

Executive

Waste & Recycling Service

11 October 2010

Report of Head of Environmental Services

PURPOSE OF REPORT

To consider further improvements to the Waste & Recycling scheme following the successful implementation of food waste recycling service.

This report is public

Recommendations

The Executive is recommended to :

- (1) Agree the proposed Waste and Recycling Service Efficiencies set out in Appendix 1;
- (2) Approve a supplementary capital estimate of up to £130,000 for the acquisition of a glass collection vehicle;
- (3) Agree the proposed Recycling Initiatives and Service Developments set out in Appendix 2
- (4) Agree to the changes in practice regarding the types of bins provided; and
- (5) Note the reduction in waste to landfill and the rise in customer satisfaction levels of the waste and recycling service.

Executive Summary

Introduction

- 1.1 The Council has invested wisely in its waste and recycling service and has been a consistent high recycling performer. Following the recent roll out of the food waste recycling service, a recycling rate in excess of 58% is expected this year with the amount of waste going to landfill falling from around 27,500 tonnes in 2009/10 to an estimated 23,000 tonnes this year.
- 1.2 This reduced tonnage to landfill success is down to residents who have embraced recycling. In recent years, customer satisfaction levels with recycling have been fairly high with current satisfaction levels with the kerbside recycling scheme at 79% and the bring banks at 86%. However

there has been a lower satisfaction with refuse collection, 70%, largely due to around 20% of residents concerns with 2 weeks between collections.

- 1.3 The introduction of food waste has not only boosted recycling rates and reduced the amount of waste going to landfill, it has significantly increased satisfaction levels with the kerbside recycling scheme (78% in 2009 to 83% in 2010) and refuse collection (70% in 2009 to 78% in 2010).
- 1.4 The financial arrangements which exist between collection authorities in the Oxfordshire Waste Partnership and the County Council mean that besides recycling credits, landfill diversion credits are paid for every tonne reduction in landfill below a target landfill tonnage. Consequently, increasing recycling beyond the current levels will bring in additional income as well as reducing the environmental impact from sending waste to landfill which in turn reduces the cost of landfill to Oxfordshire County Council as the waste disposal authority.
- 1.5 Of the estimated 23,000 tonnes of waste going to landfill in 2010/11, approximately half of this material could be recycled through our current recycling facilities. If this material was captured and recycled it would bring in an additional recycling credits and landfill diversion payments amounting to over £400,000 per annum. Hence improving the performance of the recycling scheme will not only benefit the environment it will reduce the cost of service delivery to the Council.

Proposals

- 1.6 The current glass collection contract expires during February 2011. Bringing the collection of glass in house should bring in annual savings of more than £78,000 per year. This requires a new specialist vehicle and capital expenditure of up to £130,000. This new vehicle which is expected to have a minimum life of eight years will deliver a payback of less than 2 years.
- 1.7 To encourage both waste minimisation and also to drive down the cost of provision of containers, it is recommended that a range of changes in practice be introduced regarding the types of bins provided.
- 1.8 The past investment and improvements to working practices have provided the Council with a range of service efficiency opportunities. These are identified in Appendix 1 and will reduce further the cost of the waste and recycling collection service without damaging customer satisfaction levels
- 1.9 To further develop the bring bank sites to provide a comprehensive range of local recycling facilities for materials not collected in the kerbside service and in doing so, maximise the return to the Council from the recycling market. Further service developments aimed at improving performance and maintaining high customer satisfaction levels are detailed in Appendix 2.

Conclusion

- 1.10 The waste & recycling service is seen as a high priority service by residents. Both overall performance & customer satisfaction are high. However it is important that the service continues to deliver value for money into the future by reducing the cost of delivery and increasing the performance of the

service. The proposals in this report seek to achieve this.

Background Information

- 2.1 Cherwell District Council introduced an alternate week collection system during 2003/04. This system transformed the waste & recycling service and moved the recycling rate from 10% in 2002/03 to 43% in 2004/05. Similarly the amount of waste going to landfill over the same time period fell from 54,000 tonnes to 32,500 tonnes.
- 2.2 Between 2004/05 and 2008/09, the recycling rate increased through a variety of initiatives leading to further falls in the amount of waste going to landfill. These initiatives included flats recycling, increasing the number of bring bank sites from 40 to more than 70 sites, battery recycling and promotion & publicity work including door stepping campaigns. These activities helped drive the recycling rate up to almost 50% in 2008/09 with the amount of waste going to landfill falling to around 30,000 tonnes despite an increase in the population size.
- 2.3 Waste analysis work carried out by the Oxfordshire Waste Partnership in 2006 showed that more than 40% of the waste in the green bins was food waste. To reduce the amount of waste going to landfill and to increase the recycling rate a food waste recycling scheme was needed.
- 2.4 Customer satisfaction levels for the kerbside recycling service between 2006 & 2009 were in the range 76-79%. For refuse collection over the same time period the level of satisfaction was 67-70%. More than 20% of residents were unhappy with the overall refuse collection service with the main area of concern being the two weekly frequency of collection in relation to food waste.
- 2.5 Research work on food waste recycling was carried out during 2007/08 with the twin objectives of increasing the amount of waste diverted from landfill and increasing customer satisfaction levels. This research work included carrying out visits to a number of councils which operated food waste recycling schemes and carrying out a food waste forum in Cropredy to gauge residents' views on food waste recycling, kitchen caddies & liners.
- 2.6 In late 2007, the Oxfordshire Waste Partnership requested Oxfordshire County Council to source food recycling facilities. Originally it was envisaged that facilities would be in place by April 2009. However due to tender problems the successful bidder Agrivert was not awarded a contract until early in 2009 and provision of the In Vessel Composting facility at Ardley was not ready until February 2010.
- 2.7 The new food waste recycling scheme including the funding required was approved as part of the 2009/10 Financial and Service Planning process. Capital funding for the new scheme came from the Council capital funds with one off revenue funds coming from the New Initiative Fund of the Oxfordshire Waste Partnership.
- 2.8 The Council's food waste recycling scheme was launched in October 2009 and, despite the disruption caused by heavy snow in January 2010, was rolled out across the district to all properties with the exception of flats by April 2010. Food waste recycling at flats commenced during the summer 2010 and all flats will have the facilities for food waste recycling by autumn 2010.
- 2.9 The rollout plan ran smoothly with few additional calls to the customer service centre. This seems to indicate that the information provided, along with the

kitchen caddy and liners were successful. Door stepping campaigns in selected areas also showed a high degree of understanding and satisfaction with the scheme.

- 2.10 The first quarter in 2010/11 shows there has been a reduction in waste to landfill of around 1,250 tonnes. It is estimated that around 45- 50% of the food which was in the green bin has been removed. A recent waste compositional analysis backs up this position.
- 2.11 The amount of waste sent to landfill during 2010/11 following the launch of food waste recycling is expected to be around 23,000 tonnes. This will be some 4,500 tonnes less than 2009/10
- 2.12 The scheme was delivered to programme apart from some short delays due to disruption from heavy snow falls which disrupted the rollout plan in January 2010. Financially the scheme was delivered under budget with almost £100,000 of capital funding being returned.
- 2.13 The very recent customer satisfaction survey indicates that satisfaction in comparison with 2009 with the kerbside recycling service has risen significantly from 78% to 83%. In addition customer satisfaction with the refuse collection service has risen from 70% to 78%. Also, it should be noted that the percentage of residents dissatisfied with the refuse collection service has fallen from 17% to 12%
- 2.14 Consequently the food waste recycling appears to have been well received by residents and participation has been very good. However, although the amount of waste going to landfill will have fallen to an estimated 23,000 tonnes in 2010/11, around 50% could still be recycled using the current bring banks and kerbside recycling services.

Finances & Future Cost Reductions

- 2.15 The Waste Collection service costs £59 per property per year. The financial challenges facing the Council mean that the service needs to be delivered at a lower cost whilst maintaining high levels of customer satisfaction.
- 2.16 The financial arrangements between the Council and the County Council encourage the diversion of waste from landfill. Each tonne of dry recycling which is diverted out of landfill attracts payments of more than £60/tonne which is a combination of approximately £40/tonne in recycling credits and £20/tonne in landfill diversion credits. Each tonne of food waste diverted from landfill brings in more than £20/tonne from landfill diversion credits. If all the recyclables still present in the green bin were removed for recycling overall waste collection costs would be reduced by more than £400,000 per annum. Just by increasing the recycling performance over the next three years to a recycling rate of around 65% would bring in more than an additional £120k in recycling credits and landfill diversion payments.
- 2.17 Raw materials have greatly increased in value since the collapse in recycling markets in autumn 2008. This is reflected in the gate fees paid at Material Recovery Facilities (MRFs) and also in value of the separate materials. In addition recycling requirements on industries such as batteries and electronic & electrical equipment mean that recycling compliance schemes set up to support recycling are paying for every tonne of batteries or waste electrical & electronic equipment (WEEE) recycled. As a consequence and given the

investment in its bring banks recycling service, the Council is well positioned to capture these market opportunities.

- 2.18 A number of areas where additional income can be raised or costs can be reduced are set out in Appendix 1. The most significant areas of reduced cost are around gate fees for dry recyclables and new arrangements for the collection of glass from bring banks.
- 2.19 The bring banks have been very successful for capturing glass - almost 2,900 tonnes were collected via the banks during 2009/10 and customer satisfaction with the bring bank service is extremely high at 87%. Therefore, continuing to collect glass via the bring banks appears to be the most cost effective way of recycling glass. In addition, collecting glass colour separated so that it can be recycled into new glass containers delivers the greatest reduction in carbon dioxide emissions. Each tonne of glass recycled saves around 350kg of emissions. Collecting glass commingled with the other dry recyclables appears not only to be more expensive but has no effect on reducing carbon dioxide emissions and may lead to a small increase in emissions. This is because the glass output from MRFs is mixed glass which has limited use apart from being used as road aggregate. The current contract for the collection of glass expires in Feb 2011. The current contractor provides a very good service but costs up to £85,000/year plus the contractor gets the value of the glass. The last tender exercise almost two years ago only produced four tenders and the chosen contractor was substantially cheaper than rival bids.
- 2.20 Bringing this service in house using existing staff will reduce the costs and allow the glass to be sold. This will bring annual savings estimated to be £78,000 per annum. However, a new specialist vehicle will be required for glass collection from the bring banks which will have an expected life of eight years. The specification of a new vehicle has been discussed with suppliers and the estimated cost is £130,000.
- 2.21 Other significant materials collected at the bring banks include textiles, newspaper and waste electrical & electronic equipment (WEEE), drinks' cartons, cans and batteries. A new vehicle for the collection of glass will also incorporate features to allow the collection of batteries, cans and possibly paper.
- 2.22 There are still significant opportunities to increase tonnages through the bring banks. Over 300 tonnes of textiles are collected at the bring banks but up to a 1,000 tonnes still remain within the green bins. Consequently, increasing textile recycling facilities should lead to more textiles being collected for recycling.
- 2.23 The pink WEEE bins are proving to be popular with 40 tonnes expected to be collected in 2010/11, rising to nearer an expected 100 tonnes in 2011/12.

Containers

- 2.24 The provision of containers is important if residents are to access the waste & recycling services. However annual costs for bins, boxes and sacks are substantial, being over £150,000 in 2009/10. Some of these costs are recovered from the payments made for the use of blue bins and some funds from new developments are received which reduced net expenditure to £110,000 in 2009/10. However, most other containers are not chargeable.

Nonetheless, such a cost to the Council for containers is perceived to be too high and the following proposals are aimed at reducing this.

- 2.25 When containers have been damaged or lost, replacements have been provided free and new containers have been issued. Old damaged containers have been scrapped and sent for recycling. Repairing & reusing containers has not been common. However, if old bins were suitably cleaned and bins which have lost lids have new lids fitted, the number of new containers should be reduced.
- 2.26 Blue boxes have been provided free. Properties are usually provided with two blue boxes free and only given additional boxes when requested. The cost of four boxes with lids is approaching the cost of a wheeled bin. In future, most new built properties will be provided with three bins since the developer will have paid for them. This will help reduce the Council's expenditure on containers.
- 2.27 A recent change in bin procurement has seen the cost of a bin fall. Hence reducing the cost of the blue bin while introducing a small charge for a fourth box should encourage further take up of the blue bin and reduce box expenditure.
- 2.28 Now most new built properties will be provided with three bins since the developer will have paid for them. This will help reduce expenditure on containers.
- 2.29 Properties which cannot accommodate wheeled bins are provided with grey sacks for refuse and paper garden waste sacks for garden and food waste. There is a significant cost to delivering single use sacks twice per year to around 700-900 properties. It maybe possible to introduce reusable sacks for refuse and for food & garden waste which could bring in savings. Further research is required.
- 2.30 As a consequence of the above, the following changes to container provision practices are proposed;

Residual Bin Size – With the successful introduction of recycling schemes the amount of waste in the residual bins have fallen substantially. The 240 litre bin is too large for the residual needs of most properties. The intention is to introduce a 180/190 litre bin as the standard bin for all new properties from 2011.

Bins for Large Families – large families are issued a 360 litre bins for residual waste. The qualification for such a size bin has been six or more in the family or families with two children in nappies. This qualification is reviewed on a three yearly basis. The intention is to change the scheme by issuing 240 litre bins to families of five or six or to families of any size but with two children in nappies. Families of seven or families with three children in nappies will be loaned a 360 litre bin.

Blue boxes – Households will be issued with two blue boxes. As a means of encouraging more recycling and to reduce the number of blue boxes being used, consideration is being given to offering refurbished blue bins when they are available at a discounted rate to replace boxes where there are two or more. Should householders not want a blue bin and require additional blue boxes, then a charge will be incurred.

New Properties – New properties will be issued with three bins, 180 litre residual bin, a 240 litre blue bin and a 240 litre brown bin. A kitchen caddy will be provided with an initial roll of caddy liners.

Replacement Bins – Replacement green bins will usually be reconditioned bins if available. If none are available, then a new 180/190 litre bin as the standard bin will be issued.

Encouraging recycling

- 2.31 The change in national government has started to bring a change in approach to recycling. The current government has advocated the use of reward schemes for recycling. The main provider of such a scheme has carried out a presentation to officers on the benefits and costs of a reward scheme. The reward scheme gives residents points for recycling. These points can be converted into money off vouchers at various retailers.
- 2.32 It appears that such an approach has a number of merits for councils with relatively low recycling performance. However, since the Council is already operating at high levels of recycling the benefit is a lot less clear. Although a full proposal has yet to be received, it seems a high level of capital & revenue cost would be required and this is likely to make such a scheme prohibitive.
- 2.33 The Council has been successful in encouraging residents to use the recycling services through providing good information and easy to use and convenient systems. Popular events promoting recycling include events distributing free compost bags to residents. This compost has come from the site where the content of householders' brown bins has been taken for processing.
- 2.34 The main strategy for increasing recycling is through providing good information in Cherwell Link, on the website and through other publications. Increasingly other information channels are being used such as Twitter, the use of the Agripa system on vehicles and officers giving presentation to interested groups.
- 2.35 Due to the waste and recycling service base which the Council has established, it is very well placed to introduce further recycling and service developments without the need for additional expenditure. Appendix 2 identifies and proposes those which can be progressed in this way thereby further improving the service performance.

Waste Strategy

- 2.36 The new government is reviewing the current National Waste Strategy which came about in 2007 and aims to have a new strategy in place for April 2011. The current national target is to recycle 50% by 2020. The Joint Oxfordshire Municipal Waste Strategy has set a target of 55% recycling by 2020.
- 2.37 The new government aims to be 'the greenest government' so the current targets for recycling are likely to rise. The Waste Strategy for Scotland has set a target of recycling 70% by 2025. Consequently overall recycling targets may rise from current levels. However, Cherwell is well placed to meet any increase in target levels since recycling levels are forecast to rise beyond 60% in 2011/12.

- 2.38 The financial incentives in place within the Oxfordshire Waste Partnership make reducing landfill tonnages through further recycling or waste minimisation attractive. Consequently, the raising of targets is unlikely to present a major risk to the Council.

Key Issues for Consideration/Reasons for Decision and Options

- 3.1 The severe financial challenges facing the Council over the next few years means that the Council should examine all opportunities for improving the performance of the waste and recycling performance where this then leads to reduced service cost.
- 3.2 The waste & recycling service is a high priority service and must deliver good value for money by delivering financial efficiencies while ensuring high customer satisfaction levels
- 3.3 Many of the proposals contained in this report has been some excellent pro active support and advice from the Council's procurement team. New markets combined with more productive procurement processes delivered by professional procurement officers has meant that the Council is clearly benefiting again from the investment it made in this unit.

The following options have been identified. The approach in the recommendations is believed to be the best way forward

Option One Approve the supplementary capital estimate and agree the changes in container practices and other service developments.

Option Two Re-tender the glass collection service and try and seek reduced costs. However the last tender had only four tenders and the current supplier was significantly cheaper than all the other tenders.

Option Three Add glass to the blue bin and re-tender the dry recycling contract. This is likely to be cheaper than Option 2 but it is a more expensive option than Option 1 and would increase carbon emissions by around 1,000 tonnes

Consultations

Wayne Lewis OWP co-ordinator The proposals set out in the recommendations are in keeping with the Joint Municipal Waste Management Strategy for Oxfordshire. In my opinion they will reduce costs, promote waste reduction and recycling without adversely affecting levels of customer satisfaction

Implications

Financial: The proposals contained in this report are expected to reduce the Council's waste and recycling service cost by in excess of £300,000 per annum. To achieve the glass

recycling changes will require a new vehicle estimated to cost up to £130,000 which in turn will require the approval of a supplementary capital estimate if the service improvement is to be introduced in 2010/11.

Comments checked by Joanne Kaye, Service Accountant, 01295 221545

Legal: There are no legal implications arising from the proposals in this report

Comments checked by Richard Hawtin, Team Leader – Property and Contracts, 01295 221695

Risk Management: The waste and recycling service is one of the most influential Council services in terms of customer satisfaction and reputation. The changes proposed carry only low risk and are likely to enhance this position.

Comments checked by Rosemary Watts, Risk Management and Insurance Officer, 01295 221566

Wards Affected

All

Corporate Plan Themes

Cleaner Greener Cherwell

Executive Portfolio

Councillor George Reynolds
Portfolio Holder for Environment, Recreation & Health

Document Information

Appendix No	Title
Appendix 1	Proposed Waste and Recycling Service Efficiencies
Appendix 2	Proposed Improved Recycling Initiatives and Service Developments
Background Papers	
None	
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Appendix 1 - Proposed Waste and Recycling Service Efficiencies

1. Glass recycling – The current glass collection contract expires in February 2011. Up to £85,000 is spent with our contractor collecting glass. Bringing this work in house by the procurement of a vehicle for around £130,000 will deliver annual savings of £78,000. The pay back is less than two years and the life expectancy of the vehicle is eight years.
2. Gate fees – the collapse in recycling markets in the autumn of 2008 led to rising gate fees. Since then material prices have recovered and in some instances gone beyond the pre 2008 crash prices. Gate fees are being reviewed and a significant reduction is expected in excess of £80,000 per annum.
3. Containers – Over £150,000 (gross) is spent each year on bins & boxes. Some funds for blue bins and money from developers for new properties reduced the net expenditure to £110,000 in 2009/10. However by reusing and repairing more bins and by possible changes to charges for blue containers the intention is to reduce expenditure by £20,000 in 10/11.
4. Vehicle depreciation changes – The Refuse Collection Vehicles have been replaced on a six year cycle. The maintenance costs of vehicles rise with age. However the combination of better maintenance practices, more robust vehicles and the vehicles rarely going on landfill sites has helped increase the life of the vehicle. The intention is to replace refuse collection vehicles on a seven year cycle without increasing annual maintenance cost. This change will reduce capital requirements to replace vehicles by around £60,000 per year.
5. Bring banks – there are over 75 bring bank sites. The annual cleaning of bring banks and the Health & Safety lifting equipment inspection (LOLAR testing) has been carried out by external contractor. By carrying out this work in house and by maximising the value of the materials collected at the bring banks, costs should be reduced by £20,000 in 10/11.
6. Properties which cannot accommodate wheeled bins are supplied with single use grey sacks and paper organic sacks. This costs around £20/property per year. A reusable bag system is being investigated which if successful could save around £10,000 per year after spending around £5,000 on a reusable bag system.
7. Bartec system – the Bartec is an in cab system which allows better flow of information from the Customer Service Centre and the back office to the front line vehicles. The communication route between the vehicle and the Customer Service Centre is also improved. For example, contaminated bins will be identified and Customer Service Centre informed during the collection process so that customer queries can be responded to immediately. Similarly, missed bins reported immediately to the Customer Service Centre can be communicated to the drivers whilst hopefully still in the vicinity of the missed bin. The system is being rolled out through the fleet during 2010/11 and a number of operational efficiencies are expected to be realised which will reduce costs.

8. Christmas collections 2010 – Christmas falls on a Saturday this year. By collecting on the Bank Holiday Tuesday there will be no disruption to collections at Christmas. Householders will have their normal collections on the usual day. This not only reduces disruption and calls to the Customer Service Centre it will remove the need for printing and distributing stickers with the arrangements.
9. Rounds review – the rounds have not been fully reviewed for a number of years. New developments, new recycling and composting outlets and changes in recycling collections mean that the planned routes may not be as efficient as possible. The current rounds are being reviewed to reduce mileage (and hence fuel), reduce labour costs and obtain better balanced workloads. This work may involve changing the day of collection of up to 20,000 properties. Plans and proposals are being developed with the view to changing rounds in early 2011.

Appendix 2 - Proposed Improved Recycling Initiatives and Service Developments

1. Waste Electrical & Electronic Equipment - Currently there are 16 sites and 6 tonnes of waste electrical & electronic equipment including toasters, kettles, hair driers, small electrical devices have been diverted from landfill. As the number of sites is increased beyond 25, the amount of WEEE diverted from landfill will increase. Some 40 tonnes is expected to be collected in 2010/11. Each tonne of material recycled is worth around £90 in payments from the recycling industry, recycling credits and landfill diversion credits
2. Kerbside collection of batteries – batteries are currently collected via bring banks at over 30 locations. This collected around 8 tonnes in 2009/10. It is estimated that another 20-30 tonnes exist in the residual bins. The possibility of collecting batteries from the kerbside is being researched including making contact with some councils who currently collect. Such as scheme is aimed to be financially cost neutral or better
3. Increasing the amount of glass being captured by further expanding the number of bring sites making it easier for residents to recycle glass. The recent waste analysis shows that some 700 to 900 tonnes is still present in the green bin. By better utilisation of the existing banks, another 5 to 10 sites could be in operation by April 2011. This scheme should bring in additional income.
4. Increasing the amount of textiles being captured. Currently around 325 tonnes of textiles are being collected at a variety of bring banks across the district. However, a recent waste compositional analysis showed that up to 1000 tonnes still remain in the green bin. The current provision of textile banks and the providers will be reviewed – this project should generate some additional income.
5. Trade recycling – some funds secured from the Business Resource Efficiency & Waste (BREW) enabled some research work to be carried out by Oxford Brookes University, a report has just been received with a number of recommendations – this project will increase trade recycling generating additional income.
6. Schools recycling – schools waste as classed as chargeable household waste (Schedule 2). This means that a charge can be made for collection but not for disposal. The intention is to offer to schools, particularly primary schools the Schedule 2 service including food waste. Encouraging food waste in the classroom will have a positive influence on the overall food waste recycling scheme – this scheme will cover all costs and may generate some income.
7. The highest performing council in England for recycling in 2009/10 was Rochford which achieved a recycling rate of around 65% using a three bin collection system. This system includes a weekly brown bin collection system. Rochford is being approached to fully understand their scheme since initial calculations show that a weekly brown bin over the summer months may be possible from summer 2012 for a very low cost.

8. Door stepping campaign in the autumn/winter months to target properties not recycling their food waste. The aim is to increase participation and increase the diversion of food waste from landfill.
9. Two new refuse collection vehicles arrived at the start of September with the Agripa system fitted to the main sides of the vehicles. The Agripa system is essentially an advertising hoarding on the side of vehicle. Different mesh panels can be fitted to the sides of vehicles using an industrial Velcro type of fitting. Feedback on the value of this system will be sought during the rest of 2010/11.
10. Caddy liners – access to caddy liners is an important factor for residents using the food waste recycling scheme. Despite liners being available at most supermarkets and a number of smaller local shops, many residents appear to prefer to buy liners from Cherwell District Council. This seems in part to be price and also certainty about using the correct liners. For the first five months of the food waste recycling service, over 1,700 rolls of liners were sold from Banbury TIC and Thorpe Lane Depot. Physical constraints for storage in Bicester and Kidlington have precluded the sale in these outlets to date. Proposals to make liners more easily available for residents include looking at ordering online with rolls being delivered either by post or crews and also wall simple vending systems in Linkpoints.