



## Refuse minimisation and disposal



The idea of getting everything out of the waste stream that can be reused is right, but a lot more legwork's needed. At home we have all the bins for separating stuff out, at school all the kids are learning about it and I think the community's ready to take the next step.

It's important for our environment that the Council and community really need to work harder and push it along. Our old landfill's chokka and we've paid a fortune for this new one at Kate Valley. I don't mind paying a bit more if we really can make sure it's the last dump we're going to need.

***Lisa Rakatau***

Computer operator  
Bromley

# Refuse minimisation and disposal



## Why does the Council provide refuse minimisation and disposal?

The Council encourages waste reduction, reuse and recycling, to support the health of the community and the environment, and to encourage the sustainable use of our natural resources. The Council also provides solid waste collection, treatment and disposal services in order to protect the community and the environment.

## What activities are included in refuse minimisation and disposal?

### Waste minimisation

The Council provides programmes to encourage reusing and recycling, and to motivate behaviour change. The Council provides kerbside recycling, green-waste composting and recycling drop-off facilities at refuse stations. This activity also includes business resource efficiency programmes.

### Refuse transfer and disposal

The Council provides for the safe, convenient and environmentally-sound disposal of solid waste.

### Black bag collection and disposal

The Council provides a reliable collection and disposal service for official Council black rubbish bags.

## How does the Council's work contribute towards our Community Outcomes?

Community Outcome	How the Council contributes	How much?
Safety	By collecting and disposing of refuse.	✓✓
Community	By providing equal access to refuse disposal services.	✓
Environment	By providing safe collection and disposal of refuse. By encouraging waste minimisation.	✓✓✓
Governance	By providing the opportunity for the community to participate in decision-making through consultation on waste management plans.	✓
Prosperity	By meeting commercial needs for dealing with waste.	✓✓
Health	By the collection and disposal of refuse.	✓✓✓
Knowledge	By providing waste minimisation education.	✓✓
City Development	By removing litter and refuse from our city.	✓✓



## Refuse minimisation and disposal

### What does the Council plan to do in the future?

<i>What is the Council's objective?</i>	<i>What policies, strategies or drivers support this objective?</i>	<i>What is the Council already doing?</i>	<i>What will we do in years 1 to 3?</i>	<i>What will we do in years 4 to 10?</i>	<i>How will we know if we achieve our objective?</i>
To encourage waste reduction, reuse and recycling, to support the health of the community and the environment and to encourage the sustainable use of our natural resources.	<b>Strategies:</b> <ul style="list-style-type: none"> <li>• Solid Waste Management Plan</li> </ul> <b>Drivers:</b> <ul style="list-style-type: none"> <li>• Population demographics</li> <li>• Number of properties</li> <li>• Economic activity</li> <li>• Recycling and waste disposal behaviour</li> </ul>	<p>Providing programmes that avoid waste generation, encourage reusing and recycling, and motivate behaviour change. Programmes include business resource efficiency programmes.</p> <p>Providing kerbside recycling, green-waste composting and recycling drop-off facilities.</p>	<p>Continue to do the same.</p>		<p>Refuse stations are open at convenient times.</p>
					<p>Rubbish bags and recycling crates are collected each week.</p>
To provide a safe and environmentally sound solid waste collection, treatment and disposal service.		<p>Providing for the safe, convenient and environmentally sound disposal of solid waste.</p>	<p>Continue to do the same.</p> <p>A Zero Waste Working Party will report back to Council later in 2006 on how best to advance on the Council's waste minimisation targets.</p>	<p>Pending findings of the Zero Waste Working Party.</p>	<p>Zero breaches of resource consents occur for the operation of waste facilities.</p> <p>Programmes are provided that reduce waste in line with the Solid Waste Management Plan 2005.</p>

# Refuse minimisation and disposal



## Measuring our achievements

Measures and targets	Current performance	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
Zero breaches of resource consents by the Council's solid waste facilities.	Achieved	Continue to achieve zero breaches.									
Opening hours of refuse stations - 8.5 hours per day, 7 days per week (excluding public holidays).	Achieved	Continue to open 8.5 hours per day, 7 days per week.									
Percentage of black rubbish bags and recycling crates collected weekly.	99%	Maintain collection of $\geq 99\%$ of recycling crates.									
Kilogrammes of waste sent to landfill per capita, per year.											
Domestic: (target maximum of 170 kg per capita by 2020).	320 kg	310 kg	300 kg	290 kg	280 kg	270 kg	260 kg	250 kg	240 kg	230 kg	220 kg
Commercial: (target maximum of 235 kg per capita by 2020).	443 kg	430 kg	415 kg	400 kg	385 kg	370 kg	355 kg	340 kg	325 kg	310 kg	295 kg
Total amount of waste (tonnes) sent to landfill per year.	264,000 tonnes	260,000 tonnes $\pm 5\%$			230,000 tonnes $\pm 8\%$			210,000 tonnes $\pm 10\%$			

## What negative effects or risks can occur in relation to refuse minimisation and disposal?

Negative effects	Mitigation options
Pollution and noise generated by refuse collection, and transportation.	Waste minimisation programmes. Alternative methods of collection and transportation.
Too much waste is sent to landfill, and the amount is increasing.	Increased recycling, composting, education and support for businesses to reduce waste.
The current green recycling crate is at capacity for many households, which can lead to litter and collection difficulties.	Provide a 140 litre wheeliebin kerbside collection of recyclables.
Effects of landfilling including the occupation of land, methane and leachate generation.	Waste minimisation programmes. Alternative treatment and disposal of waste.
Moving to direct charging for refuse disposal may reduce the affordability of the service.	Waste minimisation programmes. Encourage the separation of material for reuse or recycling as a way to avoid refuse disposal charges.





# Refuse minimisation and disposal

## The Council's key assets relating to refuse minimisation and disposal

- Refuse stations (land and buildings) – three
- Compost manufacturing plant – one
- Part share in regional landfill – one
- Kerbside recycling crates – 160,000
- Closed landfills (liability) – 51

### Maintaining our assets

Maintenance of assets is provided by service providers under long-term contracts. The development of new infrastructure is competitively tendered.



### Changes planned for assets

Reason for change	What will be done?	Year 1 cost (\$ 000)	Year 2 cost (\$ 000)	Year 3 cost (\$ 000)	Years 4 to 10 cost (\$ 000)
Renewals and replacements	Assets are maintained in accordance with the Solid Waste asset management plan including landfill rehabilitation and refuse station capital replacements.	2,004	783	796	5,450
Increased levels of service	Service improvements are planned to the three refuse stations and a waste minimisation initiative in 2008/09.	1,139	169	21,616	1,416
Increased demand	Assets will be added in accordance with the Solid Waste asset management plan.	14	21	21	166

# Refuse minimisation and disposal



## Refuse Minimisation and Disposal

Cost of Proposed Services	CCC 2006/07 \$000's	BPDC 2006/07 \$000's	Total Plan 2006/07 \$000's	Plan 2007/08 \$000's	Plan 2008/09 \$000's	Forecast 2009/10 \$000's	Forecast 2010/11 \$000's	Forecast 2011/12 \$000's	Forecast 2012/13 \$000's	Forecast 2013/14 \$000's	Forecast 2014/15 \$000's	Forecast 2015/16 \$000's
<b>Activity Operational Cost -</b>												
Black Bag Collection and Disposal	6,508	179	6,687	6,989	7,288	7,415	7,704	7,872	8,039	8,186	8,314	8,431
Refuse Transfer and Disposal	3,281	534	3,815	4,056	5,342	6,576	6,907	6,991	7,151	7,324	7,489	7,476
Waste Minimisation	7,599	145	7,744	8,287	8,775	10,612	11,024	11,266	11,504	11,713	11,897	12,064
<b>Total Expenditure</b>	<b>17,388</b>	<b>858</b>	<b>18,246</b>	<b>19,332</b>	<b>21,405</b>	<b>24,603</b>	<b>25,635</b>	<b>26,129</b>	<b>26,694</b>	<b>27,223</b>	<b>27,700</b>	<b>27,971</b>
<b>Activity Operational Revenue -</b>												
Black Bag Collection and Disposal	2,046	15	2,061	2,225	2,397	2,463	2,526	2,586	2,641	2,691	2,736	2,782
Refuse Transfer and Disposal	1,896	-	1,896	2,009	2,069	2,126	2,180	2,232	2,279	2,323	2,362	2,401
Waste Minimisation	3,354	-	3,354	3,977	4,097	4,210	4,318	4,419	4,513	4,600	4,677	4,755
<b>Total Operational Revenue</b>	<b>7,296</b>	<b>15</b>	<b>7,311</b>	<b>8,211</b>	<b>8,563</b>	<b>8,799</b>	<b>9,024</b>	<b>9,237</b>	<b>9,433</b>	<b>9,614</b>	<b>9,775</b>	<b>9,938</b>
Fees and charges	7,296	15	7,311	8,211	8,563	8,799	9,024	9,237	9,433	9,614	9,775	9,938
Grants and subsidies	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Operational Revenue (by source)</b>	<b>7,296</b>	<b>15</b>	<b>7,311</b>	<b>8,211</b>	<b>8,563</b>	<b>8,799</b>	<b>9,024</b>	<b>9,237</b>	<b>9,433</b>	<b>9,614</b>	<b>9,775</b>	<b>9,938</b>
<b>Net Operational Cost</b>	<b>10,092</b>	<b>843</b>	<b>10,935</b>	<b>11,121</b>	<b>12,842</b>	<b>15,804</b>	<b>16,611</b>	<b>16,892</b>	<b>17,261</b>	<b>17,609</b>	<b>17,925</b>	<b>18,033</b>
Vested Assets	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Cost of Services</b>	<b>10,092</b>	<b>843</b>	<b>10,935</b>	<b>11,121</b>	<b>12,842</b>	<b>15,804</b>	<b>16,611</b>	<b>16,892</b>	<b>17,261</b>	<b>17,609</b>	<b>17,925</b>	<b>18,033</b>
<b>Capital Expenditure</b>												
Renewals and Replacements	2,004	-	2,004	783	796	649	668	684	685	1,110	888	766
Improved Service Levels	1,139	-	1,139	169	21,616	185	192	199	204	209	212	216
Increased Demand	14	-	14	21	21	22	23	23	24	24	25	25
<b>Total Capital Expenditure</b>	<b>3,157</b>	<b>-</b>	<b>3,157</b>	<b>973</b>	<b>22,433</b>	<b>856</b>	<b>883</b>	<b>906</b>	<b>913</b>	<b>1,343</b>	<b>1,125</b>	<b>1,007</b>

### Rationale for activity funding (see also the Revenue and Financing Policy, page 258)

User charges are collected for services considered reasonable by the Council to fulfil the objectives of the service and within the constraints of the market, e.g., sale of bags and disposal fees.

The level of revenue sought from these activities by the Council for the 10 years covered by the LTCCP is illustrated above. The balance of the net operating cost is funded by General rates, as the

whole community benefits from these activities. Development contributions are applied towards appropriate capital expenditure. The balance is funded corporately in accordance with the Revenue and Financing Policy.

Refer to page 259 for a summary of the corporate funding approach for capital expenditure.