

Kaikoura District Waste Management & Minimisation Plan

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Table of contents

1	Introduction	2
2	Objectives and Policies for Achieving Efficient Waste Management and Minimisation	2
3	Methods for Achieving Effective and Efficient Waste Management and Minimisation	5
3.1	Collection Services	6
3.2	Recovery Services	8
3.3	Recycling Services	8
3.4	Treatment Service	8
3.5	Disposal Services	8
3.6	Service Delivery Mechanisms	8
4	Waste Management and Minimisation Facilities	10
5	Public Health Issues	10
6	Waste Management Advocacy and Education	10
7	Climate Change Issues	11
8	How Implementing the Plan is to be Funded	11
8.1	General	11
8.2	Funding of Kerbside Refuse Service	12
8.3	Funding of Other Service Elements	12

• Introduction

The Waste Minimisation Act 2008 ('the Act') requires local authorities to have a Waste Management and Minimisation Plan (WMMP) which contains a summary of the Council's objectives, policies and targets for waste management and minimisation and indicates how the Council will deliver on these objectives.

43 Waste management and minimisation plans

- (1) For the purposes of [section 42](#), a territorial authority must adopt a waste management and minimisation plan.
- (2) A waste management and minimisation plan must provide for the following:
 - (a) objectives and policies for achieving effective and efficient waste management and minimisation within the territorial authority's district;
 - (b) methods for achieving effective and efficient waste management and minimisation within the territorial authority's district, including—
 - (i) collection, recovery, recycling, treatment, and disposal services for the district to meet its current and future waste management and minimisation needs (whether provided by the territorial authority or otherwise); and
 - (ii) any waste management and minimisation facilities provided, or to be provided, by the territorial authority; and
 - (iii) any waste management and minimisation activities, including any educational or public awareness activities, provided, or to be provided, by the territorial authority;
 - (c) how implementing the plan is to be funded;
 - (d) if the territorial authority wishes to make grants or advances of money in accordance with [section 47](#), the framework for doing so.
- (3) A territorial authority may amend its waste management and minimisation plan or revoke it and substitute a new plan.
- (4) A waste management plan adopted under Part 31 of the Local Government Act 1974 as at the commencement of this section must be treated as if it were a waste management and minimisation plan adopted under this section, and this Part applies to the plan accordingly.

Section 50 of the Act requires WMMPs to be periodically reviewed, and a review of KDC's WMMP has accordingly been undertaken. As part of this review a detailed Waste Assessment has been prepared that meets the requirements of section 51 of the Act, and this assessment document contains much of the information that underpins this WMMP, and should be read in conjunction with it.

Because this approach has been taken where much of the required supporting detail is contained in the Waste Assessment this WMMP is a much briefer document intended only to directly address the requirements of section 43 of the Act in a straightforward way.

2 Objectives and Policies for Achieving Efficient Waste Management and Minimisation

Council's proposed vision, goals, objectives and associated targets for the management of solid waste, as developed through the Waste Assessment are set out in the following Table 1.

These directions represent a more pragmatic response to the challenges present than the previous very strong emphasis on 'zero waste' goals.

It has become increasingly clear that some waste minimisation activities as they have previously been conducted are fundamentally inefficient, and that there is a need for a more pragmatic approach that has a greater focus on cost efficiency.

Table 1: Solid Waste Vision - Goals - Objectives - Targets

Vision:	<i>Our community has effective, efficient and affordable means of managing solid waste</i>	
Objective	Relevant Goal(s)	Target(s)
1. <i>Essential waste management services are available</i>	Ensure that services are available for the disposal of solid waste to prevent potential development of unsanitary conditions	1.1 Annual number of residential properties classified as unsanitary under the Health Act 1952 because of a lack of available refuse disposal services. Target: 0
2. <i>Waste quantities are reduced</i>	That the community is made aware of and encouraged to adopt practices that will reduce waste generation at source. Advocacy is conducted with central government for measures to reduce waste generation at source. Recycling, reuse and resource recovery services are provided where these offer cost efficiency similar to or better than that for disposal of the material as refuse.	2.1 To reduce the total quantity of waste disposed of to landfill from Kaikōura on a district per capita basis. The current figure is <i>440 kg per person per year</i> . Target: < 380 kg per person per year
3. <i>Services are cost efficient</i>	Provide waste management services that are efficient on a cost per unit of material basis.	3.1 Charges for disposal of general refuse at the Kaikoura landfill. Target: <\$240 + currently applicable landfill levy rate* per tonne 3.2 Estimated annualised average nett cost (inclusive of associated revenue) of all materials delivered to beneficial markets through recycling, reuse or resource recovery services. Target: <\$340 + currently applicable landfill levy rate* per tonne <i>*At present the levy rate is \$10 per tonne, but it is to increase to \$60 per tonne in 4 steps, the first of which is at 1 July 2021</i>

Vision:	<i>Our community has effective, efficient and affordable means of managing solid waste</i>	
Objective	Relevant Goal(s)	Target(s)
4. <i>User pays principles are applied in funding solid waste services</i>	Whenever possible costs of providing waste management services are recovered from users of those services in proportion to their use of those services.	4.1 >80% of KDC costs for KDC refuse collection and disposal activities (excluding those for street litter bins and clean-up of illegal dumping) are recovered on a user pays basis.
5. <i>Council solid waste services are used appropriately to maximise efficiency</i>	<p>Users deposit only the relevant appropriately presented materials to particular Council services.</p> <p>Street litter bins are used for street litter only</p> <p>Materials for recycling, resource recovery or re-use are not contaminated with other substances</p>	<p>5.1 Less than 75 reported incidents per year of street litter bins being used for grossly inappropriate purposes.</p> <p>5.2 Less than 5% of materials by weight deposited to recycling, resource recovery or re-use services are contaminated to the extent they have to be treated as refuse.</p>
6. <i>Adverse local environmental effects of KDC solid waste services are minimised</i>	Operation of Council's refuse disposal, resource recovery, reuse and recycling activities are conducted in a way that adverse effects on the local environment are no more than minor	<p>6.1 Full compliance is achieved with all conditions of regional council Resource Consents for the operation of the Kaikoura landfill</p> <p>6.2 Number of complaints per year received regarding the environmental effects associated with the landfill and Resource Recovery Centre.</p> <p>Target: <5</p>
7. <i>General community satisfaction with Council solid waste levels of service</i>	A majority of customers prefer status quo levels of service (LoS) for Council solid waste activities over other feasible alternatives.	7.1 Less than 10% of recipients of a three-yearly survey of solid waste LoS options (that also contains estimated rates or charge impacts of those options) express desire for change from the status quo.

Table 1 (Continued): Solid Waste Vision - Goals - Objectives - Targets

3 Methods for Achieving Effective and Efficient Waste Management and Minimisation

In accordance with the previous section, consideration of methods has been conducted with a greater emphasis on cost efficiency than previously. Details of this consideration are contained within the Waste Assessment document, and the methods proposed to be adopted are summarised in Table 2.

Table 2: Proposed Waste Management and Minimisation Methods - Summary

Activity	Proposed Method(s)
Refuse Disposal	Implement fortnightly kerbside service in Kaikoura urban area using 120 litre wheelie bins User pays disposal of general refuse and specialist items at Kaikoura resource recovery centre (RRC). Charges to be reduced, to a level that covers directly associated costs only.
Street Litter	Existing single use street litter bins are to be replaced with multi-bin recycling stations such as that at the Village Green to encourage the community and visitors to recycle items where possible. This will need to be supported by appropriate signage and education.
Recycling	Recycling of types 1,2 & 5 plastics, glass, cardboard, tin (steel) and aluminium cans, metals. Kerbside crate-based collection in Kaikoura urban area only – previous kerbside service to Peketa, Goose Bay, Oaro and Hapuku ceases. Collection frequency reduced to fortnightly. Acceptance of recycling at Kaikoura RRC and rural recycling centres at Lynton Downs and Kekerengu. Operation of facility at Suburban School ceases. The Kaikoura RRC is also a drop off point for the Agrecovery rural recycling program.
Greenwaste	Accepted at the RRC on a user pays basis for composting.
Food Waste	Accepted at the RRC or at kerbside in Kaikoura urban area in conjunction with the recycling collection. Collected material is composted. Enhanced collection system using dedicated containers to be explored further, with a view to potential implementation later in the period of this plan.
Re-use Services	Re-use services for large and small items provided at the RRC. Potential for extending these services to be explored.
Hazardous Materials Disposal	Disposal services for oil, paint and other hazardous substances provided at RRC. All collected materials are managed through environmentally sound processes.
Waste Minimisation Advocacy and Promotion	Council advocacy to central government focused on measures that will reduce waste at source. Local promotion of cost-effective waste minimisation options by Council's refuse and recycling contractor. Support of schools wishing the participate in the Enviroschools program.
Landfill	Close Kaikoura Landfill by June 2024, establish transfer station and dispose of refuse outside the District.

Further comments on these proposed methods are provided in the following sections.

3.1 Collection Services

Refuse

The Kaikoura District has previously been unusual in that Council has not provided or otherwise supported any kerbside service for the disposal of residual waste. This approach was taken in support of 'zero waste' principles based upon a belief that making disposal of refuse easy would not encourage residents to adopt measures that would reduce the volumes of refuse that they produce.

In recent times it has however become increasingly apparent that the extent to which most residents are able to efficiently reduce their waste generation through services such as recycling is quite limited, and that as such there is an essential need for most households and businesses to be able to dispose of certain amounts of residual waste. On this basis it is believed that depending on the form it takes, provision or support by Council of a kerbside refuse disposal service is not necessarily contrary to waste minimisation, and does not have to compromise Objective 2 in Table 1.

Another factor considered to support the provision of an affordable kerbside refuse service is that it supports Objective 1 in Table 1, since there are people in the community – particularly older people – who may not be able to easily take their refuse to the Resource Recovery Centre, and as such must rely on private disposal services.

Community feedback – including a petition – also suggests that there was a desire for such a service.

Taking account of these factors the implementation of a kerbside refuse collection is proposed.

This would be a fortnightly collection in the Kaikoura urban area only. It would use 120 litre wheelie bins.

Use of these relatively small bins collected at this frequency would only provide a limited 'base' disposal service, which might not meet all the needs of properties that generate large quantities of waste. Such properties would have to dispose of any excess refuse by other (probably more costly) means, and this in turn provides an incentive to attempt to limit the quantity of residual waste created so that the capacity of the kerbside service is not exceeded.

Recycling

Council has in the past provided recycling services for plastics, glass, paper, cardboard and 'tin' (steel) and aluminium cans and metal items. In more recent times the range of accepted materials has been reduced because of the contraction of recycling markets. As at December 2020 receipt of plastics is limited to types 1,2 and 5, paper is not accepted and whilst glass is accepted it is not sorted and as such no viable market is available for it and it is instead crushed and used as a cover layer in the landfill.

Kerbside collections of recyclable material using crates and sacks for paper & card have been previously been conducted in the Kaikoura urban area and in the smaller settlements of Peketa, Goose Bay, Oaro and Hapuku.

Recyclable materials have also been accepted at the Kaikoura RRC and at rural recycling centres at Suburban School, Lynton Downs and Kekerengu.

Other than for metals, none of this recycling is considered economically justifiable. In almost all cases the cost of collecting, processing and transporting the material to market (if there is one) far exceeds

the market values of those products, and there are also not believed to be significant demonstrable environmental benefits.

Because of the previous strong focus on 'Zero Waste' principles in the community it is however suspected that doing what appears rational and largely ceasing these activities would be too radical a step for some. It is also believed that there could be significant changes in respect of the economic viability of waste diversion (perhaps artificially created through use of increased funding from the central government Landfill Levy) within the next few years, and that it might therefore be premature to completely abandon recycling at this time.

There is nevertheless considered to be a need to eliminate some of the least cost efficient elements of KDC's recycling services, the most prominent of which appear to be the kerbside recycling collections from the smaller communities and the operation of the rural recycling centre at the Suburban School.

The current kerbside recycling collections from Peketa, Goose Bay, Oaro and Hapuku serve a small number of properties, many of which are only temporarily occupied, and as such generate only a limited amount of recycling. The cost of continuing these services under a new contract has however been indicated to be relatively high, and as such the level of cost efficiency is very low.

The appropriateness of providing these collections is also questionable because most of the properties concerned are relatively small residential lots, with no ability to dispose of residual refuse on site. As such the residents of these properties have to either make use of a private refuse collection service (which is likely to have a high cost) or (more likely) periodically transport their refuse to the Kaikoura landfill for disposal, and in doing so they also have an opportunity to also bring their recycling to the Resource Recovery Centre.

Because of the lack of facilities in these small communities it is not realistic to live there unless means of transport to Kaikoura is available, and as such the potential lack of resident mobility that could support the provision of kerbside services in Kaikoura is not considered a factor in these locations.

Somewhat similar comments apply with regard to the need to provide rural recycling centres. To live in the rural areas having transport to town is essential, and with the need to visit town comes the opportunity to drop off recycling at the Kaikoura RRC.

This comment is particularly applicable to the rural recycling centre at Suburban School, which is only around 6km from the Kaikoura RRC, and has also been regularly abused, with refuse being frequently dumped there.

The facilities at Lynton Downs and Kekerengu are considered somewhat different because of their remoteness from Kaikoura, and the fact that many of the properties in those areas are sufficiently large to practice on site disposal of waste, and as such may therefore not otherwise visit the Kaikoura RRC.

Based on the reasons above it proposed in future to discontinue the kerbside recycling collections in Peketa, Goose Bay, Oaro and Hapuku and to cease providing a rural recycling centre at the Suburban School.

Food Waste

Food waste has also been collected at kerbside in conjunction with the kerbside recycling service, though specific receptacles for this material have not been provided. The level of use of this service has been relatively low.

It is however proposed to further explore the potential for an enhanced food waste collection service where customers are provided dedicated receptacles (a benchtop bin, compostable bags and a kerbside bin) with a view to possible implementation of such a service at some stage during the period covered by this plan.

3.2 Recovery Services

Services for the recovery of organics (green and food waste) through composting are provided at the Kaikoura RRC. These services appear to process a relatively large amount of organics (mostly green waste, with a small amount of food waste) in a relatively affordable way and the service is proposed to be retained.

3.3 Recycling Services

The range of recycling services proposed to be provided was described in a previous section.

3.4 Treatment Services

No waste treatment services other than the composting of green waste are proposed to be directly undertaken. A range of materials including oil, paint and hazardous wastes and those items listed in Table 3 are however accepted at the Kaikoura RRC for treatment or disposal to be undertaken by other parties elsewhere.

3.5 Disposal Services

A single municipal landfill is operated in the Kaikoura District on the site of the Kaikoura RRC.

The capacity of this landfill is approaching full utilisation. A variety of previous estimates have been made regarding the remaining useful life of this site, and most recent opinion, as at October 2020, suggests that this was at least 6 years.

In a number of respects the current configuration and operation of the landfill is however less than ideal, and it is the view of Council that it may be preferable to close the facility before its capacity is exhausted, and it has been suggested that it might be appropriate for the timing of such a closure to align with implementation of the new delivery arrangements created by the current 3-waters reform process, since this also has potential to significantly impact the operations of IWK.

As such it is currently suggested that a suitable target date for the closure of the Kaikoura landfill and a transition to alternative refuse disposal arrangements may be 30 June 2024.

Such alternative disposal arrangements would be transport of residual waste to a large modern out of District landfill, such as the North Canterbury regional landfill at Kate Valley or the Bluegums landfill in the Marlborough District.

3.6 Service Delivery Mechanisms

All of KDC's solid waste services are currently delivered by IWK. It is however believed that to ensure that this plan is implemented in the most cost efficient manner possible that a contract to deliver those services is openly tendered.

It is envisaged that such a contract would be for an initial term of 3 years commencing on 1 July 2021, aligning a potential end of this term with the closure of the landfill.

Table 3 : User Pays Services at Kaikoura Resource Recovery Centre (charges are indicative only)

Product	Per Tonne	Min. Charge	Product	Per Item
Asbestos	\$1,250.00	\$25.00	Black Bags (up to 65L)	\$4.50
Cleanfill	\$80.00		Black Bags (large)	\$8.00
General Refuse	\$350.00	\$3.50	Compost - Bag	\$6.00
Green Waste	\$80.00	\$3.50	Compost - Full Scoop	\$60.00
Jib Board	\$350.00		Compost - Half Scoop	\$30.00
Mixed Demolition	\$350.00		Computer Monitors (large old)	\$20.00
Offal	\$105.00		Computers & Laptops	\$5.00
Truck spill	\$1,500.00		Fridge & Freezers	\$15.00
Polystyrene	\$2,080.00	\$150.00	Green Waste - Bag	\$3.50
			LPG-Gas Bottles & Fire Extinguishers	\$17.50
			Microwaves	\$12.00
			Per KM Charge	\$1.35 per km
			Pick Up Fee	\$30.00
			Agwrap - Bagged Drop Off	\$15.00
			Oil Filters	\$2.00
			Printer - Commercial	\$25.00
			Printer - Domestic	\$18.00
			Scrap Metal Casual Sales	Individual pricing
			Skips - Commercial (within 50km zone)	\$350.00
			Skips - Domestic (within 50km zone)	\$290.00
			TV - CRT	\$45.00
			TV - Flat Panel	\$25.00
			Tyre 1 - Car tyre	\$5.00
			Tyre 2 - 4X4 tyre	\$7.00
			Tyre 3 - Light truck tyre	\$15.00
			Tyre 4 - Tractor tyre	\$70.00
			Tyre 5 - Loader tyre	\$80.00
			Tyre 6 - Heavy truck tyre	\$30.00
			Whiteware & Electronics	\$5.00
			Windscreens	\$10.00

4 Waste Management and Minimisation Facilities

Whilst it is intended that the Kaikoura Landfill will be closed in the relatively near future, it is expected that the Kaikoura RRC would remain on its current site and would then also function as a refuse transfer station.

Some urgent improvement to the facility is however considered to be necessary, particularly in respect of the configuration of the receipt area for bulk refuse.

A concept plan for a revised layout of the site with incorporation of a transfer station has been previously prepared, but it is believed that this was excessively complex and non-optimal and that a simpler and less expensive arrangement would be preferable, with a core element being provision of raised bays to enable safe drop off of material into skips.

It is believed that this development of the transfer facility and closure of the landfill could be conducted progressively, with a start potentially being made in the relatively near future.

The rural recycling centres at Lynton Downs and Kekerengu are very minor facilities and no further development of them is proposed. As stated previously it is proposed that the rural recycling centre at the Suburban School would close.

5 Public Health Issues

Waste, particularly putrescible and hazardous waste, has the potential to be detrimental to health. Therefore, a key objective of any waste minimisation and management system is to protect public health. The risk of public health impacts can be significantly reduced by avoiding, where possible, and carefully managing, where not, contact with waste. In practice this means:

- Ensuring services are available for waste disposal to prevent accumulations on occupied properties.
- Containing waste effectively, including:
 - Providing appropriate containers for storing waste prior to collection - these may be reusable (wheelie bins) or single use (rubbish bags).
 - Providing dedicated public drop off areas at the RRC.
 - Regular collection and disposal.
 - Suitable collection and transport vehicles.
 - Disposal at a well-constructed and operated landfill including provision of appropriate barrier systems such as base liner and adequate daily, intermediate and final cover.
- Excluding as far as possible vermin that may spread waste or associated contaminants.
- Effectively managing hazardous wastes such as agrichemicals, household chemicals, e-waste and asbestos.

It is believed that this plan adequately addresses all of these issues.

6 Waste Minimisation Advocacy and Education

Council believes that significant fundamental changes to regulations that impact on the creation of waste at source, such as controls on packaging and implementation of container deposit schemes are necessary if waste is to be minimised in an efficient way.

The control of such regulation is in the hands of central government, but a potential role of local authorities, including KDC, is to advocate to central government for such changes.

It is also believed that there is a need to inform and educate the community regarding the waste minimisation options that are available, encouraging use of those option which are most efficient and effective, such as making purchasing decisions with regard to the associated waste that will be generated, practicing home composting and re-using items.

It is proposed that this education component will be delivered by the contractor engaged to deliver Councils refuse and recycling services.

7 Climate Change Issues

Diversion of materials from landfill has potential to yield some reduction of greenhouse gases in the short term, and it is also believed that the proposed kerbside refuse collection will also make an environmental contribution though reducing the extent of vehicle use. Currently a large volume of household refuse is delivered to the landfill using private cars, whilst the new service will reduce the need for this, with a coordinated collection round being much more fuel efficient.

The greatest potential for mitigation of climate change associated with solid waste is however considered to be through modification of residents purchasing practices, which is targeted to be influenced through community education and advocacy to central government.

8 How Implementing the Plan is to be Funded

8.1 General

Implementing the Plan will require adjustment to the current funding arrangements that have been largely unchanged since 2015, without adjustment being made for factors that include cost inflation, declines in markets for recyclables and the need to make some improvements to operational practices, in particular those required to ensure health and safety.

IWK indicated in 2019 that substantial increases in costs would be associated with maintaining existing services, which resulted in extensive subsequent investigation of alternative level of service options and associated costs.

IWK has indicated potential pricing for a number of further alternative service options which have helped guide the thinking of Council. This pricing is however strictly confidential as IWK may in future need to participate in an open tender process for these services.

This investigation has indicated some potential for savings, but has provided no evidence of potential to avoid some increase in cost without a significant reduction of levels of service.

As discussed in the previous section some such reductions have been made to contain costs. The frequency and extent of kerbside recycling collections is proposed to be reduced, and the operation of the suburban recycling centre is proposed to cease.

For rural properties it is believed that the closure of Suburban Rural Recycling Centre may be sufficient to result in some small decrease of the rates charged to those properties for solid waste services.

For Kaikoura urban properties such a decrease does not however seem likely. Whilst the discontinuation of the potentially expensive kerbside recycling services to Peketa, Goose Bay, Oaro and Hapuku would relieve the larger community of some costs (since all the kerbside recycling services are funded by a single targeted rate) retaining the remaining existing services (without the addition of the kerbside refuse collection) would be likely to increase average per property costs by in the order of \$30 per year.

The properties in Peketa, Goose Bay, Oaro and Hapuku would of course cease to pay a targeted rate for the kerbside collection, and would be treated as rural properties.

The inclusion of a kerbside refuse collection for Kaikoura urban would further elevate the rates requirement for properties in that community. If this service was fully funded by a targeted rate on the properties receiving it the associated solid waste rates for those properties would be likely to rise to at least \$100 per annum above the current level.

This is a significant increase but it is the belief of Council that this kerbside refuse service would provide substantial additional benefit to residents and that if achievable at this price would represent excellent value, representing an overall saving to residents if total costs (including charges for refuse disposal via private services or the RRC) are also considered.

It is however stressed that it is not possible at this time to be absolutely confident about these future cost increases. Such confidence can only be obtained through an open tender process, and such a process will be conducted once a proposed package of services has been confirmed through adoption of the WMMP.

It needs to be understood that the WMMP represents an intent, not an absolute commitment, and that if the tendered prices received are very different to Council's expectations that the WMMP and the associated package of services may need to be revised.

8.2 Funding of Kerbside Refuse Service

It is proposed that a proportion of the cost of the kerbside refuse service – suggested to be at least 50% - would be funded on a user pays basis. It is envisaged that the user pays portion of the service would be recovered through users having to buy a sticker or tag to affix to their bin for it to be emptied.

The inclusion of a user-pays element has the benefit that it would better align with Objective 4 in Table 1. In particular it would be fairer for owners of holiday homes and other temporarily occupied properties.

The extent of the user pays proportion would be determined once tenders for the service have been received and the costs of service components are known.

8.3 Funding of Other Service Elements

It is envisaged that all other elements of the proposed package of services would be funded in a similar manner to previously, though with adjustment of particular rates and charges to reflect confirmed service costs. In essence the form of the funding model would be as shown in Table 4 below.

Table 4: Proposed Funding Mechanisms

Activity / Cost Component	Funding Mechanism
Fixed costs - Kaikoura Resource Recovery Centre operation, maintenance and management, including oil and hazardous waste disposal	District UAGC (uniform annual general charge)
Urban Kerbside Recycling	UAGC to serviced properties
Rural Recycling Centres	UAGC to properties not receiving kerbside recycling service

Urban Kerbside Refuse	A UAGC and a User Pays charge combination to these properties – to be determined
Street Litter Bins	50% UAGC on commercial properties, 50% District UAGC
Landfill operating & management fixed costs	District UAGC
Variable costs – refuse disposal, item re-use and green waste composting,	User pays fees and charges, as per Table 3 at December 2020 (subject to revision)
Capital Costs – Landfill Closure, transfer station development, any other major RRC improvement	Loan funded, recovered through District UAGC

In regard to achieving objective 4 in Table 1 it is believed that where user pays charges are applied these should only cover costs directly related to the activity that is being paid for.

The practice of using such charges to subsidise other activities – for example recovering some of the cost of recycling through refuse charges – should be avoided.

It is believed that if this principle is followed it should be possible to achieve target 3.1 for the cost of refuse disposal indicated in Table 1.