

**WASTE OPTIONS REPORT - RECYCLING MORE IN MID DEVON**

**Cabinet Member(s):** Cllr Colin Slade, Cabinet Member for the Environment  
**Responsible Officer:** Darren Beer Interim Group Manager – Street Scene and Open Services

**Reason for Report:** This report reviews the need to increase recycling in the District in line with government guidelines to recycle 65% of household waste by 2035 and Devon's proposed 60% target rate by 2025. This report describes possible options for future Waste and Recycling collection arrangements following a review carried out by WYG Consultancy. If considered, then a trial can take place to ascertain viability.

**Recommendations: That the PDG reviews the information in this report for Cabinet to resolve:**

- 1. To consider the options in the report**
- 2. To give authority for the service to complete a trial to a limited number (around 1000) of households for a minimum three months**

**Financial Implications:** There will be cost savings/implications depending on the option considered. These savings/implications are based on modelling but will not be fully quantifiable until a trial is complete. However, initial modelling performed by WYG indicated potential annual savings of circa £143K in collection costs from a move to three weekly residual collection using containers. There would be a potential increase in recycling credits circa £67K due to the increase tonnage in dry recyclables and food waste captured. Due to this increased tonnage, material income could go up by £68K, but the volatility of the current market also needs to be considered.

**Budget and Policy Framework:** None directly in terms of the Council's Policy framework. There will be budget implications with regards any potential change in service, which can more accurately be ascertained following a trial. These may have both revenue and/or capital implications depending on which decision is taken.

**Legal Implications:** Under Section 46 of the Environmental Protection Act Waste Collection Authorities may by means of notice specify how householders present their waste for collection.

**Risk Assessment:** A register of risks will be compiled as part of a trial if authorised. Each of the options present a different risk, including; carbon emissions, carbon footprint, impact of operational costs and other resources required.

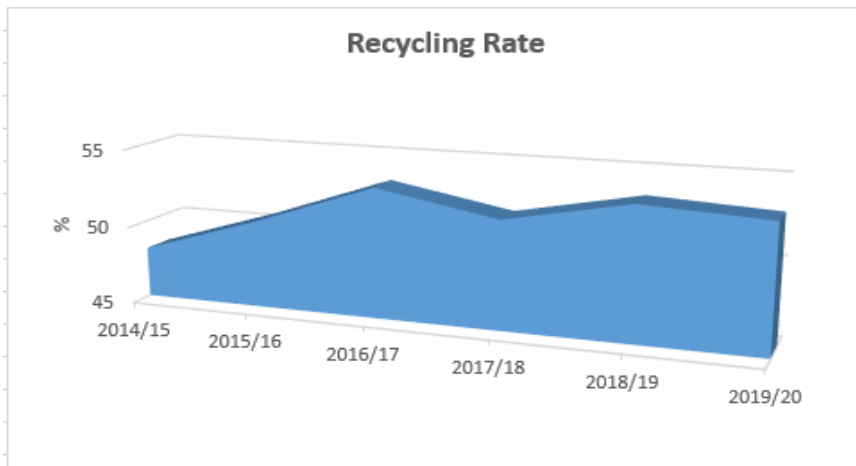
**Equality Impact Assessment:** The service will continue to provide assisted collections according to the current policy; considerations for residents residing in HMOs, flats and properties with no outside space will be included in the project plan if a trial is approved. We will also learn from the other councils who have successfully implemented strategic changes to their waste collections operations.

**Relationship to Corporate Plan:** This report identifies with the 'Environment' priority area of the Corporate Plan for 2020-2024 *'increase recycling rates and reduce the amount of residual waste generated'*.

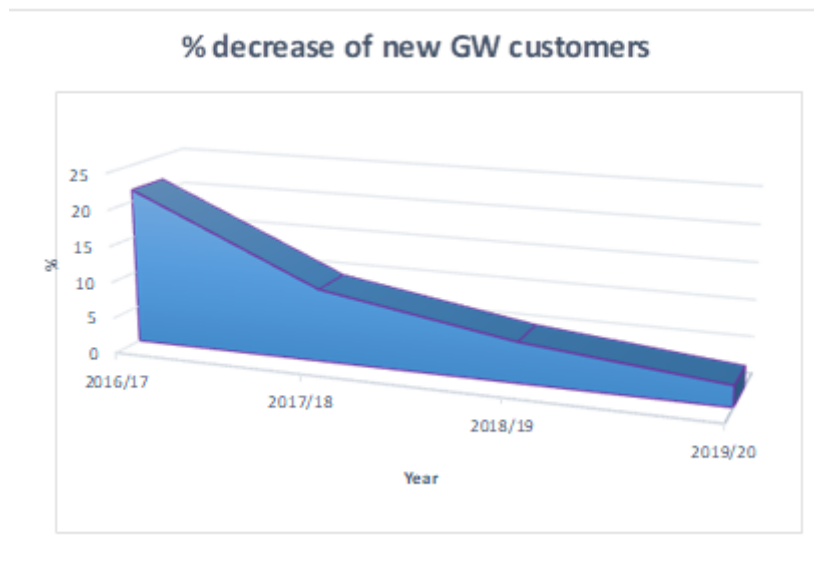
**Impact on Climate Change:** The impact on carbon emissions is detailed in the report. There are opportunities to reduce the current carbon footprint. MDDC made a decision in June 2019 to become carbon neutral by 2030.

## **1.0 INTRODUCTION/BACKGROUND**

- 1.1 The current household refuse service consists of fortnightly residual waste (black sacks), fortnightly dry recycling (green and black boxes), opt in chargeable fortnightly garden waste collections (brown wheeled bins and sacks) and weekly food waste (blue caddy). The service was last reviewed and updated in 2015 which helped deliver 20% savings in the cost of the service and deliver better performance in both the recycling rate and tonnages of waste produced. There has been no proposed change in frequency for garden or food waste in this report.
- 1.2 On week 1, residual waste is collected and food is collected on the same vehicle as dry recycling. On week 2, food is collected in a split bodied vehicle alongside garden waste. Over a fortnightly cycle there are 32 garden and food routes; 44 residual and 96 dry recycling and food routes. Some householders use wheel bins for residual waste, others use bags. The only stipulation requires householders to contain waste within a bag if they use a traditional dustbin. At present there is no restriction on the amount of residual waste that can be presented for collection as long as the contents can be described as 'household waste'.
- 1.3 The most recent review of waste and recycling collections took place during October 2015 with the introduction of weekly food and chargeable garden waste collections; this facilitated a significant positive effect on the recycling rate achieved by Mid Devon District Council residents. The move away from depositing waste in landfill to energy from waste has also been a step forward for Mid Devon.
- 1.4 The graph below illustrates a slight decrease in the recycling rate since 2016/17 the year after the new scheme was introduced.



1.5 The number of garden waste customers is increasing every year with a high percentage of existing customers renewing subscriptions. The rate at which we are gaining new customers is declining. New customers are most likely to be occupants of new builds; this is a limited number of subscriptions therefore this aspect of the service cannot be relied upon to have a hugely noticeable effect on the recycling rate in the future.



1.6 Waste arisings encompass all waste types put out for collection by residents; reducing waste arisings involves encouraging residents to think about prevention and reuse primarily as illustrated in the waste hierarchy.



- 1.7 Mid Devon residents perform well in this area, however the decrease since 2016/17 is minimal. If residents continue to be able to present unlimited amounts of residual waste for collection the annual tonnage is likely to plateau; this would limit the options for route optimisation and the ability to create operational savings as well as present little opportunity to improve the carbon footprint attributed to the service.
- 1.8 The MDDC Refuse Service Carbon Model Report (WYG Consultants) indicates a current carbon footprint of 550.14 tCO<sub>2</sub>eq attributed to collection vehicles. Continuing to provide waste and recycling collections in its current format will increase the carbon footprint as new housing developments are added to routes. Collecting waste from large housing estates may not add considerable mileage to routes however idling vehicles can release carbon emissions in equal measure to a moving vehicle. Any increase to the baseline will need to be offset in the interest of MDDC's declaration of 'Climate Emergency'. However it should be mentioned that the vehicle replacement programme will introduce cleaner more energy efficient vehicles to the fleet over the coming years.
- 1.9 Current arrangements state that residents may present residual waste at collection points in a receptacle of their choice, if this is a dustbin or similar, the contents must be contained within a sack. If a resident uses a wheeled bin capable of fitting on the bin lift, the contents may be loose. The amount of residual waste a resident may present for collection is not limited. Without providing residents with a receptacle of limited capacity it would be impossible to measure or reduce the amount of waste presented for residual collections. As discussed previously a limitless approach to residual waste allowance has an adverse effect on waste arisings. A reduction in waste arisings is key to increasing the recycling rate and crucial to reducing carbon footprint. Providing a wheeled bin (180L) would limit the amount of residual waste a resident may present for collection; it would also highlight those residents who would benefit from waste education indicated by the presence of side waste. This would result in a targeted approach to education and enforcement.

## 2.0 OPTIONS AVAILABLE

Option	Residual	Garden	Food	Recycling	Residual Waste Containment
Option 1	3 Weekly	Chargeable – 2 Weekly	Weekly	2 Weekly	Residents receptacle/sacks
Option 2	3 Weekly	Chargeable – 2 Weekly	Weekly	2 Weekly	180L Wheeled Bin (provided)
Option 3	3 Weekly	Chargeable – 2 Weekly	Weekly	Weekly	180L Wheeled Bin (provided)
Option 4*	2 Weekly	Chargeable – 2 Weekly	Weekly	2 Weekly	Residents receptacle/sacks

\*Current arrangements

### 2.1 Option 1

- Enable residents to contribute to sustainability

- Potential annual saving in collection costs, circa £143K
- Offers the opportunity to reduce the current carbon footprint for waste collection vehicles from 550.14 tCO<sub>2</sub>eq to 323.50 tCO<sub>2</sub>eq
- 17.4% increase in kerbside recycling tonnage
- Increase in material (circa £68K) and recycling credit (circa £67K) income
- Up to an extra 21% in food waste collected
- There will be a reduction in residual waste per household tonnage but this is unclear due to unlimited allowance of using black sacks, which may impact the increase in kerbside recycling tonnage

## 2.2 Option 2

- Enable residents to contribute to sustainability
- Potential annual saving in collection costs, circa £143K
- Offers the opportunity to reduce the current carbon footprint for waste collection vehicles from 550.14 tCO<sub>2</sub>eq to 323.50 tCO<sub>2</sub>eq
- 17.4% increase in kerbside recycling tonnage
- Increase in material (circa £68K) and recycling credit (circa £67K) income
- Up to an extra 21% in food waste collected
- A 15.7% reduction in residual waste tonnage
- Identify households who would benefit from waste education
- Provide containment for residual waste
- Contribute to a clean and tidy neighbourhood
- Requires the provision of a 180L wheeled bin to households; the one-off expected cost for supply and delivery of these containers is £900,000

## 2.3 Option 3

- Enable residents to contribute to sustainability
- Increased operational costs of circa £952K, therefore no round savings
- Increase in material income, circa £20K and recycling credit income, circa £20K above two weekly recycling
- Potential increase of around 80 tCO<sub>2</sub>eq in carbon footprint due to the introduction of weekly recycling requiring additional fleet and increased fuel compared to two weekly recycling
- The assumption made by WYG Consultants is that a weekly collection of recycling would only decrease the residual tonnage collected by 4% and increase the recycled tonnage collected by 4.5%
- Requires the provision of a 180L wheeled bin to households; the one-off expected cost for supply and delivery of these containers is £900,000

## 2.4 Option 4

- A continuation of the current regime for waste & recycling collections will not enable progression towards the aspirations of the Corporate Plan 2020-2024
- Limits opportunity to increase recycling rate, reduce waste arisings, further operational savings; carbon emissions increase (new developments being added to current rounds) and therefore will need to be offset
- Would incur no additional costs however this option provides limited opportunity for operational savings or provision to increase the recycling credit or material income
- Does not provide an opportunity to reduce carbon emissions

- 2.5 East Devon uses an additional coloured reusable sack for cans and plastic due to the increase in recycling. The costs of providing the additional sacks would be in the region of £2 per household including delivery, equating to circa £70,000 as a one-off capital payment.
- 2.6 The WYG report is based on authorities already on a three weekly regime. WYG figures for recycling credits are based on a part year factual and remainder forecast and material income is based on data provided from June-July 2019.
- 2.7 Other options have been considered but not included in this report. This includes four weekly waste collections. Currently very few authorities use this collection frequency. There could be benefits with regards the carbon footprint and increased tonnage of recycled waste collected (up to 11.5%) but needs to be balanced against potential costs of moving to weekly recycling.
- 2.8 Any movement of waste from the residual waste stream to recycling would save DCC as the disposal authority money and be passed onto MDDC through the shared saving agreement (which runs until 2026). However, there may be no increase in this level of payment under the shared savings agreement for future changes, although there will be in terms of recycling credits for increases in tonnes recycled. The 2019-2020 figure is £340K, up £12K from the previous year. Figures for the three weekly options have not been currently modelled.

### 3.0 WHAT OUR NEIGHBOURS ARE DOING

- 3.1 There are now a number of authorities that have moved to three weekly residual waste collections across England, Scotland and Wales with Bury being one of the first to move to this regime back in 2014. There are now a number of authorities, especially in Wales and Scotland that have moved to three weekly collections. There are also a number of authorities that have trialled or are now completing this frequency as described in the following paragraphs.

April 2019 - March 2020				
Authority	Residual H/H Waste per H/H (Kg)	Percentage HH waste sent for Reuse, Recycling or Composting	Percentage of food & garden waste	Kg's of total waste arisings per H/H
East Devon District Council	251.73	60.5%	27.93%	635.50
Teignbridge District Council	341.46	56.3%	30.28%	774.49
South Hams District Council	333.90	54.4%	32.71%	725.85
Torridge District Council	339.17	54.1%	30.88%	738.59
West Devon Borough Council	310.68	53.7%	27.10%	665.27
Mid Devon District Council	365.00	53.1%	29.83%	768.61
North Devon District Council	409.66	49.5%	27.22%	808.37
Exeter City Council	460.31	26.1%	9.34%	620.78

Note: Recycling rates for 2019-2020 show an average increase of 0.6% increase over figures for 2018-2019.

- 3.2 Somerset have successfully completed a three weekly residual waste collection trial in the County. This is now being rolled out across the County, with Phase 1 beginning in Mendip and Phase 4 rolling out in the West Somerset area in early 2022.

- 3.3 East Devon District Council operate a waste collection service where residual waste is collected every three weeks using wheeled waste bins and recycling weekly. The main aim being to “offer residents a more sustainable method of recycling and waste collection that looks to the future and benefits the environment” (Cllr Iain Chubb EDC). For the year 2019/20 East Devon waste arisings per household were 17.32% less than in Mid Devon with a recycling rate of 60.5% the 9<sup>th</sup> highest performing Waste Collection Authority nationally (provisional figures used). 307kg of waste per head was collected in East Devon with 342kg per head collected in Mid Devon. It can be argued that the extra recycling material captured at this frequency is not enough to warrant the additional operational costs and negative impact on carbon emissions.
- 3.4 South Hams and West Devon have historically been high performers, with South Hams achieving its highest rate (57.9%) in 2008/09, and West Devon (59.9%) in 2011/12. Rates for both authorities subsequently stabilised and remained static. However, these South West Devon partners are in the process of introducing new services with the South Hams ‘Super Recycler Service’ launching in 2021 to include new kerbside materials, food waste collected weekly, fortnightly residual and garden waste. In West Devon, three weekly residual collection trials are underway to also support weekly recycling and food waste collections.
- 3.5 Torbay, achieving its highest performance in 2012/13 (44.7%) is also improving services with planning underway for a three weekly residual waste trial in the New Year following in the footsteps of East Devon.
- 3.6 North Devon and Torridge showed the greatest annual (2019/20) increase in recycling rate as an outcome of new waste services for residents. This broke a period of static performance over recent years. North Devon are currently conducting a three weekly residual waste collection trial.
- 3.7 Districts in Devon are working towards the aspirations of the Joint Resource and Waste Management Strategy for Devon (2020-2030) which proposes a 60% recycling rate target by 2025. In order for this to be achievable new initiatives are being introduced sooner rather than later.
- 3.8 There are very few authorities (Falkirk and Conwy) that have implemented four weekly collections. None of our neighbouring authorities have opted for this collection frequency.

#### **4.0 PREDICTIONS**

- 4.1 WYG consultants predict a 15.73% reduction in residual waste per annum if three weekly collections were to be rolled out to Mid Devon residents along with the capacity limitations of a 180L wheeled bin; this figure is based on the performance of authorities who already have three weekly collections in place. Recycling is predicted to increase by 17.43%. Applying these predictions to 2019/20 tonnages the kerbside recycling rate achieved could be 8% higher than currently being achieved.

4.2 A trial in a rural and urban area would test the predicted financial; operational and environmental benefits. Areas would be chosen to best reflect the effect on collections in the district as a whole; measure resident's appetite for the change; identify operational issues encountered and the effect on tonnages, recycling rate, material and recycling credit income.

## **5.0 CONCLUSION**

5.1 Although the recycling rate has been set at 65% by 2035 we need to be prepared for any changes in government policy. Wales have already set recycling targets of 70% by 2025.

5.2 That the Committee review the options put forward.

5.3 That the results of a trial would form part of an officer report submitted to the Committee to ascertain whether this should then be rolled out across the authority.

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**Circulation of the Report:** Cllr Colin Slade, Leadership Team