## TO: JOINT WASTE DISPOSAL BOARD $9^{\text {th }}$ June 2022

## Re3 WASTE PARTNERSHIP REPORT <br> Report of the re3 Project Director

## 1 INTRODUCTION

1.1 This report accompanies presentations, made to the re3 Board by Officers and the Contractor, on the following items:

- Social Value delivered through the re3 contract
- Climate Change progress achieved
- Waste composition and potential financial benefits


## 2 RECOMMENDATION

2.1 That Members note the contents of this report and accompanying presentations.

## 3 ALTERNATIVE OPTIONS CONSIDERED

3.1 None for this report.

4 REASONS FOR RECOMMENDATION
4.1 The purpose of this report is to brief Members, in accompaniment to presentations to the re3 Board, in relation to three strategically important aspects of the councils' shared waste contract.

5 PROGRESS IN RELATION TO WASTE MANAGEMENT

## Social Value

5.1 The Public Services (Social Value) Act came into force in 2013. It encourages public sector procuring organisations to seek a wider range of benefits through service provision. Specifically, local government has a duty to have regard for economic, social and environmental wellbeing through public service contracts. Since 2018, Social Value has been part of the evaluation process for large Government Contracts.
5.2 The concept of social value was not explicitly recognised during the award of the re3 contract. However, the service is largely focused on local provision and, with the support of the Contractor, FCC, it has been possible to evaluate the social value from the re3 Contract.
5.3 The Contractor has commissioned Thrive, a social value consultancy, to assist in quantifying the social value delivered through its contracts, including re3. The Thrive approach is fully aligned with the UK Government Social Value Model. As a result, the results can be confidently included within any statutory reporting.
5.4 The Contractor and Thrive worked together to select, from the Government model, the indicators that are applicable to the re3 contract. They are as follows:

- Tackling Economic Inequality
- Supply Chain Resilience
- Fighting Climate Change
- Wellbeing
5.5 In accordance with the Government rated values for the above example activities, Thrive and FCC calculated that the social value derived from the re3 Contract amounts to $£ 18,911,007$ per annum.
5.6 It represents a significant amount of inward investment, reflecting the shared nature of the contract and how the scale of working together can increase impacts.
5.7 The reporting of social value will be included in future reporting to the re3 Board. It may also be possible, as above, to utilise the Thrive and FCC calculations in assessing service changes and/or future developments within the re3 Contract.


## Climate Change

5.8 At the re3 Board meeting on $3^{\text {rd }}$ March 2022, officers reported that the re3 arrangements, over a 7 -year period since 2015, had made considerable progress in reducing the climate impact of waste treatment.
5.9 Officers explained that further work would be undertaken, to incorporate important associated activities, such as haulage and energy usage. That work, with contributions from the Contractor, has now been progressed.
5.10 The updated information includes the use of oil and diesel average amount of $\mathrm{CO}^{2} \mathrm{e}$ (equivalent) emitted as a result of waste treatment in the re3 area has reduced from 117 kg to 53 kg (each per tonne of waste treated).
5.11 Table 1, below, shows how the combined activities and treatments contribute towards the overall climate change impact from managing, principally household, waste in the re3 area.

Table 1-re3 CO2 Emmissions (kg/t)

|  | $2015 / 2016$ | $2016 / 2017$ | $2017 / 2018$ | $2018 / 2019$ | $2019 / 2020$ | $2020 / 2021$ | $2021 / 2022$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Recycling - Co2 | 821,463 | 766,014 | 741,979 | 769,397 | 754,621 | 785,098 | 878,133 |  |
| Composted - Co2 | 235,481 | 295,222 | 229,655 | 217,306 | 225,227 | 223,865 | 231,054 |  |
| Energy Recovery - Co2 | $1,533,030$ | $1,555,541$ | $1,882,646$ | $1,640,358$ | $1,691,299$ | $1,857,388$ | $1,556,676$ |  |
| Landfilled-Co2 | $20,309,790$ | $16,828,278$ | $9,765,432$ | $13,473,672$ | $9,963,145$ | $7,662,259$ | $4,659,573$ |  |
| Beneficial Use - Co2 | 11,228 | 8,131 | 2,139 | 1,820 | 1,580 | 1,266 | 1,708 |  |
| Food Waste - Co2 | 0 | 0 | 0 | 0 | 46,125 | 71,949 | 179,143 |  |
| Street Sweepings - Co2 | 172,997 | 312,295 | 332,499 | 329,373 | 366,306 | 322,554 | 275,294 |  |
| Passthrough - Co2 | 305,379 | 266,931 | 220,486 | 201,646 | 117,708 | 80,516 | 95,716 |  |
| Total Waste Kg Co2e | $23,389,369$ | $20,032,412$ | $13,174,836$ | $16,633,572$ | $13,166,010$ | $11,004,895$ | $7,877,295$ |  |
| Fuel - Gas oil | 396,255 | 386,503 | 336,373 | 336,248 | 333,006 | 312,849 | 367,059 |  |
| Freight - Diesel | 0 | 0 | $1,229,401$ | 874,693 | 826,780 | 887,403 | $1,359,402$ |  |
| Total Kg Co2e | $23,785,624$ | $20,418,915$ | $14,740,610$ | $17,844,512$ | $14,325,796$ | $12,205,147$ | $9,603,756$ |  |
|  |  |  |  |  |  |  |  |  |
| Total Co2 Kg Emmsions |  |  |  |  |  |  |  |  |
| per Tonne of waste | 117.80 | 103.47 | 81.11 | 100.02 | 80.40 | 66.69 | 53.43 |  |

N.B. Diesel Figures for 2015/2016 and 2016/2017 not available
5.12 The three councils have had some success, over many years, in reducing the amount of landfill utilised. That has been greatly helped, more recently, by the inclusion with the re3 arrangements of food waste processing - it's influence can be seen from 2019 onwards.
5.13 Diverting more waste away from landfill and energy from waste (EFW) is achievable. This will require the councils to make their existing waste collections (for food and recyclables) even more effective.
5.14 The use of fuel has been added to the data in Table 1 since the last meeting. The level of haulage needed, in managing waste from the re3 area, will be challenging to address. The UK does not have enough waste treatment capacity - most importantly for recycling - at present. The re3 arrangements use very little non-UK treatment but moving waste around the country inevitably means using heavy good vehicles (HGV). This is an area for further consideration.
5.15 Officers will continue to monitor and report this information, so it can be used to support decision-making.

## Waste Composition and Potential Financial Benefits

5.16 The re3 Project Team recently commissioned an analysis of the residual waste generated by residents in the re3 area. The analysis identifies the amounts of recyclable material that remain within waste for disposal, which is collected from residents. The results of the analysis are shown in Table 2, below.

Table 2 - Waste Composition Analysis Results (per council) and estimate of annual tonnage

| Residual Waste Composition (\%) |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Material | RBC | BFBC | WBC | Avg |
| News \& Pams | 1.64 | 1.07 | 0.73 | 1.15 |
| Mixed Paper | 5.62 | 5.37 | 4.76 | 5.25 |
| Card | 5.58 | 2.12 | 3.39 | 3.69 |
| Ali Cans | 0.74 | 0.89 | 0.70 | 0.78 |
| Steel Cans | 1.03 | 0.64 | 0.36 | 0.67 |
| PET Clear | 2.20 | 4.41 | 1.41 | 2.67 |
| PTT / Mixed Plastic | 1.24 | 1.01 | 1.30 | 1.18 |
| HDPE Clear | 0.20 | 0.21 | 0.24 | 0.22 |
| HDPE Jazz | 0.23 | 0.19 | 0.18 | 0.20 |
| Tetrapak | 0.30 | 0.36 | 0.17 | 0.28 |
| Metals (non cans) | 0.93 | 2.62 | 2.76 | 2.11 |
| Textiles | 2.48 | 4.70 | 7.39 | 4.86 |
| WEEE | 2.18 | 2.05 | 2.01 | 2.08 |
| Foil | 0.42 | 0.39 | 0.20 | 0.34 |
| Glass Bottles | 5.31 | 5.08 | 4.62 | 5.01 |
| Wood | 0.91 | 1.88 | 1.38 | 1.39 |
| Food Waste | 27.43 | 19.16 | 20.71 | 22.43 |
| Garden Waste | 9.24 | 9.67 | 4.44 | 7.78 |
| Nappies | 6.70 | 10.23 | 6.98 | 7.97 |
| Plastic Film / Bags | 8.26 | 7.30 | 7.49 | 7.68 |
| Other | 17.36 | 20.65 | 28.76 | 22.26 |
| Total | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 0 0 . 0 0}$ |


| Tonnage 22/23 |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| RBC | BFBC | WBC | re3 Total |  |
| 406 | 186 | 196 | 788 |  |
| 1,388 | 927 | 1,277 | 3,593 |  |
| 1,378 | 366 | 908 | 2,652 |  |
| 183 | 154 | 188 | 525 |  |
| 255 | 110 | 96 | 461 |  |
| 543 | 762 | 378 | 1,684 |  |
| 305 | 174 | 349 | 829 |  |
| 51 | 36 | 64 | 150 |  |
| 57 | 33 | 48 | 138 |  |
| 74 | 63 | 47 | 184 |  |
| 231 | 452 | 741 | 1,424 |  |
| 613 | 812 | 1,982 | 3,407 |  |
| 539 | 354 | 539 | 1,432 |  |
| 103 | 67 | 54 | 224 |  |
| 1,312 | 878 | 1,240 | 3,430 |  |
| 224 | 325 | 370 | 919 |  |
| 6,779 | 3,309 | 5,553 | 15,641 |  |
| 2,282 | 1,670 | 1,191 | 5,143 |  |
| 1,656 | 1,768 | 1,871 | 5,295 |  |
| 2,041 | 1,260 | 2,009 | 5,311 |  |
| 4,289 | 3,568 | 7,713 | 15,569 |  |
| $\mathbf{2 4 , 7 1 0}$ | $\mathbf{1 7 , 2 7 4}$ | $\mathbf{2 6 , 8 1 4}$ | 68,798 |  |

5.17 The left-hand block in the table above illustrates the different types of material within residual waste, and their relative proportions (as a \% of overall weight). The right-hand block estimates the likely tonnage of each type, for 2022/23, based on the composition data.
5.18 The coloured rows (light-blue, pink and green), each represent a missed opportunity. In each case they are waste types which were present within residual waste, for disposal, even though they can be recycled via council collections or the HWRCs.
5.19 The bottom three, coloured, rows (grey) represent waste streams for which no current alternative to disposal exists. Further work will be undertaken to seek alternative treatments. In the case of 'Plastic Film/Bags' we know that it will become a requirement for this stream to be recycled by 2026/27.
5.20 There remain significant amounts of recyclable material available. Presented as in the table above, the overall amounts are as follows:

| Category | RBC | BFC | WBC |
| :--- | :---: | :---: | :---: |
| Collectable from residents <br> (t/pa) | 14,217 | 8,684 | 13,660 |
| Deliverable by residents (t/pa) | 224 | 325 | 370 |
| Collectable from or Deliverable <br> by residents (t/pa) | 2,282 | 1,670 | 1,191 |
| Total (t/pa) | $\mathbf{1 6 , 7 2 4}$ | $\mathbf{1 0 , 6 7 8}$ | $\mathbf{1 5 , 2 2 1}$ |

5.21 The re3 Project Team and Contractor, FCC, have undertaken further analysis of the composition data, to reflect the above results in a financial context.
5.22 The value to the councils, if all the above waste streams were recycled, and disposal costs were avoided, is assessed to be $£ 3.31 \mathrm{~m}$.
5.23 The value to the councils, if some of the above waste streams, having been diverted from disposal, were sold at current market rates is assessed to be $£ 1.69 \mathrm{~m}$.
5.24 Accordingly, the unrealised value for the re3 partnership, currently lost via residual waste, is assessed to be $£ 5.00 \mathrm{~m}$ per annum ( $£ 3.31 \mathrm{~m}+£ 1.69 \mathrm{~m}$ ).
5.25 The re3 Project Team and Contractor will work with the respective council teams to support the greater capture of recycling, and to accurately target and measure savings.
5.26 A further composition analysis will be scheduled for 2023.

## 6 ADVICE RECEIVED FROM ADMINISTERING AUTHORITY

## Head of Legal Services

6.1 None for this report.

Corporate Finance Business Partner
6.2 None for this report.
Equalities Impact Assessment
6.3 None.
Strategic Risk Management Issues
6.4 None
Climate Impact Assessment
6.5 None.
7 CONSULTATION
7.1 Principal Groups Consulted
Not applicable.
7.2 Method of ConsultationNot applicable.
7.3 Representations Received
Not applicable.
Background Papers
None for this report
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