### BUSINESS CASE FOR RECYCLING MATERIALS BULKING AND SALES BEING PERFORMED BY UBICO AND THE JOINT WASTE TEAM

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Document location	TBC

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1.0	21.11.14	Background and strategic context drafted
1.1	23.12.14	Anticipated Budget Information included

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### Background and strategic context

Cheltenham Borough Council (CBC) has a contract in place with Printwaste Ltd for the bulking of recycling material collected from the kerbside, bring sites and through the Swindon Road Household Recycling Centre. The current contractor also carries out the marketing and sale of the recycled materials. The current contract extension is due to expire in April 2015.

The Joint Waste Committee (JWC) included in its 2014-17 business plan a project "tendering of a new contract for the sale of recyclable material with consideration of associated bulking and transfer operations". The Joint Waste Team (JWT) which works on behalf of the JWC considered two options, firstly a procurement process through a service concession contract and secondly an option whereby Ubico Ltd would take on dry recyclable material bulking with the JWT having responsibility for the marketing and sale of the recycled materials.

### Dry Recyclable Materials Bulking and Sales Operation

### **Current Arrangements with Printwaste Ltd**

Dry recyclable materials (paper, card, mixed glass, mixed plastic bottles and mixed cans) are collected from the kerbside and from bring sites and the Household Recycling Centre by Ubico and are bulked at the Swindon Road bulking facility by Printwaste. Food waste is outside the scope of this review. Printwaste is responsible for offloading stillage vehicles, sorting materials, baling the materials that are collected, liaising with hauliers for transport of materials to re-processors, loading haulage vehicles and the material marketing.

Printwaste pay a fee per tonne for each material stream. The tonnage fee payable per commodity is reviewed every 3 months. In addition, a per-tonne charge is made for bulking paper and glass which is charged to Ubico as a handling fee.

Dry recyclable materials are transported to a variety of destinations depending on the material being recycled with the costs being borne by the re-processors and as such they are classed as 'ex-works'.

### **Proposed Arrangements**

### **Ubico's Responsibilities**

- 1. Under the revised governance arrangements for Ubico, the Managing Director has delegated authority to approve contracts up to £250,000, but in this case it would be a variation to the existing contract which would not normally be referred to the Board. The Board are however aware of Ubico's plans to expand in this area and support the proposal.
- 2. Ubico would be responsible for receiving recycling vehicles into the Swindon Road, weighing in and offloading the vehicles. Ubico would then sort and or/bale or bulk up the materials as necessary ready for sale to the market and would keep accurate records of goods received and

loaded on to bulk transport vehicles.

- 3. The new operation whilst not exactly the same as currently performed by Ubico on site, does share a large number of processes concerning safe material handling and health & safety, so if Printwaste was not willing for the existing staff to transfer to Ubico under TUPE, then Ubico could employ replacement operatives who could be trained to the required standard without the need for significant additional expenditure.
- 4. For recycling materials that have been sold 'ex-works' the buyer will send bulk transportation to collect the materials. Ubico will receive and weigh these vehicles, load them accordingly and weigh them on departure, keeping accurate records of goods out. Ubico will also be responsible for other ancillary services such as the transfer and transport to a local bulking/reprocessing facility of food waste.

### Gloucestershire Joint Waste Team's Responsibilities

- 1. The constitution of the Joint Waste Committee (JWC) delegates the Councils waste, recycling and street cleansing 'client' functions to the JWT.
- 2. The JWT would be responsible for the marketing and sales of dry recyclable materials through procurement contracts. It is anticipated that the contracts would be let over time periods of 6 months to 2 years and include a floor and ceiling price for the particular commodity to mitigate any shortfall in the Councils income if the market crashed. The only down side of such an agreement is that potential additional revenue might not be realised if the commodity value increased dramatically. Through the expertise of the material marketing advisor, the contract terms will be carefully scrutinised by the JWT to ensure that a good balance between protection for CBC and maximising income is found. For the avoidance of doubt selling to the market includes the haulage of materials from the bulking facility to its ultimate destination and is what's known in the industry as 'ex-works'.
- 3. As the JWT is not a legal entity it cannot enter into contracts directly itself. For the purposes of this arrangement therefore it is proposed that CBC would be the contracting authority for procurement purposes and would receive the associated income directly.
- 4. The JWT will need to demonstrate best value through its procurement process not just from a monetary perspective but also an environmental perspective.

### **Objectives**

This proposal has the following objectives:-

- 1. Bring the material bulking operation under the functions Ubico perform on behalf of CBC
- 2. Delegate the material marketing/sales responsibilities to the JWT
- 3. Target a net income benefit of £92k for CBC

### **Financial Implications**

The financial implications are expected to achieve a net income to the General Fund of between £52,000 and £92,000 per annum depending on the purchase cost of capital equipment and which capital financing arrangement is decided upon.

If the capital equipment is financed from prudential borrowing, then it is anticipated that net annual income from running this service will generate £52,000 to the General Fund. If, however, the capital equipment is funded by capital receipts then net annual income to the General Fund will increase to £92,000 as there will be no capital financing costs.

The decision on which financing option should be used will be made in line with the impending review of the Asset Management Plan and Capital Financing Strategy.

The income figures shown are based on the mid-range scenario for recyclable sales as projected in the Eunomia report. The sensitivity analysis within the Eunomia report produces a low end range additional income of £200k per annum, a central range assumption of £272k per annum and a high end range additional income of £346k per annum.

The expenditure assumptions in the report do not include any marketing costs which at this stage will be met from the Council's material income.

### **Current Arrangements**

The net income from Printwaste Ltd forms part of the recycling income that appears within the recycling budgets of CBC. The approximate annual cost of the bulking operation is £250k less income of £272k, giving a net income of £22k for CBC. This takes into account the handling charge of £45k per annum for bulking paper and glass that Printwaste invoices Ubico for, and so forms part of the monthly Ubico recharge to CBC for the recycling service.

#### **Proposed Arrangements**

In order for Ubico to undertake the material bulking operation it will need to acquire the necessary capital equipment, and an inventory estimate needs to be established which both CBC and Printwaste agree upon. Currently this work is in hand and therefore for the purposes of this report a prudent approach has been taken and a capital cost of £390K has been used as this is based on purchase of equipment.

Ubico has estimated its annual revenue costs of operating the materials bulking facility as £265K, which includes asset rental costs of £40K p.a. representing the cost of borrowing to finance the capital expenditure. However, if Ubico undertake the bulking materials work then there would be no handling fee (£45K per annum) and if this amount was taken off the annual running costs it results in a total cost to Ubico of £220K per annum for running the bulking facility.

Using the central range assumption of additional income of £272K per annum and annual running costs of £220K per annum, then the net income to the General Fund would be £52K per annum. In view of the need to identify on-going annual revenue savings within the Medium Term Financial Strategy, and if the Cabinet is minded to do so, the purchase of capital equipment could be funded from capital receipts which will increase the net income to the General Fund to £92K per annum.

Anticipated Budget

Estimated Gross Income	(276k)
Estimated Gross Expenditure	195k (this excludes handling charge CBC
	currently pay)
Estimated Additional Net Income	(81k)

### Marketing Arrangements

It is proposed that the one off cost of up to £5K for the material sales expert adviser should be financed from the additional income which the Council is expected to receive and it is not anticipated that any further expenditure would be required for the JWT to take on this task.

If in the future, further JWC partner's material is marketed by the JWT, then dependent on the quantity of work a FTE might need to be employed to undertake this role on a part or full time basis. In this case the costs would be equally shared amongst the partners benefiting from this work at that time.

### **Options appraisal**

# 1) Ubico to undertake recycling material bulking at Swindon Road & JWT to manage material sales on behalf of CBC

### Advantages

- 1. The potential to develop expertise of material bulking in Ubico, which could be beneficial to other partners as they join;
- 2. The potential to develop the expertise in the JWT and to market materials for other areas or other material streams from partners within the JWC;
- 3. Potential to maximise revenue by eliminating third party margins whilst still obtaining best prices
- 4. The potential to extend operations to take further recycled materials without the need for varying a contract;
- 5. Easier to control the quality of recyclable material collected at the kerbside because of the greater feedback loop from Ubico bulking staff to Ubico collection crews

### Disadvantages

- 1. Up to £390k capital costs will be required to purchase the necessary equipment to enable Ubico to run the facility;
- 2. Currently limited experience of material bulking & sales within Ubico and the JWT

### 2) Re-procure the material bulking & sales contract

### Advantages

1. Responsibility would fall to a waste management company which has experience of material bulking and sales;

### Disadvantages

- 1. High procurement costs
- 2. The Council would be tied in to a contract for a set period of time with little opportunity for change and which would be more expensive than the Ubico/JWT option due to operating profit being applicable
- 3. Opportunities for experience to be gained by Ubico and the JWT would not be available;
- 4. Opportunities for other partner authorities to use CBC facility would not be available;

### 3) Do nothing

1. Doing nothing is not a viable option as the current contract with Printwaste is due to expire in April 2015 and can only be extended for a short period of time – suggested up to 6 months.

### Recommendation

- 1. Ubico take on the dry recyclable material bulking operation after the Printwaste contract extension expires;
- 2. CBC takes back responsibility for the sale of the dry recyclable material and makes arrangements for the day to day management of material sales to be undertaken by the JWT;

### Financial benefits summary

Using the central range assumption of additional income of £272K per annum and annual running costs of £220K per annum, then the net income to the General Fund would be £52K per annum. In view of the need to identify ongoing annual revenue savings within the Medium Term Financial Strategy, and if the Cabinet is minded to do so, the purchase of capital equipment could be funded from capital receipts which will increase the net income to the General Fund to £92K per annum.

### High level implementation plan

- Sign off business case 9<sup>th</sup> December 2014
- Cabinet approve recommendations in materials bulking and sales report 9<sup>th</sup> December
- Conduct independent valuation of Printwaste plant and equipment December 2014
- Conclude negotiations on contract extension and value of plant and equipment with Printwaste January 2015
- Project inception and PID sign-off January 2015
- Project run period with completion of outputs defined in PID January to October
- Go-Live, Ubico take over responsibility for recycling materials bulking October 2015
- Go-Live, JWT take over responsibility for recycling material sales October 2015

### **Risk Assessment**

The ri	sk			Original risk score (impact x likelihood)			Managing risk				
Risk ref.	Risk description	Risk Owner	Date raised	Impact 1-5	Likeli- hood 1-6	Score	Control	Action	Deadline	Responsible officer	Transferred to risk register
1	If Ubico cannot implement the new operational arrangements by the end of the contract then the Council will need to put in contingency arrangements for the bulking and sale of dry recyclable material	Rob Bell	9.12.14	4	3	12	Reduce	<ol> <li>Project in place and sponsored by MD Ubico to implement changed service within timeframe</li> <li>Current provider aware of contract termination and scope available to further extend temporarily</li> </ol>	<ol> <li>1.1.15</li> <li>9.12.14</li> </ol>	Rob Bell Scott Williams	
2	If Ubico do not have previous experience in materials bulking and transfer then the quality of dry recyclable materials might be compromised leading to a reduction in sales income achieved	Rob Bell	9.12.14	4	2	8	Reduce	<ol> <li>Staff TUPE from current provider or training of new employees to required standards</li> <li>Ubico Managing Director has legal responsibility for health and safety of workforce</li> </ol>	October 2015 October 2015	Julie McCarthy Rob Bell Rob Bell	

								under current contract		
								3. Project plan will include workforce requirements including operations training and health and safety	1.1.15	Rob Bell
								4. Regular inspections of material quality to be completed by Ubico management team	Ongoing	Rob Bell
								5. Monthly H&S inspections to be carried out by qualified member of the JWT	Ongoing	Scott Williams
3	If the JWT does not have any previous experience in marketing dry recyclable materials or the relationships in	Pat Pratley	9.12.14	4	3	12	Reduce	1. Expert adviser to support the JWT with setting up marketing and sales operation	1.4.15	Scott Williams
	place with the material re- processors then the JWT will not secure 'off-take' of the material or achieve best value							2. Members of JWT have some experience of the work already	Ongoing	Scott Williams
	for the material sold							3. Resilience will be built within the team by more than one officer being responsible for marketing	Ongoing	Scott Williams

4	If Ubico were to have a problem with the operation of the bulking material facility then officers would need a contingency plan in place to ensure the bulking operation could recommence as soon as practicable to protect the income stream	Rob Bell	9.12.14	3	2	6	Reduce	<ol> <li>Ubico will make suitable business continuity plans to allow for the continued acceptance and bulking of materials collected should there be any significant breakdown or failure of equipment or plant or unavailability of operatives</li> <li>Ubico will identify alternative material bulking providers in the area</li> </ol>	October 2015 October 2015	Rob Bell	
5	If Printwaste Ltd is unwilling to sell the plant and equipment it owns within the material bulking facility then the business case viability could be compromised	Scott Williams	9.12.14	3	3	9	Reduce	<ol> <li>Conduct independent valuation of the plant and equipment used on site</li> <li>Conclude negotiations with Printwaste regarding settlement cost of capital equipment</li> <li>Lease arrangements to confirm agreed capital settlement</li> </ol>	1.1.15 1.1.15 1.1.15	Scott Williams Scott Williams Scott Williams	

								4. Ubico to identify alternative plant and equipment providers	1.4.15	Rob Bell
6	If the JWT does not consider the material marketing and sales from an environmental as well as monetary perspective then there is a risk that there may be a negative environmental	Scott Williams	9.12.14	3	3	9	Reduce	1. JWT Head of Service pioneered the publication of open information regarding marketing and use of materials	1.4.15	Scott Williams
	impact							2. CBC environmental requirements will be fed into the procurement process conducted by the JWT	1.4.15	Scott Williams
7	Market fluctuations in material value might lead to CBC income being affected	Scott Williams	9.12.14	3	2	6	Reduce	1. Longer term contracts will be sought which include floor and ceiling price constraints to protect income.	Ongoing	Scott Williams
8	If Ubico decide to take recycling from other partner areas of the JWC and vehicles are travelling further to deposit loads then this may have a negative environmental impact	Rob Bell	9.12.14	3	3	9	Reduce	It is anticipated due to the distances involved that all new partners would have their own bulking arrangements in place as part of their procurement of a	Ongoing	Rob Bell

				suitable operations		
				depot		

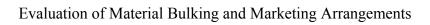


# Appendix A: Evaluation of MaterialBulking and Marketing Arrangements- Updated

Report for Cheltenham Borough Council

Authors: Paul Jones Simon Croasdell 05 September 2014







Report for: Steve Read, Gloucestershire Waste Partnership Scott Williams, Cotswold District Council & Cheltenham Borough Council

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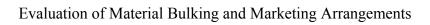
### Acknowledgements

Our thanks to Scott Williams and Rob Bell for providing information on the current contractual situation and the proposed cost of facilities for equipping a bulking facility

### Disclaimer

Eunomia Research & Consulting has taken due care in the preparation of this report to ensure that all facts and analysis presented are as accurate as possible within the scope of the project. However no guarantee is provided in respect of the information presented, and Eunomia Research & Consulting is not responsible for decisions or actions taken on the basis of the content of this report.







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# Scope of the Work

Cheltenham Borough Council (CBC) currently provides a borough-wide kerbside collection of recycling, food waste, garden waste and residual waste through Ubico, a company jointly owned by CBC and Cotswold District Council.

All dry recyclates are offloaded and bulked at the Swindon road depot. Residual and garden waste is delivered directly to Wingmoor Farm.

The service is currently provided under contract with Print Waste Ltd, though the ownership of the current bulking facility is with CBC. It is understood that CBC are looking to determine for whether it is in its best interest to retender this contract or take in-house and directly operate it (partly through UBICO), starting in 2015.

The purpose of this report is to evaluate the relative costs, risks and benefits associated with taking the marketing and bulking of the current kerbside collected dry recyclable material in-house. It forms part of CBC's overall business case for this decision. The scope of the work was agreed as:

- To review the historic prices paid under the Print Waste contract and to compare to high, medium and low prices that could have been obtained by direct selling over the same period.
- To review the financial and non-financial benefits and risks associated with taking the service in-house versus renewing the Print Waste contract. Give due consideration to the potential for additional material (household and commercial) to be received from partner authorities.

This report was originally written in September 2013 and has now been revised (in July 2014) with updated material price comparisons.

### **Current Service**

Currently the following materials from the kerbside and from bring sites are bulked at Swindon road:

- > Paper
- ➤ Card
- Mixed Glass
- Mixed Plastic bottles
- Mixed Cans
- ➢ Food Waste

Cans and plastic are collected mixed at the kerbside. Note that food waste is out of scope of this report.

Print waste is responsible for:

Evaluation of Material Bulking and Marketing Arrangements



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- Offloading stillage vehicles;
- Sorting mixed cans and plastic in Steel, Aluminium and Mixed bottles, using a simple overband magnet and eddy current separator set up;
- Baling the materials that are collected in relatively low volumes plastic, metals & card;
- Arranging for transport of materials to reprocessors and loading haulage vehicles; and
- Material marketing

Print Waste also handles some other waste from the Joint Waste Committee (JWC) contracts, and bulking for Tewksbury's commingled collections. These are carried out through a range of contracts that Print Waste operates with these other parties.

# Material Income Review

The current arrangement sees Print Waste pay a fee per tonne for each material stream, which is reviewed every three months. A per tonne charge for bulking is made for paper and glass. For our comparison we have taken the sum of both figures and compared it to what could be expected from direct sale of the material, such as could be expected were Ubico operating the site itself. Clearly this revenue needs to be offset against the additional cost of operating a bulking facility at the Swindon Road depot.

### Materials Pricing Report

The Materials Pricing Report (MPR) is compiled by WRAP and gives an indication of changes in the market across grades. It lists a low and high price for each material per week. We used our experience to estimate what sort of grade of material would be expected from kerbside sorted collections and whether we could expect it to be marketed for the MPR high or low price.

All prices are assumed to be ex-works. However for card, plastic and cans it is assumed that the recyclates are sold as bales of appropriate size and density.

### Paper

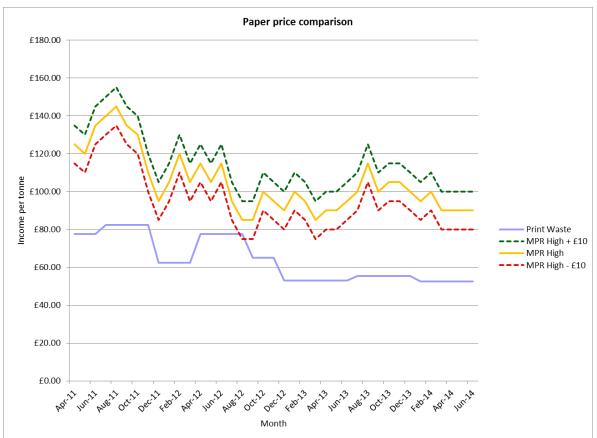
Separately collected paper in the 'News and PAMs' grade can expect to attract a premium. There are three main direct outlets in the UK:

- Aylesford Newsprint
- ➢ Palm
- > UPM Shotton

In addition there are brokers and export options.

Based on our recent experience with reprocessors and sellers of this material grade, we would expect CBC to be able to obtain at least the MPR high price and usually a premium of about £10 over this. The best value for this material is likely to be achieved by agreeing a fixed length contract to supply, with a floor price and a tracker to the MPR (or similar) index. Figure 1 shows the prices from the MPR mapped against the actuals from Print Waste, from April 2011 to June 2014.





### 1. Figure 1: Analysis of Prices per Tonne for Paper, April 2011 to June 2014

The table above shows the historic comparison of the net income per tonne to the council and the likely direct selling price of the material. The paper high price is the MPR high. Over the course of the 39 months in the analysis the average difference between the MPR high price and the Print Waste price was £40.73 per tonne. The difference is reasonable consistent over the whole period with only 3 months in which the difference was less than £30 per tonne and 6 months in which the difference was over £50 per tonne. The most likely explanation for this is that prices are fixed for three months and the market has shifted sharply over that period. We have modelled the difference between the MPR high price and the Print Waste price to be conservative, although as stated above we could expect a premium of around £10 per tonne above the MPR high price.

### Glass

Currently glass is collected mixed although historically some colour separated glass has been sold. We have assumed all glass is mixed, although as we are concerned with relative income, should greater colour sorting occur then this should not impact on the relative business case.

Based on our experience with reprocessors and sellers, we believe that the MPR high price for mixed glass is a good central assumption. It should be noted that although historically very consistent, recently they have become much more volatile due to a historic issue with large scale PRN fraud leading to under supply against the Packaging Regulation target.



We have assumed a best case scenario of  $\pm 5$  and worst case of  $\pm 5$  adjustment to MPR high value. We are aware of some kerbside collected glass being sold for MPR  $\pm 20$ , but although the market has settled after last year's volatility we have been cautious.



2. Figure 2: Analysis of Prices per Tonne for Mixed Glass, April 2011 to June 2014

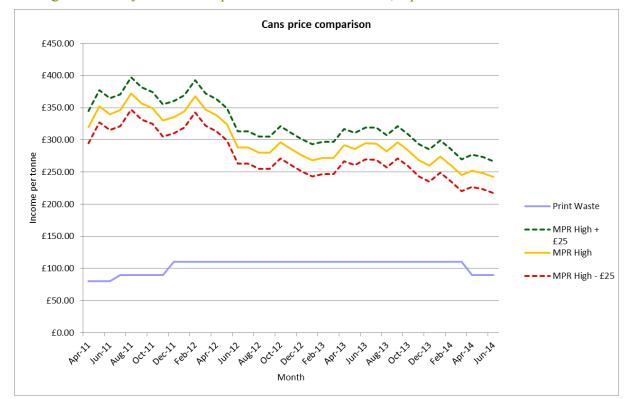
Figure 2 above shows the historic comparison of the net income per tonne to the council and the likely direct selling price of the material. Over the course of the 39 months in the analysis the average difference between the MPR high price and the Print Waste price was £15.82 per tonne; the difference increased significantly recently and the average difference from June 2012 to June 2014 was £21.48.

### Cans

Currently cans are collected mixed with plastic from the kerbside, with smaller quantity of material collected separately from the bring sites. In an in-house bulking scenario, all cans would be sorted on site and baled. Aluminium and steel would be sold separately for different values. Aluminium is worth considerably more than steel (currently £710 versus £125). Therefore the ratio of these materials is important to the overall income. We have assumed 20% of the mix by weight is aluminium, which is historically typical for such collections, although we have observed a gradual rise in the percentage of aluminium which is likely to continue over the next year due to a number of the major packaging companies shifting to the material. Our central assumption is the MPR high price for both materials because the mixed cans come from a kerbside sort container stream, which means that there is no contamination



with other streams of recyclables which would negatively impact the quality of the product.



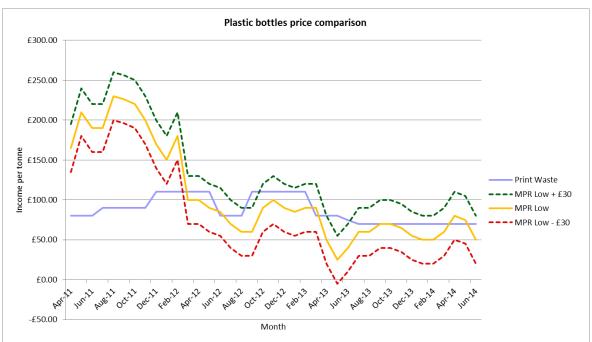
**3.** Figure 3: Analysis of Prices per Tonne for Mixed Cans, April 2011 to June 2014

Figure 3 above shows the historic comparison of the net income per tonne to the council and the likely direct selling price of the material. Over the course of the 39 months in the analysis the average difference between the MPR high price and the Print Waste price was £196.58 per tonne. This may seem very high, however it is important to note that the cost of sorting and bulking (per tonne) of this very light material will be high and is likely to account for most if not all of this difference. The difference has decreased over the period; the average difference from June 2012 to June 2014 was £167.78.

### Plastic

Currently plastic bottles are collected mixed with cans at the kerbside, with smaller quantities collected separately at bring sites. The price of plastic varies depending on the composition and particularly how much non-bottle plastic is collected.





# **4.** Figure 4: Analysis of Prices per Tonne for Plastic Bottles, April 2011 to June 2014

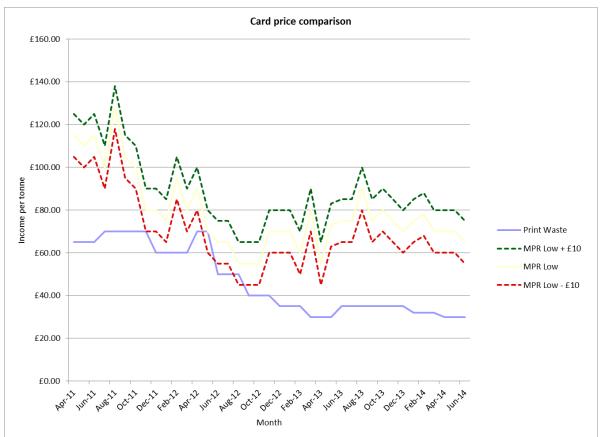
Figure 4 above shows the historic comparison of the net income per tonne to the council and the likely direct selling price of the material. The grade used for the plastics price was mixed polymers, the specification of which includes PET and HDPE bottles plus packaging with SPI Polymer identification numbers 1-7. The MPR low price was used to account for the non-bottle plastic. The variability of the index to some extent reflects the wide range of materials and packaging types that it covers. Over the course of the 39 months in the analysis the average difference between the MPR low price and the Print Waste price was £17.85 per tonne. However, unlike the other materials, the picture is much less clear and since early 2012 the Print Waste price has often been between the MPR low and MPR low plus 30 prices; the average difference from June 2012 to June 2014 was £15 less than the MPR low price.

This may be due to the fact that the material is higher quality (due to being collected in a container-only stream, as discussed above) and attracting a premium. However it would suggest caution in assuming too high a value for the plastic stream, without a more thorough understanding of its composition. As the plastics stream is a small tonnage relative to paper and glass, the uncertainty around the value does not have a significant impact on the overall financial case for the bulking facility.

### Card

Kerbside card will contain a high level of grey board and non-corrugated card rather than the more homogeneous OCC grade stream that one might expect from collections of recycling from commercial customers. Therefore we have used the low MPR price for OCC as our central assumption, which is typical for such material if baled. Our high price is the MPR low plus £10 per tonne and the low price is the MPR low minus £10 per tonne





### 5. Figure 5: Analysis of Prices per Tonne for Card, April 2011 to August 2013

Figure 5 above shows the historic comparison of the net income per tonne to the council and the likely direct selling price of the material. Over the course of the 39 months analysis the average difference between the MPR low price and the Print Waste price was £32.38 per tonne. The average difference has been relatively stable over the period.

## Estimates of Overall Revenue Benefits of JWC Bulking and Marketing

Table 1 shows the estimate of the additional income that could be achieved from direct marking of materials, before any allowance for the operation of the bulking station is considered.

We have used the annual tonnage from 2012-13 for kerbside and bring alone, although it is important to note that additional tonnages would be likely to be processed through the site, both from other JWC contracts and also third party tonnage. Any growth in the tonnage received, whether through alternative sources or increased recycling will increase the total difference.



Central Assumption	Kerbside (t)	Bring Sites (t)	Total (t)	Average Difference per tonne	Total Difference
Paper	3,138	437	3,575	£40.73	£145,611
Glass - Mixed	2,372	387	2,759	£15.82	£43,654
Cans	239	40	278	£196.58	£54,731
Plastics	238	75	313	£17.85	£5,591
Cardboard	454	264	718	£32.38	£23,237
Total	-	-	-		£272,824

6	Table 1. Ov	verall Difference	in Revenues.	Print Waste	Versus In-house	Scenario
•••			m nevenues.	I I III W USIC		Section

Based on the central assumptions used in the above analysis we would estimate an additional £272,000 income per annum. Our range of sensitivity would be between  $\pounds 200,000$  and  $\pounds 346,000$  and we would have a high degree of confidence that the result would be within this range. The ranges we defined, which match those shown in the graphs in Section 3, are summarised in Table 2.

### 7. Table 2: Definition of the sensitivity ranges

Material	Central Assumption	Low end of range	High end of range
Paper (News and Pams)	MPR high	- £10	+£10
Glass - Mixed	MPR high	- £5	+£5
Cans (steel and aluminium)	MPR high	- £25	+£25
Plastics (mixed polymers)	MPR low	- £30	+£30
Cardboard (OCC)	MPR low	- £10	+£10

UBICO are currently working on an estimate of the cost of operating the bulking facility. Based on their work so far we would expect this to be under £250,000. We believe that there may be scope for this to reduce by procuring existing Print Waste equipment and reducing the manpower and plant that has been so far been envisaged (depending on throughput of other material). Therefore we would expect a small surplus to be made solely from the sale of CBC materials. However, given that additional activities would be carried out at the site, there is likely to be some additional income from the following:

> Other JWC materials (e.g. bring/kerbside/schools);



- Possible bulking of dry recyclates from CA sites (May Gurney/Kier have the contract but require bulking locations for the low volume materials paper, cans, card); and
- Commercial recycling.

The only potential revenue stream that we have quantified would be the 340 tonnes of card and plastic bottles from Swindon Road. These could be bulked and baled with a  $\pm 10$  per tonne handling charge.

Therefore the potential revenue from the bulking operation is £276,000 and the running cost would be not more than £250,000. Ubico have historically been charged approximately £45,000 per annum by Print Waste for handling charges, which Ubico recharge to CBC. Removing Print Waste from the process would therefore mean that Ubico would not have to budget for the handling charges and so this £45,000 can be netted off against the £250,000 to give a net figure of £205,000 for running costs and avoided handling charges. This gives an annual surplus of £71,000 in the central scenario. It is assumed that the facility would not be running at full capacity and so more dry recyclables could be accepted were opportunities identified in the future, which could significantly increase the annual surplus, as the marginal cost of operation associated with increased volume would be likely to be minimal.

# Risk and Benefits

In addition to the financial case described above, there are risks and benefits that would be associated with bringing the bulking and material marketing in-house. Some of the risks in the dry recyclate supply chain, such as changing composition, falling arisings due to economic slowdown, and problems with the quality of the material streams will be suffered by the in-house solution as well as the current contractor. The following sections focus on the particular benefits and risks associated with the inhouse option.

### Benefits

Bringing the bulking and material marketing in-house would deliver the following benefits:

- The operation could be used to market materials from other areas or other material streams in the area. For example, material from the Cotswolds and from commercial customers could be marketed by the same operation;
- The mix of contract and spot market recyclate sales could be chosen to fit the risk/reward profile that best suits the needs of the Partnership, rather than that which best suits the needs of the bulking contractor;
- The Partnership would extend its flexibility to add further recycled materials without the need for consulting Print Waste or amending the contract;
- It would be easier to control the quality of recyclate collected as there could be a feedback loop from bulking staff back to the collection crews, for example focussing on particular quality/contamination issues;
- The need to retender the current bulking contract (and future contracts) would be avoided, along with the risk of a lack of effective competition leading to a poor commercial outcome for the JWC;
- Longer term, prices of secondary materials are likely to rise faster than inflation in the general economy, as material availability and security are increasingly valued; and



Bringing the operation in-house avoids the risk of the operator becoming insolvent (with the associated risk that assets could be seized and the operations interrupted);

### Risks

An in-house bulking and material marketing operation would potentially suffer the following risks:

- The marketing operation would face directly the volatility of the market without the buffer of the bulking contract. This risk is limited as the contract has built in three month price reviews which ensure that Print Waste can adjust the price offered to account for material price changes;
- If the bulking operation were to stop as a result of a problem, then the issue would be the responsibility of the in-house operation to manage and resolve. Print Waste has a second site in the area which could be used as a 'back-up' in the event of a problem, whilst the in-house alternative would need to put contingency plans in place (either on a precautionary basis or with very short notice);
- The bulking operation would have limited material sales experience. Experienced personnel could be taken on (with the associated cost) or the skills and experience could be developed internally, which would take some time; and
- The bulking operation could incur additional costs (e.g. overtime in the event of equipment breakdowns), whereas the current operation is a fixed priced service. In reality the current service is priced to take account of the operator's estimate of costs associated with typical levels of down time.

# Next Steps

Having considered this report, it is suggested that these steps then follow:

- It is suggested that the costs of procuring and running the facility are further refined. The option of procuring some or all of the equipment that Print Waste already have on site should be investigated as this may reduce the investment cost and speed up mobilisation;
- Mobilisation should be planned well in advance to ensure that timescales do not become tight, which may increase the cost of the changeover from Print Waste to Ubico; and
- If the development of the Ubico bulking facility is to go ahead, then trading strategies for marketing each material should be developed. These may include a combination of fixed price contracts where available/applicable/ desirable, variable pricing based on an index (and ideally floor price), and use of the spot market. Eunomia are well placed to provide advice on this aspect.

# Conclusion



The cost of running a materials bulking and marketing facility on the site of the current Print Waste one should not exceed £250,000 (including investment costs annualised over 10 years). Netting avoided handling charges historically paid by Ubico would bring this figure down to £205,000. It is expected that the current throughput of CBC dry recyclate materials would earn in the region of £276,000. Including a very small contribution from handling Swindon Road materials the annual surplus from Ubico running the facility would be around £71,000 in the central scenario.

If the running cost of the facility could be decreased, for example by buying the Print Waste existing equipment, and reducing some of the man power and plant that has been assumed necessary, then the business case becomes more secure. Additionally, the business case should take into account the potential for further throughput (for example by more aggressive sales of Ubico's commercial recycling offering), and the balance of strategic benefits over the risks of running the facility.

