council's kerbside collection service for residual waste each year	At least 90% customers satisfied with Council's kerbside collection service for residual waste each year	At least 90% customers satisfied with Council's kerbside collection service for residual waste each year	At least 90% customers satisfied with Council's kerbside collection service for residual waste each year	At least 90% customers satisfied with Council's kerbside collection service for residual waste each year

Activity	Services provided	Performance Measures	Performance Targets				
			Current	2015-16	2016-17	2017-18	2018-2025
Recyclable materials collection and processing	Domestic kerbside collection service for recyclable materials	Recyclable materials collected by Council services and received for processing at the Materials Recovery Facility	120 kg +40%/-10% recyclable materials / person / year collected and received by Council services	110 kg +40%/-10% recyclable materials / person / year collected and received by Council services [1]	108 kg +40%/-10% recyclable materials / person / year collected and received by Council services	105 kg +40%/-10% recyclable materials / person / year collected and received by Council services	100 kg +40%/-10% recyclable materials / person / year collected and received by Council services
		Kerbside wheelie bins for recyclables emptied by Council services	At least 99.5% collection achieved when items correctly presented for collection	At least 99.5% collection achieved when items correctly presented for collection	At least 99.5% collection achieved when items correctly presented for collection	At least 99.5% collection achieved when items correctly presented for collection	At least 99.5% collection achieved when items correctly presented for collection
		Customer satisfaction with the Council's kerbside collection service for recyclable materials	At least 90% customers satisfied	At least 90% customers satisfied	At least 90% customers satisfied	At least 90% customers satisfied	At least 90% customers satisfied

Proposed Changes for recyclable materials collection and processing	Rationale
[1] Reduction in recyclable materials collected	More realistic targets based on experience to date

Activity	Services provided	Performance Measures	Performance Targets				
			Current	2015-16	2016-17	2017-18	2018-2025
Organic material collection and composting	Domestic kerbside collection for organic material (food and garden waste)	Amount of organic material collected at Council facilities and diverted for composting	Greater than 175 kg +30%/- 10% organic material collected at Council facilities and diverted for composting facility / person / year	Greater than 185 kg +30%- 10% organic material collected at Council facilities and diverted for composting facility / person / year [1]	Greater than 185 kg +30%/- 10% organic material collected at Council facilities and diverted for composting facility / person / year	Greater than 185 kg +30%/- 10% organic material collected at Council facilities and diverted for composting facility / person / year	Greater than 186 kg +30%/- 10% organic material collected at Council facilities and diverted for composting facility / person / year
		Kerbside wheelie bins for organic material emptied by Council	At least 99.5% kerbside wheelie bins for organic material, emptied when correctly placed at the kerbside each week	At least 99.5% kerbside wheelie bins for organic material, emptied when correctly placed at the kerbside each week	At least 99.5% kerbside wheelie bins for organic material, emptied when correctly placed at the kerbside each week	At least 99.5% kerbside wheelie bins for organic material, emptied when correctly placed at the kerbside each week	At least 99.5% kerbside wheelie bins for organic material, emptied when correctly placed at the kerbside each week
		Customer satisfaction with kerbside collection service for organic material	At least 80% of customers satisfied with Council's kerbside collection service for organic material each year	At least 80% of customers satisfied with Council's kerbside collection service for organic material each year	At least 80% of customers satisfied with Council's kerbside collection service for organic material each year	At least 80% of customers satisfied with Council's kerbside collection service for organic material each year	At least 80% of customers satisfied with Council's kerbside collection service for organic material each year

Proposed Changes for organic material collection and composting	Rationale
[1] Increase in organic material collected	Continue to increase amount of waste sent to landfill

Refuse minimisation and disposal

Plan 2014/15		Plan 2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
		\$000									
	Cost of proposed services										
7,874	Recyclable Materials Collection and Processing	7,442	7,663	7,977	8,359	8,698	9,064	9,680	9,877	10,279	10,770
17,238	Residual Waste Collection and Disposal	17,373	17,922	18,567	18,670	19,410	19,897	21,056	21,093	21,780	22,649
18,538	Organic Material Collection and Composting	17,908	18,608	19,297	20,076	20,963	21,774	23,038	23,691	24,599	25,629
43,650		42,723	44,193	45,841	47,105	49,071	50,735	53,774	54,661	56,658	59,048
	Operating revenue from proposed services										
1,316	Recyclable Materials Collection and Processing	1,318	1,350	1,386	1,420	1,460	1,503	1,549	1,598	1,650	1,708
3,777	Residual Waste Collection and Disposal	3,403	3,516	3,596	2,409	2,508	2,624	2,745	2,867	3,009	3,151
4,388	Organic Material Collection and Composting	4,388	4,490	4,597	4,707	4,829	4,961	5,104	5,258	5,420	5,599
9,481		9,109	9,356	9,579	8,536	8,797	9,088	9,398	9,723	10,079	10,458
-	Capital Revenues	229	118	-	-	-	-	-	-	-	-
-	Vested assets	-	-	-	-	-	-	-	-	-	-
34,169	Net cost of services	33,385	34,719	36,262	38,569	40,274	41,647	44,376	44,938	46,579	48,590

Refuse minimisation and disposal funding impact statement

Plan 2014/15		Plan 2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	\$'000										
Sources of operating funding											
12,705	General rates, uniform annual general charges, rates penalties	13,121	13,560	14,012	15,188	16,011	16,387	17,357	17,330	18,081	18,460
21,224	Targeted rates	18,974	19,743	20,579	21,572	22,612	23,586	25,247	25,862	26,922	28,167
1,030	Subsidies and grants for operating purposes	1,030	1,054	1,079	1,105	1,134	1,164	1,198	1,234	1,272	1,314
6,515	Fees and charges	6,143	6,320	6,472	6,645	6,855	7,092	7,344	7,610	7,898	8,205
-	Internal charges and overheads recovered	-	-	-	-	-	-	-	-	-	-
1,200	Local authorities fuel tax, fines, infringement fees, and other receipts (a)	1,200	1,228	1,257	-	-	-	-	-	-	-
42,674	Total operating funding	40,468	41,905	43,399	44,510	46,612	48,229	51,146	52,036	54,173	56,146
Applications of operating funding											
38,976	Payments to staff and suppliers	38,203	39,471	41,019	42,022	43,561	45,092	47,876	48,802	50,766	52,969
399	Finance costs	288	291	357	496	610	714	780	753	800	817
2,188	Internal charges and overheads applied	1,549	1,707	1,631	1,637	1,830	1,733	1,829	2,011	1,921	1,992
-	Other operating funding applications	-	-	-	-	-	-	-	-	-	-
41,563	Total applications of operating funding	40,040	41,469	43,007	44,155	46,001	47,539	50,485	51,566	53,487	55,778
1,111	Surplus (deficit) of operating funding	428	436	392	355	611	690	661	470	686	368
Sources of capital funding											
-	Subsidies and grants for capital expenditure	-	-	-	-	-	-	-	-	-	-
-	Development and financial contributions	-	-	-	-	-	-	-	-	-	-
26	Increase (decrease) in debt	255	497	465	630	480	676	520	544	666	596
-	Gross proceeds from sale of assets	-	-	-	-	-	-	-	-	-	-
-	Lump sum contributions	-	-	-	-	-	-	-	-	-	-
-	Other dedicated capital funding	229	118	-	-	-	-	-	-	-	-
26	Total sources of capital funding	484	615	465	630	480	676	520	544	666	596
Applications of capital funding											
1,040	Capital expenditure										
-	- to replace existing assets (b)	814	952	805	957	1,062	1,337	1,151	983	1,320	931
26	- to improve the level of service	27	28	28	28	29	29	30	31	32	33
-	- to meet additional demand	-	-	-	-	-	-	-	-	-	-
71	Increase (decrease) in reserves	71	71	24	-	-	-	-	-	-	-
-	Increase (decrease) of investments	-	-	-	-	-	-	-	-	-	-
1,137	Total applications of capital funding	912	1,051	857	985	1,091	1,366	1,181	1,014	1,352	964
(1,111)	Surplus (deficit) of capital funding	(428)	(436)	(392)	(355)	(611)	(690)	(661)	(470)	(686)	(368)
-	Funding balance	-	-	-	-	-	-	-	-	-	-
Reconciliation to net cost of services											
1,111	Surplus (deficit) of operating funding from funding impact statement	428	436	392	355	611	690	661	470	686	368
(33,929)	Remove rates funding	(32,095)	(33,303)	(34,591)	(36,760)	(38,623)	(39,973)	(42,604)	(43,192)	(45,003)	(46,627)
(2,087)	Deduct depreciation expense	(2,683)	(2,723)	(2,834)	(2,953)	(3,072)	(3,196)	(3,289)	(3,097)	(3,171)	(3,270)
-	Add capital revenues	229	118	-	-	-	-	-	-	-	-
736	Add vested assets / non cash revenue	736	753	771	789	810	832	856	881	909	939
(34,169)	Net cost of services per activity statement surplus/(deficit)	(33,385)	(34,719)	(36,262)	(38,569)	(40,274)	(41,647)	(44,376)	(44,938)	(46,579)	(48,590)
Footnotes											
-	(a) Earthquake related operating recoveries	-	-	-	-	-	-	-	-	-	-
-	(b) Earthquake rebuild application of capital funding	-	-	-	-	-	-	-	-	-	-