

**“TEEP” ASSESSMENT AND RECOMMENDATIONS**

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**Executive Summary:**

Due to legislative changes originating in the European Union (EU) Waste Framework Directive, an assessment has been carried out of a) the necessity for, and b) the Technical, Economic and Environmental Practicability (“TEEP”) of, collecting paper, glass metal and plastics separately in Milton Keynes. The assessment also evaluated the compliance of waste collections with the waste hierarchy.

The assessment is in a background paper. The findings are as follows:

- As the Council already collects glass for recycling separately from all other waste materials, this complies with the new legislation.
- Paper, metals and plastic are collected comingled in kerbside, recycling banks, street cleaning, hospital and commercial collections. Therefore a “TEEP” assessment of these comingled collections is required.
- The quality of the paper, metal and all plastic except the plastic film from the pink sacks that are used for kerbside collection is good.
- It is technically possible to collect the kerbside paper, cans and plastics separately
- Depending on the method chosen, and if assumptions are correct, there might be a net annual saving of between 604 and 1,091 tonnes of CO<sub>2</sub> equivalent per year. However, the set-up of a new system would result in extra one-off emissions of 4,599-8,593 tonnes CO<sub>2</sub> equivalent, depending on the system chosen. There would be a net additional annual cost of between £593,000 and £1,590,000. The change to a different system would result in one-off set up costs of between £3.42m and £8.77m that the Council would be required to reimburse Serco, the Council’s collection contractor. The Council may also be required to terminate the contract as the change in value, to the extent set out above could render the Council in breach of the Public Contracts Regulations 2015
- It is concluded that a change to a separate collection system is not necessary, is technically practicable, is questionable as to whether it is environmentally practicable, and is not economically practicable.
- There is still scope to move some of the Council’s waste streams up the waste hierarchy.

## 1. **Recommendation(s)**

- 1.1 That the current recycling collection arrangements of paper, cans and plastics be retained as it is not considered necessary or economically practicable to change.
- 1.2 That the investigation and implementation of moving the waste streams up the waste hierarchy be carried out wherever practicable at this time, in line with the Council's Waste Strategy.

## 2. **Issues**

- 2.1 The EU's revised Waste Framework Directive requires that Member States have in place separate collections of paper, glass, metal & plastic by 1<sup>st</sup> January 2015.
- 2.2 The UK Government transposed the revised Waste Framework Directive into UK Law through the Waste Regulations (England and Wales) 2011, which came into force on 1st October 2012.
- 2.3 The UK's interpretation was that comingled recycling collections comply with the requirement for separate collections as long as separate collections are not technically, environmentally & economically practicable (TEEP), and that good quality recyclate is achieved.
- 2.4 This interpretation was challenged by The Campaign for Real Recycling, an organisation representing UK Recyclate end users, resulting in a Judicial Review, which found in favour of the UK Government's interpretation.
- 2.5 The Department of Environment, Food and Rural Affairs (DEFRA) decided that further guidance on carrying out a TEEP assessment was not required; subsequently a Waste Regulations Route Map was produced by the Local Authority Waste Network to assist councils in completing their assessments. This was launched in April 2014.
- 2.6 In December 2014, the Environment Agency, which is responsible for monitoring compliance with TEEP announced that they would not commence checks until the end of March 2015, to give councils longer to complete their assessments.
- 2.7 The Council's TEEP Assessment has now been completed following the suggested process in the Waste Regulations Route Map and is presented for approval.

## 3. **Options**

### 3.1 Continue with the existing system

The Council currently collects paper, cardboard, cans, plastics, foil, aerosols and cartons in a pink sack, glass in a blue box, food and garden waste in a green wheeled bin and batteries in a clear/yellow bag. Residuals are collected in black sacks. The pink sacks, black sacks and blue boxes are collected by a fleet of 17 one-pass vehicles weekly. No changes are proposed to the food and garden waste or battery collections, which are all collected by a separate refuse vehicle with binlift, in any of the following three alternative methods of separate collection. These are

### 3.2 Kerbside Sorting

Full kerbside sorting requires an increased number of vehicle movements. The Council would return to an earlier system of collection, that is:

- Paper and cardboard would be collected in new red boxes of 55 litres capacity with lids
- Glass, cans, plastics and cartons would be collected in the existing blue boxes which have 44 litres capacity.
- The crew would sort all the materials from the boxes into a dedicated kerbside sort vehicle (rather than the current one-pass vehicle) at the side of the street, weekly. The time taken to sort at the kerbside means that fewer households can be collected per round.
- The number of kerbside sorting vehicles needed would be greater than the present one-pass system because they travel more slowly. Therefore, instead of the current 17 collection vehicles, we estimate 21 will be needed.
- Black refuse sacks would need to be collected weekly and separately using widely-available refuse vehicles without binlift. As these are only picking up refuse they can move quickly, and we estimate the number needed will be less than the one-pass vehicles at 15.
- This method would result in increased net annual costs of £1.59m and set-up costs of £5.98m. If the hoped-for benefits are realised, annually 604 tonnes net of CO2 equivalent would be saved, but the set up of the new system would emit 4,599 tonnes of CO2 equivalent.

### 3.3 Separate vehicles

This option involves a further increase in vehicle movements, but the vehicles are simpler, widely available refuse collection vehicles, with or without bin lift.

- The sorting is largely performed by the resident, who must be supplied with extra containers. As well as the existing black sacks for refuse and blue boxes for glass, residents would be supplied with a 44 litre box for cans, and two 140 litre wheeled bins, one for paper and cardboard and one for plastic containers. This means that the resident would have 6 containers in total (plus a small bag for batteries).
- Due to the operational difficulties of collecting 6 containers on a weekly basis, half the recyclables would be collected each week – in effect a fortnightly collection of the dry recyclables. This might mean some loss of recyclables, but that has not been factored in, as it is too difficult to quantify. The Council cannot collect refuse or food and garden waste on a fortnightly basis due to commitments it has given when accepting funding under the weekly collection support scheme and the Council's weekly collection policy.
- This option requires 4 vehicle passes each week by each household which is on the limit of operational viability, requiring careful scheduling by the contractor to ensure that roads are not congested with collection vehicles.
- However, because the collection requires no kerbside sorting, and the crews are only picking up one material at a time (though they do have to return containers), the collection can be quicker than the kerbside sort method above, so more properties can be covered in a round.
- This method would result in increased net annual costs of £2.35m and set up costs of £8.77m. If the hoped for benefits are realised, there may

be a saving of 931 tonnes of CO2 equivalent annually but the set-up could result in emissions of 8,773 tonnes of CO2 equivalent.

### 3.4 Partial Sorting

This method is a pragmatic compromise between full separation and the current commingled paper, cans and plastics. It is not recommended in the route map but is proposed as a possible local solution if absolutely necessary. As cans, plastics, and drinks cartons can be effectively and efficiently separated to quality standards at the MRF, and have been for many years, the most likely potential benefit (if any) would be from separating the paper and cardboard from the other recyclables earlier in the process.

- Residents would therefore be given a separate container – a wheeled bin – in which to place paper and cardboard for separate collection.
- To keep costs down, this would be collected fortnightly using an RCV with binlift. Again this may mean a small and difficult-to-quantify loss of material, which has not been factored into the calculations.
- All the other materials would continue to be collected in pink sacks on the onepass vehicle as they are now.
- This method would result in increased net annual costs of £0.59m and set up costs of £3.42m. If the hoped for benefits are realised, there may be a saving of 1,091 tonnes of CO2 equivalent annually but the set-up could result in emissions of 4,956 tonnes of CO2 equivalent.

## 4. Implications

### 4.1 Policy

Changing to one of the alternative systems is not in the current Council Waste Strategy, and would not address the Council's priorities set out in the corporate plan. It would be hoped that there would be an increased recycling rate by making such radical changes, but this may not be realised. The extra expense may have a detrimental effect on other services.

### 4.2 Resources and Risk

If the council were to adopt one of the separate collection systems above, there are large financial implications detailed above and so it is not recommended that the Council does this.

As the council would continue to be collect paper, cans and plastics commingled, there might be a risk of a legal challenge, see below

Assuming the recommendation is adopted the impacts are:

N	Capital	N	Revenue	N	Accommodation
N	IT	N	Medium Term Plan	N	Asset Management

### 4.3 Carbon and Energy Management

As detailed above, it would be hoped that, having spent a large amount of money to change a service, some carbon benefits could be realised, however, it is possible that no benefit would be obtained, as extra quality recyclable materials may not be achieved.

#### 4.4 Legal

- (a) Regulation 13 (1) of Waste (England and Wales) Regulations 2011 states that from 1st January 2015, all Waste Collection Authorities will be required to collect paper, metals, plastics and glass separately, where doing so is:
- (i) technically, environmentally and economically practicable; and
  - (ii) appropriate to meet the necessary quality standards for the relevant recycling sectors.
- (b) Regulation 13 (2) clarifies co-mingled collection would amount to separate collection where the collection together with each other but separately from other waste of waste streams intended for recycling with a view to subsequent separation by type and nature is a form of separate collection.
- (c) There is a slight risk of legal challenge if the Council's (or its Provider's) separation and recycling process is not sufficiently robust to achieve required separation. However, this will need to be balanced with the TEEP test, provided under the Regulations and the European Commission's guidance that economically practicable refers to a separate collection which does not cause excessive costs in comparison with the treatment of a non-separated waste stream, considering the added value of recovery and recycling and the principle of proportionality.
- (d) If the Council decides not to change to separate waste collection for different types of waste material due to prohibitive costs, it should undertake a further review in the following circumstances:
- (i) At the end of the collection contract;
  - (ii) At end of waste disposal/treatment/recycling contract;
  - (iii) At the end of the useful life of the current fleet (if applicable).

#### 4.5 Other Implications

To change to an alternative separate collection system would require a large communications exercise. The cost of this has been factored in. All separate collection options would require residents to find extra space for more containers and to change their behaviour.

N	Equalities/Diversity	Y	Sustainability	N	Human Rights
N	E-Government	Y	Stakeholders	N	Crime and Disorder

Background Papers: TEEP and Waste Hierarchy Compliance Assessment Document