Surrey Environment Partnership performance – Q2 2020/21

Introduction

This report provides a summary of the latest waste management performance for the Surrey Environment Partnership (SEP).

Unless otherwise stated, this report looks at performance in the period up to and including Q2 2020/21 (i.e. up to and including the 3-month period Jul-Sep 2020).

Tonnages collected

Tonnages are reported here in terms of the amount of material collected from the kerbside for the four main waste streams; dry mixed recycling (DMR), food waste, garden waste and residual waste. For DMR, the report also shows the amount of this material which is actually recycled, allowing for material which is contaminated (i.e. which cannot be recycled). For garden waste and residual waste only, tonnages of material collected at the Community Recycling Centres (CRCs) are also reported, as these make up a significant proportion of the overall total tonnage.

The trend is presented here in terms of the *Moving Annual Average (MAA)*. The MAA for any given quarter is the rolling average of the most recent four quarters, including that quarter. This therefore removes any seasonality in the data, and enables us to track the trend in performance each quarter on a rolling basis.

Dry mixed recycling – kerbside collections

Table 1 below shows the quarterly tonnages from Q1 2018/19 to Q2 2020/21 for dry-mixed recycling, including the proportions of this which are recycled and not recycled.

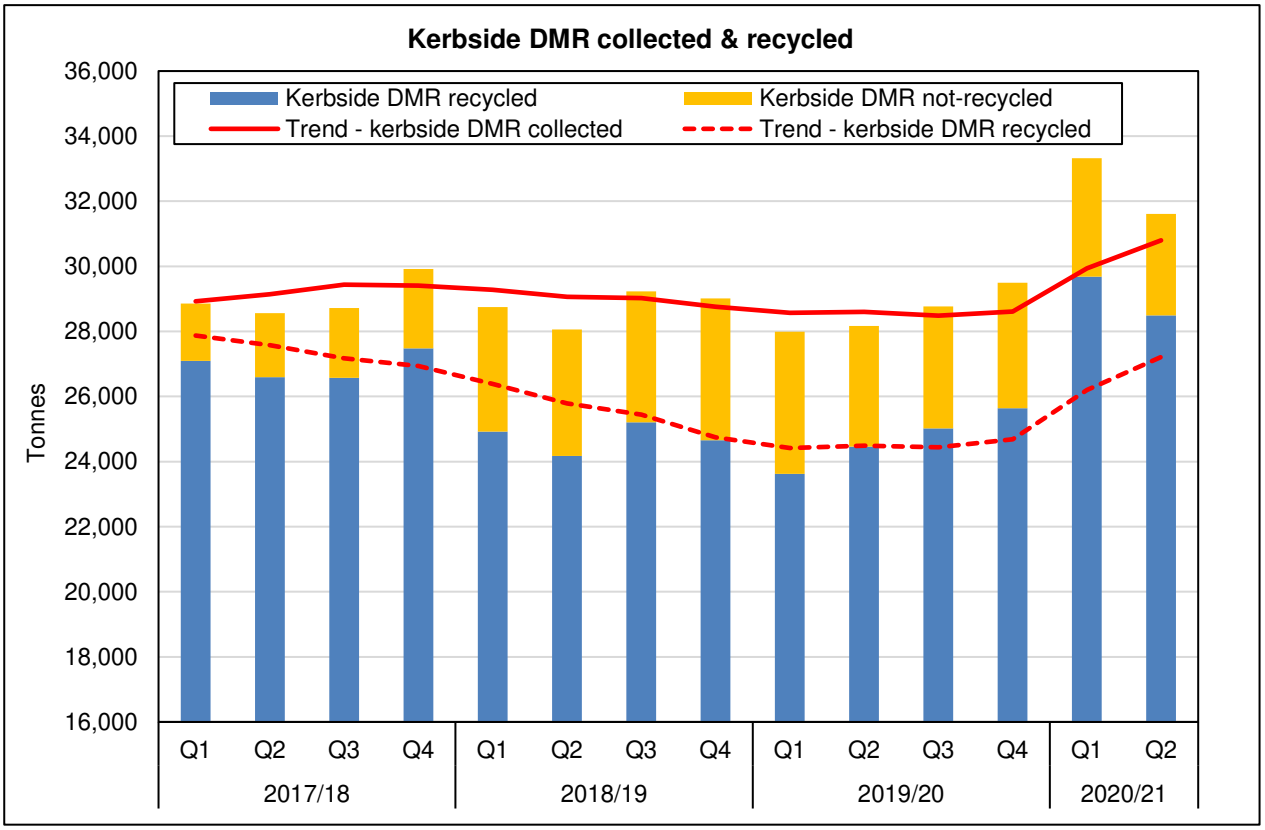
Table 1: DMR tonnages collected and recycled, Q3 2018/19 – Q2 2020/21

	2018/19				2019/20				2020/21		Trend (MAA)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1 2020/21	Q2 2020/21
Dry mixed recycling – kerbside collections												
DMR collected	28,747	28,055	29,230	29,009	27,988	28,170	28,769	29,496	33,317	31,609	29,938	30,798
DMR recycled	24,924	24,048	25,209	24,658	23,621	24,457	25,018	25,640	29,680	28,496	26,199	27,208
% recycled	86.7%	85.7%	86.2%	85.0%	84.4%	86.8%	87.0%	86.9%	89.1%	90.2%	87.4%	88.3%
Not-recyclable	3,824	4,006	4,020	4,352	4,367	3,713	3,751	3,856	3,637	3,112	3,739	3,589
% not-recycled	13.3%	14.3%	13.8%	15.0%	15.6%	13.2%	13.0%	13.1%	10.9%	9.8%	12.6%	11.7%

"Trend" is the Moving Annual Average (i.e. the average of the most recent four quarters)

Chart 1 below shows kerbside dry mixed recycling (DMR) tonnages collected and recycled from Q1 2017/18 to Q2 2020/21.

Chart 1: DMR tonnages collected and recycled, Q1 2017/18 – Q2 2020/21



Note: Vertical axis is truncated.

Prior to Q4 2019/20, the long-term trend in DMR tonnages since 2016/17 has been generally downwards, although this trend did level out to some extent during 2019/20. This was in respect of both the amount collected at the kerbside and the amount of this material which is then actually recycled. The proportion of material which is considered to be non-recyclable is called the *contamination rate*.

Since the beginning of 2020/21, the introduction of restrictions related to Covid-19 has meant that many residents have spent more time at home. As a consequence, tonnages have seen a significant increase in both Q1 and Q2, particularly Q1 when there was a national lockdown in place. As shown in Table 1 and Chart 1 above, the latest quarterly trend is therefore showing a substantial increase in the DMR tonnage both collected and recycled in both Q1 and Q2. SEP Officers have been monitoring the impact on services of having to manage higher tonnages across all main kerbside collections throughout this period.

All authorities have seen increases in tonnages collected this quarter, with Reigate & Banstead, Elmbridge, and Guildford having seen the largest increases in their trend.

As stated above, the overall contamination rate is defined here as the proportion of DMR that has been collected as DMR but has then not been recycled at a Material Recovery Facility (MRF). This includes both rejected loads (either full or partial loads which are rejected on arrival at the MRF) and MRF contaminants (material which is processed by the MRF but which is considered to be non-recyclable).

The *MRF contamination rate* represents the proportion of DMR material which has passed through the MRF but which has not been recycled. This takes into account material which is considered to be "non-target" but which is recycled nevertheless. "Target" materials are those materials collected by an authority for which the MRF tells the authority that material can be recycled. "Non-target" materials are materials which are not considered to be acceptable by the MRF, but which can still be recycled, for example, plastic bags.

Different MRFs will have different criteria for which materials they consider to be "target" or "non-target". It is also possible that a single MRF will apply different criteria for different authorities, depending on what has been agreed between the MRF and whoever is managing the material.

It should be noted that materials which are considered to be contaminants at the MRFs change over time, based on the current conditions of the material markets. Although contamination rates were already increasing prior to this time, since the beginning of 2018 more stringent criteria have been in place at the MRFs which have resulted in an increase in the overall contamination rate. This has at least partly been due to the status of the markets for the material, particularly overseas markets, which have dictated that the quality of material which could be accepted has needed to be of a higher grade. There is no evidence to suggest that any of the increase in contamination has been due to a change in resident behaviour, although this is of course possible.

As shown in Table 1 above, the overall contamination rate has improved marginally in the first two quarters of 2020/21, with a reduction of 0.9 percentage points in the trend between Q1 and Q2.

MRF contamination rates provide an indication of the contamination rates by MRF and the variation within that between different authorities. We would expect to see a variation in contamination rates by MRF, due to different constraints around the quality of material that is and is not deemed acceptable. For any given MRF however, it is reasonably likely that variations between authorities do represent real differences in the quality of material being collected at the kerbside.

Contamination levels are currently highest in Tandridge and Guildford. The contamination rates for Elmbridge, Mole Valley and Woking have seen the greatest reduction in the first two quarters of 2020/21.

Food waste

Table 2 below shows the quarterly tonnages from Q1 2018/19 to Q2 2020/21 for food waste.

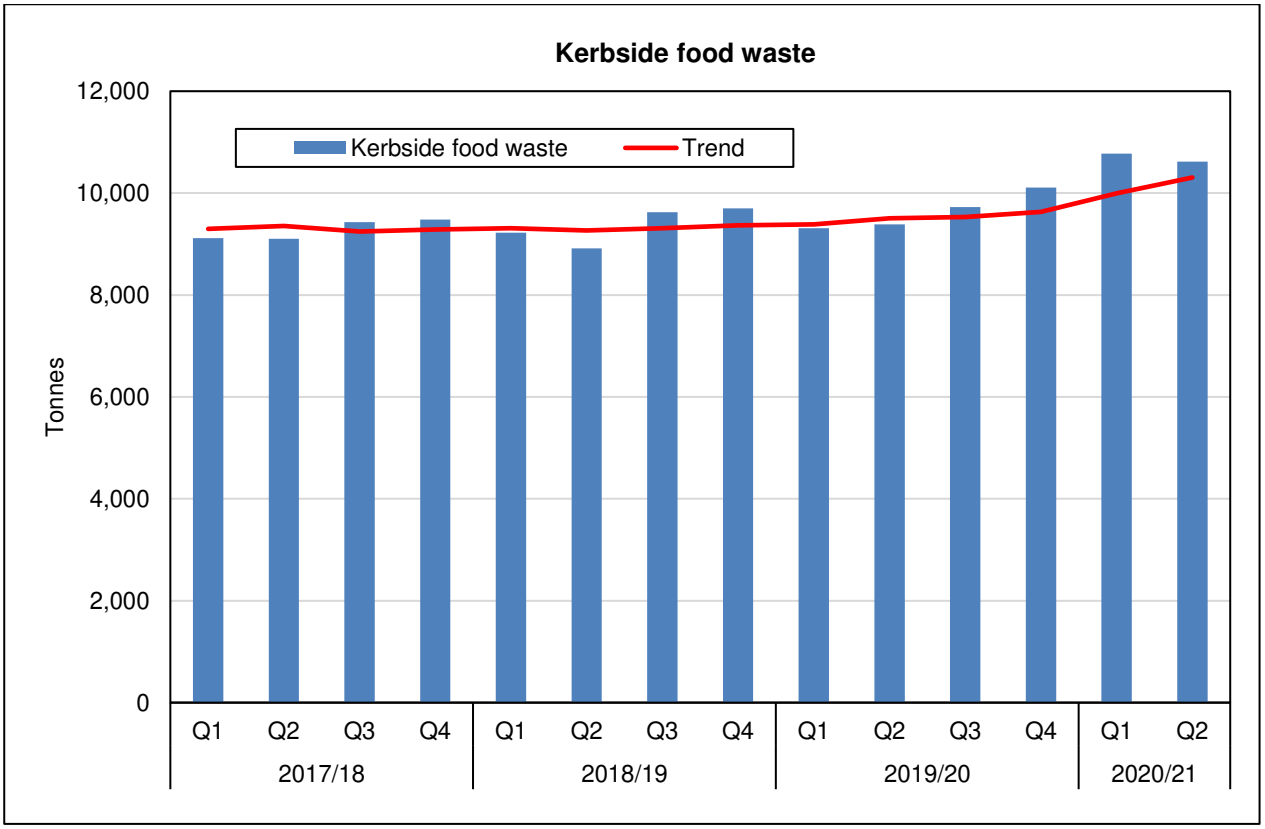
Table 2: Food waste tonnages collected, Q1 2018/19 – Q2 2020/21

	2018/19				2019/20				2020/21		Trend (MAA)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1 2020/21	Q2 2020/21
Food waste												
Total	9,223	8,918	9,625	9,702	9,311	9,385	9,727	10,108	10,775	10,616	9,999	10,306

"Trend" is the Moving Annual Average (i.e. the average of the most recent four quarters)

Chart 2 below shows total food waste tonnages from Q1 2017/18 to Q2 2020/21.

Chart 2: Food waste tonnages collected, Q1 2017/18 – Q2 2020/21



The long-term trend in food waste recycling, since 2016/17, has been gradually upwards.

In each of the last three quarters, more than 10,000 tonnes of food waste have been collected at the kerbside. As with DMR, the noticeable increase in Q1 and Q2 will most likely be related to Covid-19 restrictions, with many residents spending more time at home. Tonnages in Q2 have fallen slightly, as restrictions have been loosened; the trend, however, is still increasing. However, it is probable that we will continue to see high tonnages while some sort of restrictions remain in place, further maintaining the increasing trend.

All authorities except for Epsom & Ewell have seen an increasing trend in their food waste this quarter, with Waverley and Reigate & Banstead having seen the largest increases.

Garden waste

Table 3 below shows the quarterly tonnages from Q1 2018/19 to Q2 2020/21 for garden waste.

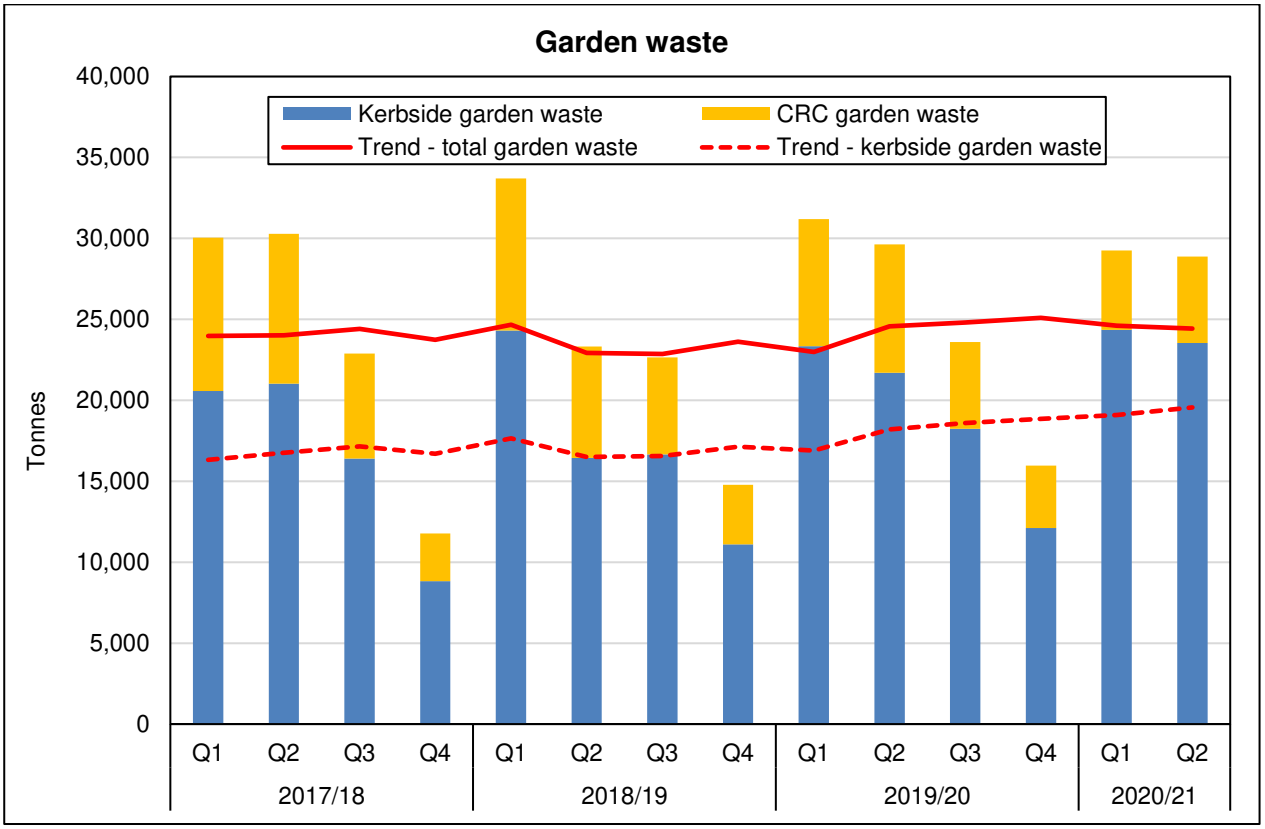
Table 3: Garden waste tonnages collected, Q1 2018/19 – Q2 2020/21

	2018/19				2019/20				2020/21		Trend (MAA)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1 2020/21	Q2 2020/21
Garden waste												
Kerbside	24,310	16,440	16,660	11,104	23,340	21,694	18,235	12,111	24,349	23,536	19,097	19,558
CRC	9,389	6,884	5,985	3,674	7,851	7,934	5,361	3,851	4,903	5,346	5,512	4,865
Total	33,699	23,324	22,645	14,778	31,191	29,628	23,596	15,962	29,252	28,883	24,609	24,423

"Trend" is the Moving Annual Average (i.e. the average of the most recent four quarters)

Chart 3 below shows garden waste tonnages collected, from both the kerbside and the CRCs, from Q1 2017/18 to Q2 2020/21.

Chart 3: Garden waste tonnages collected, Q1 2017/18 – Q2 2020/21



Although there are always seasonal variations in these tonnages, with tonnages tending to be higher in the spring, the long-term trend in garden waste recycling since 2016/17 has remained reasonably flat. Since the beginning of 2019/20 though, there has been a steady increase in tonnages collected at the kerbside, although this has been balanced out by a decrease in the amount of garden waste recycled at the CRCs. The overall trend in total tonnages over this period has therefore not shown any noticeable change.

In the first two quarters of 2020/21, with Covid-19 restrictions meaning that many residents have spent more time at home, kerbside tonnages have increased compared with previous years. However, service suspensions in Epsom & Ewell, and in particular Reigate & Banstead, have

meant that these tonnages have not been as high as they might otherwise have been. Additionally, Surrey County Council also closed all CRC sites temporarily in Q1, with a number of these being opened for garden waste around mid-May.

With CRCs having been open throughout Q2, overall tonnages have remained high. The trend in kerbside tonnages has continued to increase this quarter. This could possibly be due to more residents subscribing to kerbside collection services whilst there are still some sort of restrictions in place at the CRCs.

Residual waste

Table 4 below shows the quarterly tonnages from Q1 2018/19 to Q2 2020/21 for residual waste.

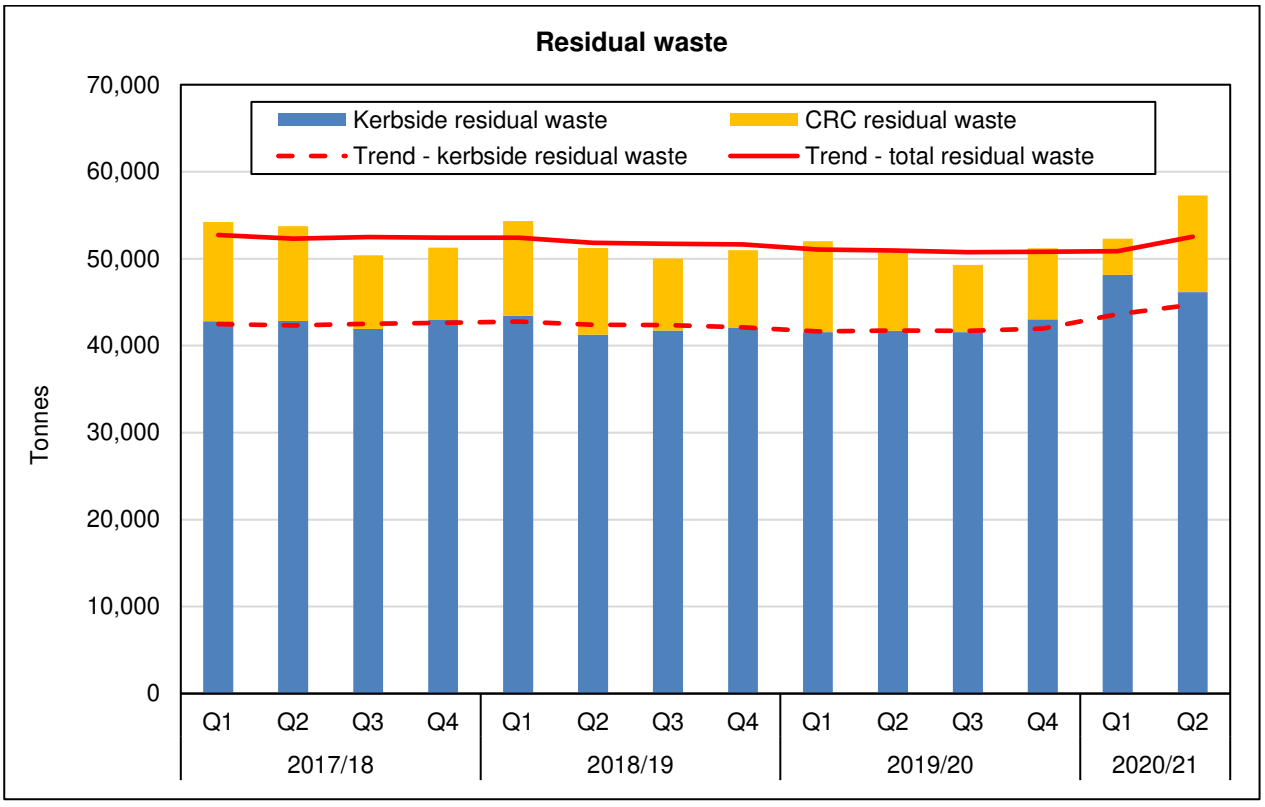
Table 4: Residual waste tonnages collected, Q1 2018/19 – Q2 2020/21

	2018/19				2019/20				2020/21		Trend (MAA)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1 2020/21	Q2 2020/21
Residual waste												
Kerbside	43,431	41,250	41,738	42,024	41,538	41,702	41,560	43,011	48,156	46,148	43,607	44,719
CRC	10,880	9,988	8,267	8,959	10,471	9,002	7,721	8,176	4,151	11,113	7,263	7,790
Total	54,311	51,238	50,005	50,983	52,009	50,704	45,624	46,844	50,534	52,287	48,426	48,822

"Trend" is the Moving Annual Average (i.e. the average of the most recent four quarters)

Chart 4 below shows kerbside residual waste tonnages from Q1 2017/18 to Q2 2020/21.

Chart 4: Residual waste tonnages collected, Q1 2017/18 – Q2 2020/21



The long-term trend in residual waste from 2016/17 to 2019/20 has shown a gradual decrease. Tonnages collected at the kerbside have seen very little change over this period; most of the overall decrease has resulted from a reduction in the amount of residual waste at the CRCs.

As with other waste streams, 2020/21 has seen an increase in residual waste tonnage collected at the kerbside. Both Q1 and Q2 have seen a noticeably increasing trend, particularly Q1 when many residents were at home. With the temporary closure of the CRCs in Q1 however, those tonnages fell significantly, and as a result the overall trend continue to be downwards in that quarter.

Since the re-opening of the CRCs in mid-May, residual waste tonnages have been high, and this has been very noticeable in Q2. The Q2 CRC tonnage is inclusive of dirty wood, which represents

a significant proportion of the total (approximately 4,900 tonnes). It is possible that during the spring lockdown period residents may have taken the opportunity to undertake home improvements or clearances. With CRCs reopening and restrictions being lifted towards the end of Q1, the increased amounts of this material may have been due simply to a backlog of this waste being deposited.

Tonnages per household have increased significantly in all authorities, most noticeably in Epsom & Ewell, and for the Partnership as a whole. Runnymede has seen the smallest increase in tonnage of all the authorities.

Statutory performance metrics

Under the 2015 *Joint Municipal Waste Strategy*, performance was reported against three of Defra's statutory performance metrics. In order to provide continuity, performance against each of these metrics will continue to be included in this report each quarter.

Performance is reported here on a consistent basis across all SEP authorities, meaning that there may be some differences between the figures shown and those taken from any individual authority's Defra *Waste Data Flow* reports. As with tonnages, data for recent quarters may be subject to retrospective revisions, and should therefore be treated as provisional at this stage. The trend is again presented in terms of the *Moving Annual Average (MAA)*. This is the rolling average of the most recent four quarters including that quarter, thereby removing any underlying seasonality in the data, and enabling us to track the trend in performance each quarter.

Collected household waste and recycling per person

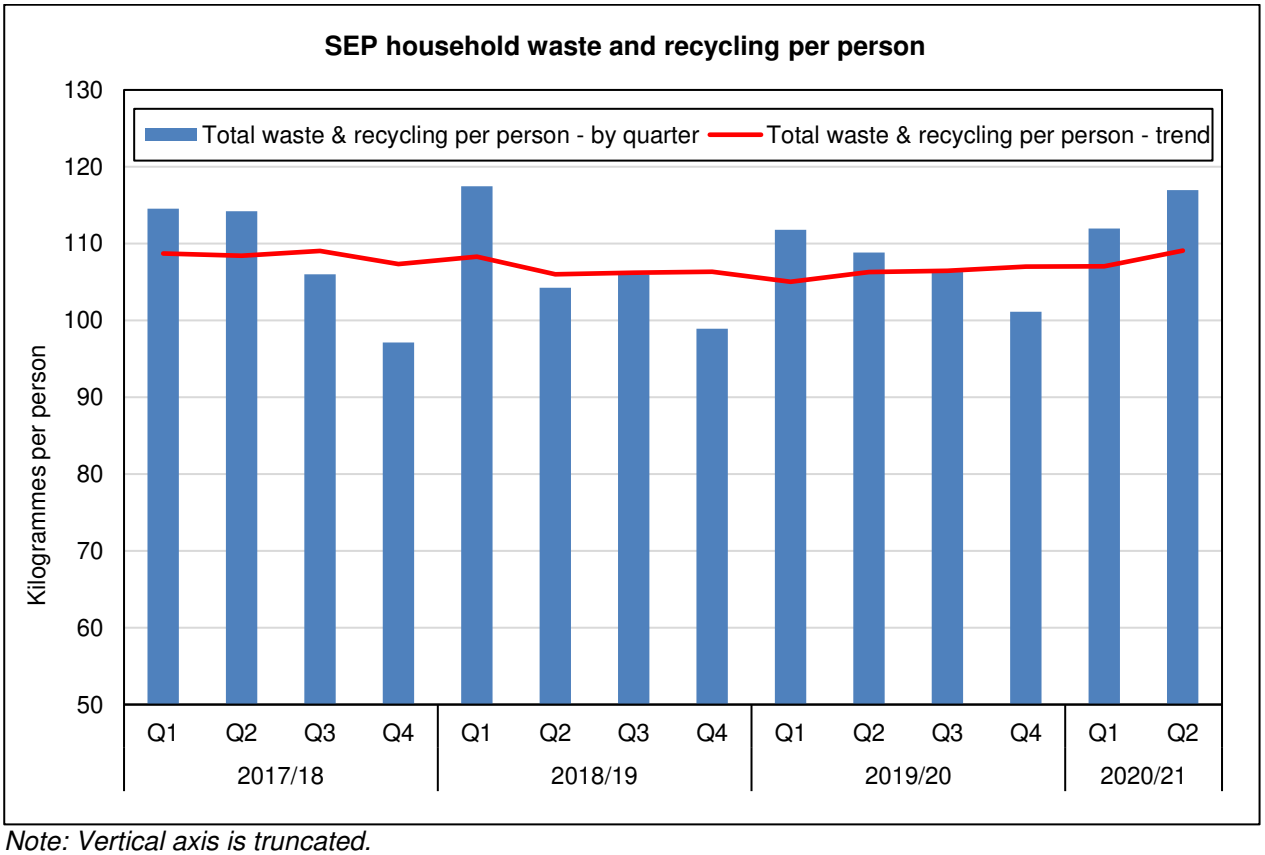
Table 5 below shows household waste and recycling per person from Q1 2018/19 to Q2 2020/21.

Table 5: Household waste and recycling per person, Q1 2018/19 – Q2 2020/21

	2018/19				2019/20				2020/21		Trend (MAA)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1 2020/21	Q2 2020/21
Waste & recycling per person (kg)	117.5	104.2	106.0	98.9	111.8	108.8	106.3	101.1	111.9	116.9	107.1	109.1

Chart 5 below shows household waste and recycling per person from Q1 2017/18 to Q2 2020/21.

Chart 5: Household waste and recycling per person, Q1 2017/18 – Q2 2020/21



Note: Vertical axis is truncated.

The long-term trend for this measure indicates that household waste and recycling per person saw very little change throughout 2018/19 and 2019/20. With the increases in tonnages seen in the first two quarters of 2020/21, as explained previously, this measure is now seeing an increasing trend. For the four quarters to Q2 2020/21, household waste and recycling stood at 109.1 kg per person on average per quarter, up from 107.1 kg per person in the year to Q1.

All Districts and Boroughs have seen an increase in waste per person. Surrey County Council has seen a small reduction, most likely due to the closure of CRCs in Q1.

Percentage of household waste sent for reuse, recycling or composting (recycling rate)

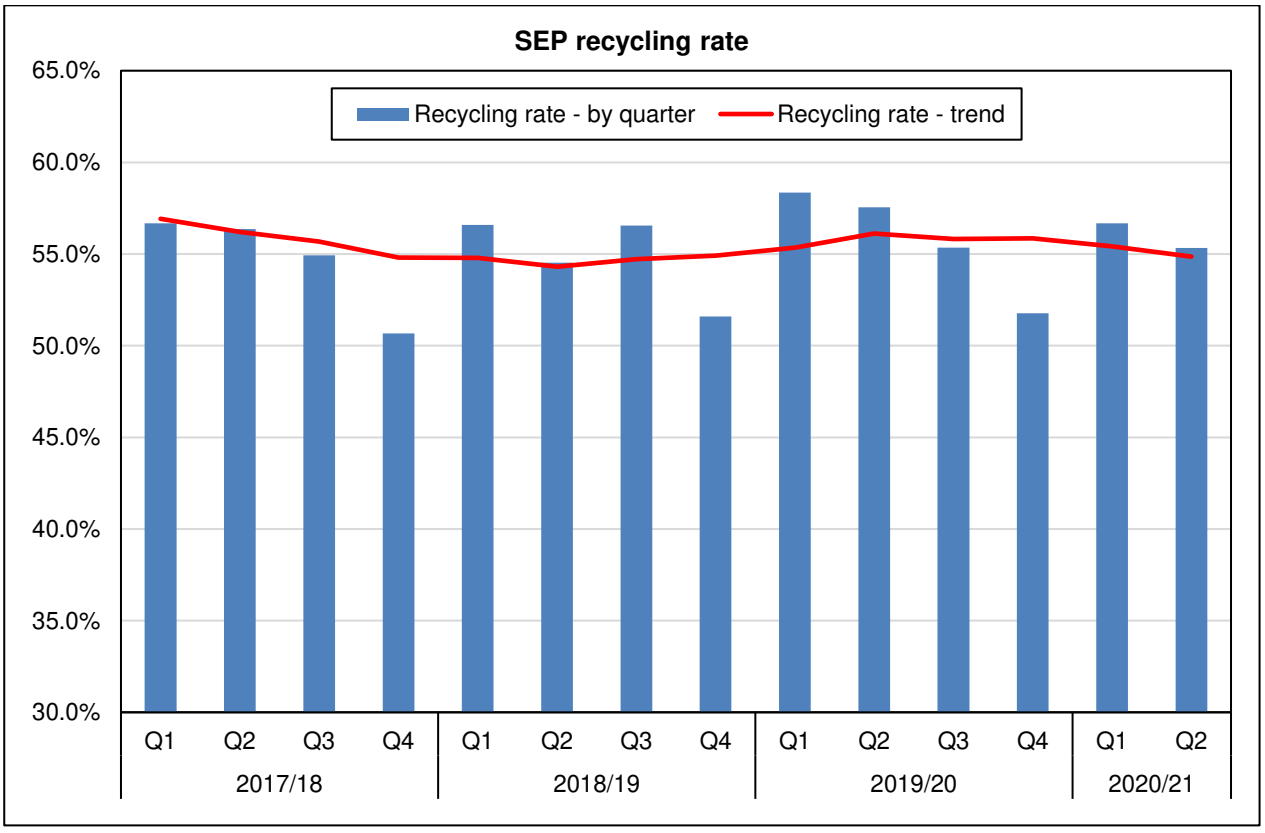
Table 6 below shows the recycling rate from Q1 2018/19 to Q2 2020/21.

Table 6: Recycling rate, Q1 2018/19 – Q2 2020/21

	2018/19				2019/20				2020/21		Trend (MAA)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1 2020/21	Q2 2020/21
Recycling rate	56.6%	54.5%	56.6%	51.6%	58.4%	57.6%	55.4%	51.8%	56.7%	55.3%	55.4%	54.9%

Chart 6 below shows the recycling rate from Q1 2017/18 to Q2 2020/21.

Chart 6: Recycling rate, Q1 2017/18 – Q2 2020/21



Note: Vertical axis is truncated.

The long-term trend for this measure indicates that there was an increase in the overall recycling rate in the first half of 2019/20, with the trend then flattening out in the following two quarters. The first two quarters of 2020/21, however, have seen a decreasing trend in the overall SEP recycling rate. The recycling rate for the year to Q2 2020/21 stood at 54.9%, which represents a decrease of

0.6 percentage points from the previous quarter. It is likely to be the case that this is largely a result of the increase in residual waste observed in Q2.

Although most authorities are seeing an increasing trend in their recycling rate, the rate in Epsom & Ewell has seen a noticeable downturn.

Please note that that the overall SEP recycling rate for Q2 2020/21 incorporates an estimated tonnage for waste recovered by SCC from the residual waste stream at the disposal stage.

Percentage of municipal waste sent to landfill

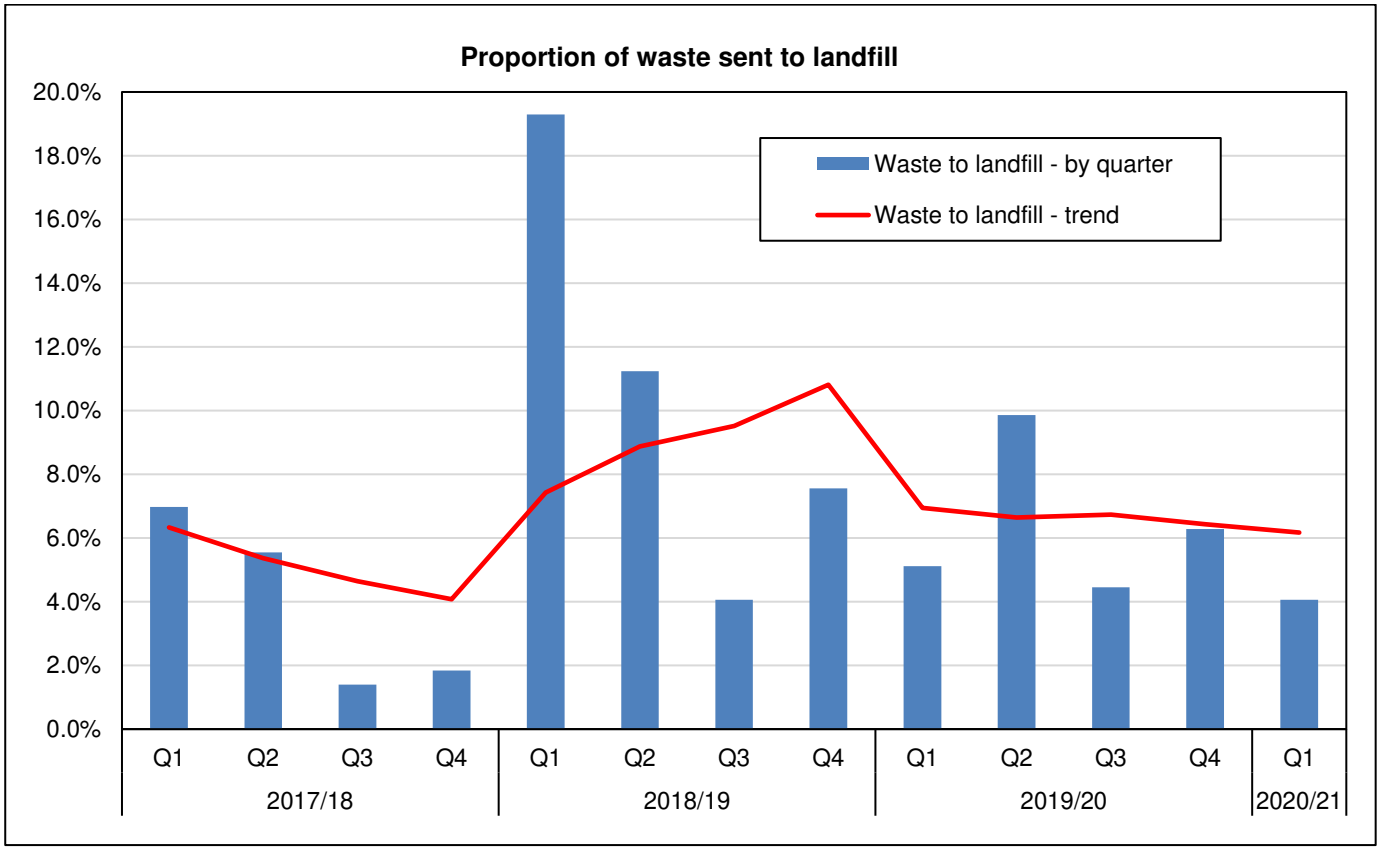
Table 7 below shows the percentage of municipal waste sent to landfill from Q1 2018/19 to Q1 2020/21. Data have been sourced from Defra's *Waste Data Flow* reports, which do not yet hold data for the latest quarter.

Table 7: Percentage of municipal waste sent to landfill, Q1 2018/19 – Q1 2020/21

	2018/19				2019/20				2020/21	Trend (MAA)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q4 2019/20	Q1 2020/21
Waste to landfill	19.3%	11.2%	4.1%	7.6%	5.1%	9.9%	4.5%	6.3%	4.1%	6.4%	6.2%

Chart 7 below show the percentage of municipal waste sent to landfill from Q1 2017/18 to Q1 2020/21.

Chart 7: Percentage of municipal waste sent to landfill, Q1 2017/18 – Q1 2020/21



Although there was a noticeable decrease in the amount of waste being sent to landfill in the latest quarter, the long-term trend in this measure has been fairly stable since Q1 2019/20. In the year to

Q1 2020/21, 6.2% of Surrey's waste was sent to landfill, down 0.2 percentage points from the previous quarter. This proportion has been lower in recent quarters compared with the preceding year, largely due to SCC's waste disposal contractor, SUEZ, being able to source more capacity at energy from waste outlets compared to the previous year.

Waste disposal

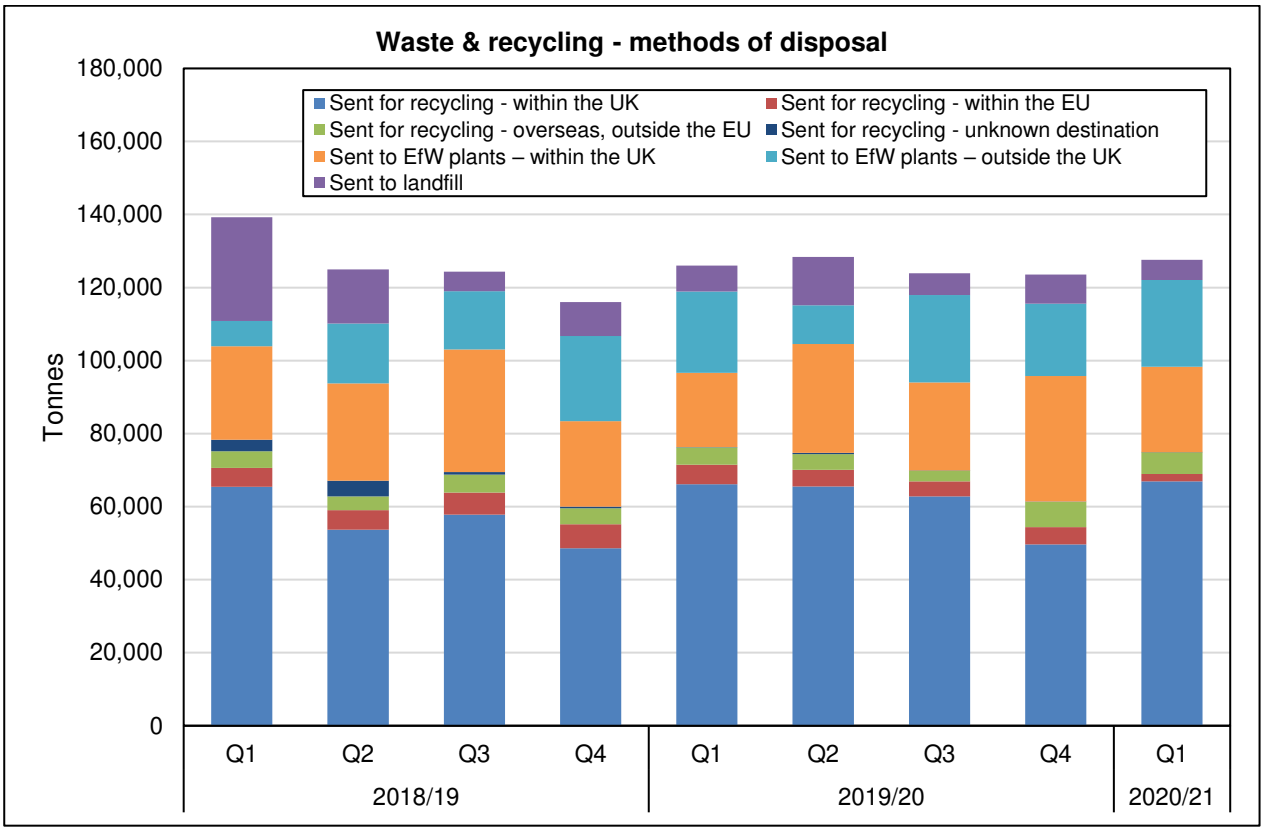
Table 8 and Chart 8 below show the tonnages disposed of via each of the main disposal routes (i.e. recycling, energy from waste, landfill) from Q1 2018/19 to Q1 2020/21. The data are sourced from Defra's *Waste Data Flow* reports.

Table 8 also shows the amount of material that is recovered as recycling from residual waste by SCC each quarter. This could be variety of materials, including DMR material separated from black-bag waste at the reprocessing stage, compost-like material that can be used for landfill cover, or mattresses for example.

Table 8: Waste & recycling, methods of disposal, Q1 2018/19 – Q1 2020/21

	2018/19				2019/20				2020/21
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Collection									
Collected as residual – recycled	4,309	4,922	7,784	5,217	6,488	5,379	7,359	4,681	3,697
Disposal - tonnages									
Sent for recycling - within the UK	65,442	53,653	57,833	48,609	66,158	65,479	62,834	49,664	66,957
Sent for recycling - within the EU	5,182	5,407	6,054	6,598	5,344	4,560	4,054	4,733	1,967
Sent for recycling - outside the EU	4,524	3,732	4,867	4,388	4,724	4,329	2,984	6,921	5,948
Sent for recycling - unknown destination	3,193	4,304	749	379	120	368	16	85	35
Sent to EfW plants – within the UK	25,622	26,673	33,499	23,441	20,322	29,763	24,163	34,396	23,384
Sent to EfW plants – outside the UK	6,898	16,361	15,993	23,323	22,246	10,624	23,904	19,810	23,776
Sent to landfill	28,373	14,865	5,307	9,286	7,062	13,270	5,952	7,911	5,483
Total disposal	139,234	124,995	124,302	116,025	125,977	128,394	123,907	123,520	127,549
Disposal - percentages									
Sent for recycling - within the UK	47%	43%	47%	42%	53%	51%	51%	40%	52%
Sent for recycling - within the EU	4%	4%	5%	6%	4%	4%	3%	4%	2%
Sent for recycling - outside the EU	3%	3%	4%	4%	4%	3%	2%	6%	5%
Sent for recycling - unknown destination	2%	3%	1%	0%	0%	0%	0%	0%	0%
Sent to EfW plants – within the UK	18%	21%	27%	20%	16%	23%	20%	28%	18%
Sent to EfW plants – outside the UK	5%	13%	13%	20%	18%	8%	19%	16%	19%
Sent to landfill	20%	12%	4%	8%	6%	10%	5%	6%	4%
Total disposal	100%	100%	100%	100%	100%	100%	100%	100%	100%

Chart 8: Waste & recycling, methods of disposal, Q1 2018/19 – Q1 2020/21



The use by SCC of different disposal routes - both methods of disposal and destination country - has fluctuated quite noticeably throughout the period since Q1 2018/19. The biggest fluctuations have been seen in the tonnages going to landfill and to energy from waste (EfW), both within the UK and overseas.

Recycling

Most recycling has stayed within the UK, with a smaller percentage being sent to facilities either within the EU or elsewhere overseas, outside the EU. However, this does fluctuate throughout the year; at the beginning of 2019/20, 53% of the total disposal tonnage stayed in the UK, but in Q4 the figure was only 40%. In recent quarters there has been an increase in the amount of recycling being sent abroad for reprocessing. In Q1 2020/21, 5% of the total disposal tonnage was recycling being sent overseas, outside the EU, for reprocessing. At the same time, only 2% of the total disposal tonnage (less than 2,000 tonnes) was sent to facilities within the EU, the lowest level for two years. The amount of material being processed as recycling at UK facilities increased again in the latest quarter to 52% of the total disposal tonnage.

Energy from Waste (EfW) and Landfill

Disposal tonnages sent to EfW plants or landfill have fluctuated significantly since 2018/19. The amount of material being sent to landfill has decreased, although this decrease has been accompanied by an increase in the amount of material being sent to EfW plants, particularly ones outside the UK.

Tonnages sent to UK EfW plants have stayed relatively steady in recent quarters, although in Q4 2019/20 the figure was noticeably higher, at over 34,000 tonnes (28% of the total disposal tonnage). The amount of tonnage being sent to EfW plants outside the UK has generally increased in recent quarters, and in Q1 2020/21 around 24,000 tonnes were disposed of in this way, representing 19% of all disposal tonnages.

The amount of material being sent to landfill is directly linked to EfW capacity. Where it is not possible to source this capacity within the UK, material will be sent either to EfW plants overseas or to landfill. Greater EfW capacity in Q1 2020/21 meant that only 5,500 tonnes of waste (4% of the disposal total) was sent to landfill.