

Surrey Environment Partnership performance – Q3 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 Q3 2020/21 (i.e. up to and including the 3-month period Oct-Dec 2020). Note that where space is restricted, the tables in this report show only performance for the latest 8 quarters.

Headline results

The headline results in Q3 are as follows:

- The amount of dry mixed recycling collected at the kerbside has continued to increase
- The proportion of this material which is then recycled has also increased, with contamination rates having fallen for the second successive quarter
- The amount of food waste collected has also continued to increase. Over 10,000 tonnes have been collected for the fourth consecutive quarter, and quarterly tonnages are now at their highest ever level.
- Garden waste collections have also seen a significant year-on-year increase
- The amount of residual waste collected has shown a similar increase
- Waste and recycling per person has continued to increase, and the long-term annual trend was up by 2.6kg per person since Q2
- The recycling rate remained steady in Q3. Although most Districts & Boroughs saw an increase in their recycling rate, with more recycling being collected at the kerbside, this was balanced out by a comparable increase in residual waste combined with a decrease in recycling at CRCs.
- The amount of waste going to landfill has fallen, with greater capacity having been available at energy from waste facilities
- The amount of material being sent for recycling overseas, outside the EU, has increased to its highest level since at least the beginning of 2018/19. This now represents 6% of total waste disposal.
- Around 35,000 tonnes of material was sent to UK energy from waste plants, the highest amount since at least the beginning of 2018/19
- All these results will continue to have been heavily influenced by the Covid-19 pandemic, particularly with residents having spent more time at home over the last year.

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 Q4 2018/19 to Q3 2020/21 for dry-mixed recycling, including the proportions of this which are recycled and not recycled.

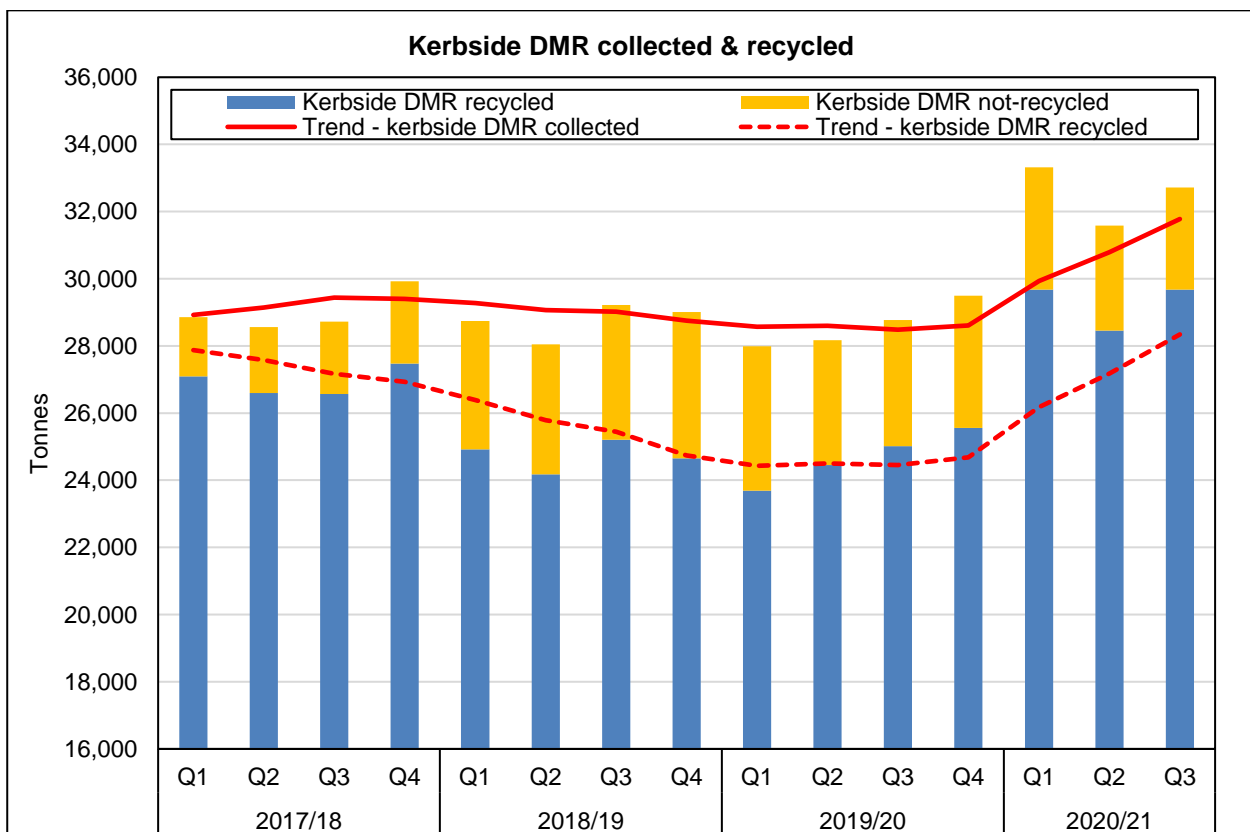
Table 1: DMR tonnages collected and recycled, Q4 2018/19 – Q3 2020/21

	2018/19	2019/20				2020/21			Trend (MAA)	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q2	Q3
Dry-mixed recycling – kerbside collections										
DMR collected	29,005	27,988	28,170	28,769	29,496	33,317	31,582	32,717	30,791	31,778
DMR recycled	24,654	23,690	24,456	25,018	25,554	29,680	28,495	29,680	27,187	28,352
% recycled	85.0%	84.6%	86.8%	87.0%	86.6%	89.1%	90.2%	90.7%	88.3%	89.2%
Not-recyclable	4,352	4,298	3,714	3,751	3,942	3,637	3,087	3,037	3,604	3,426
% not-recycled	15.0%	15.4%	13.2%	13.0%	13.4%	10.9%	9.8%	9.3%	11.7%	10.8%

“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 Q3 2020/21.

Chart 1: DMR tonnages collected and recycled, Q1 2017/18 – Q3 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, we saw significant increases in tonnages in both Q1 and Q2, particularly Q1 when there was a national lockdown in place. This trend has continued into Q3, influenced again by the second national lockdown in November.

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 the three quarters of 2020/21. 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. This may be dependent on historical arrangements around which materials can and cannot be accepted from residents for recycling.

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 slightly in the first two quarters of 2020/21, with a reduction of 0.9 percentage points in the trend between Q2 and Q3.

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, although Tandridge did see an improvement in Q3 compared with Q2. The contamination rates for Elmbridge, Mole Valley and Spelthorne have all seen slight improvements in the latest quarter.

Food waste

Table 2 below shows the quarterly tonnages from Q4 2018/19 to Q3 2020/21 for food waste.

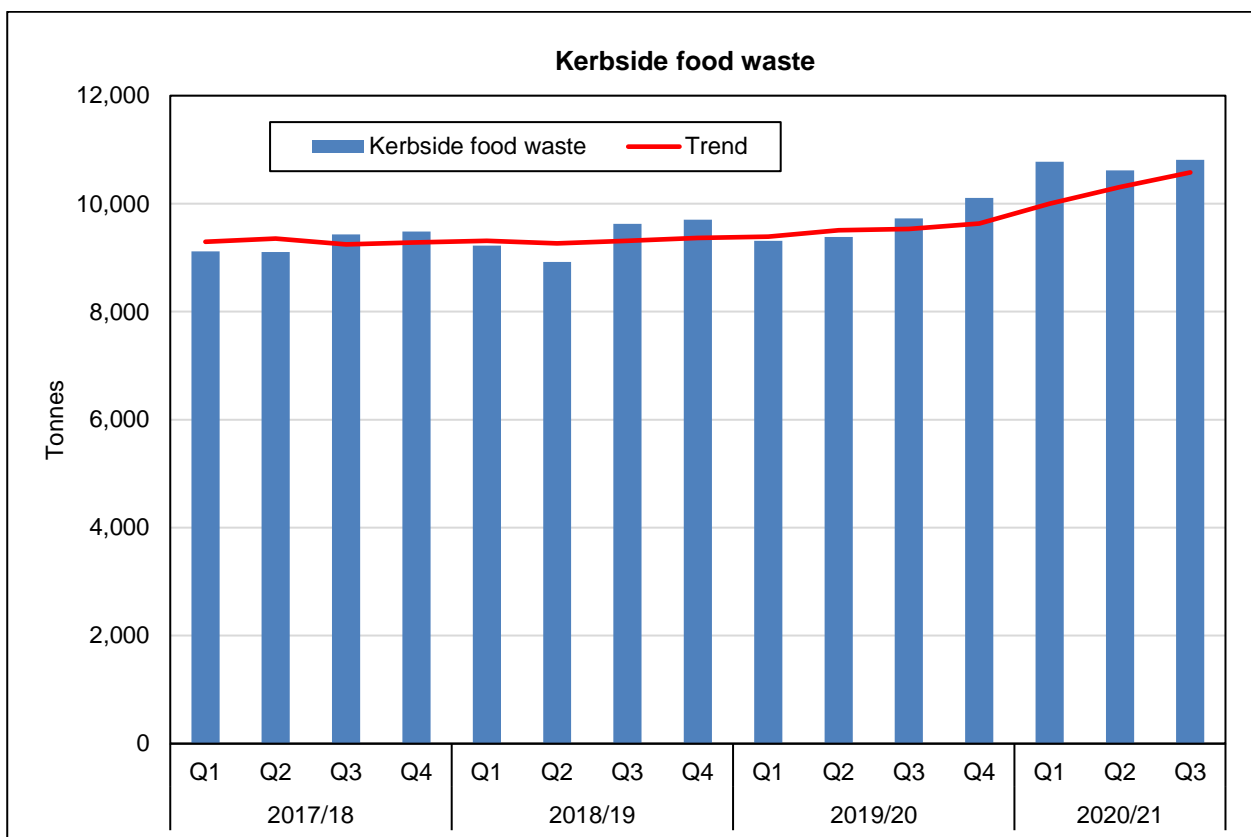
Table 2: Food waste tonnages collected, Q4 2018/19 – Q3 2020/21

	2018/19	2019/20				2020/21			Trend (MAA)	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q2	Q3
Food waste										
Total	9,702	9,311	9,385	9,727	10,108	10,775	10,619	10,811	10,307	10,578

“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 Q3 2020/21.

Chart 2: Food waste tonnages collected, Q1 2017/18 – Q3 2020/21



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

In each of the last four quarters, more than 10,000 tonnes of food waste have been collected at the kerbside. As with DMR, the noticeable increase in Q3 will most likely be related to Covid-19 restrictions, with many residents still spending most of their time at home. Tonnages in Q3 have been at their highest ever level, and are likely to have been heavily affected by the second national lockdown in November.

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

Garden waste

Table 3 below shows the quarterly tonnages from Q4 2018/19 to Q3 2020/21 for garden waste.

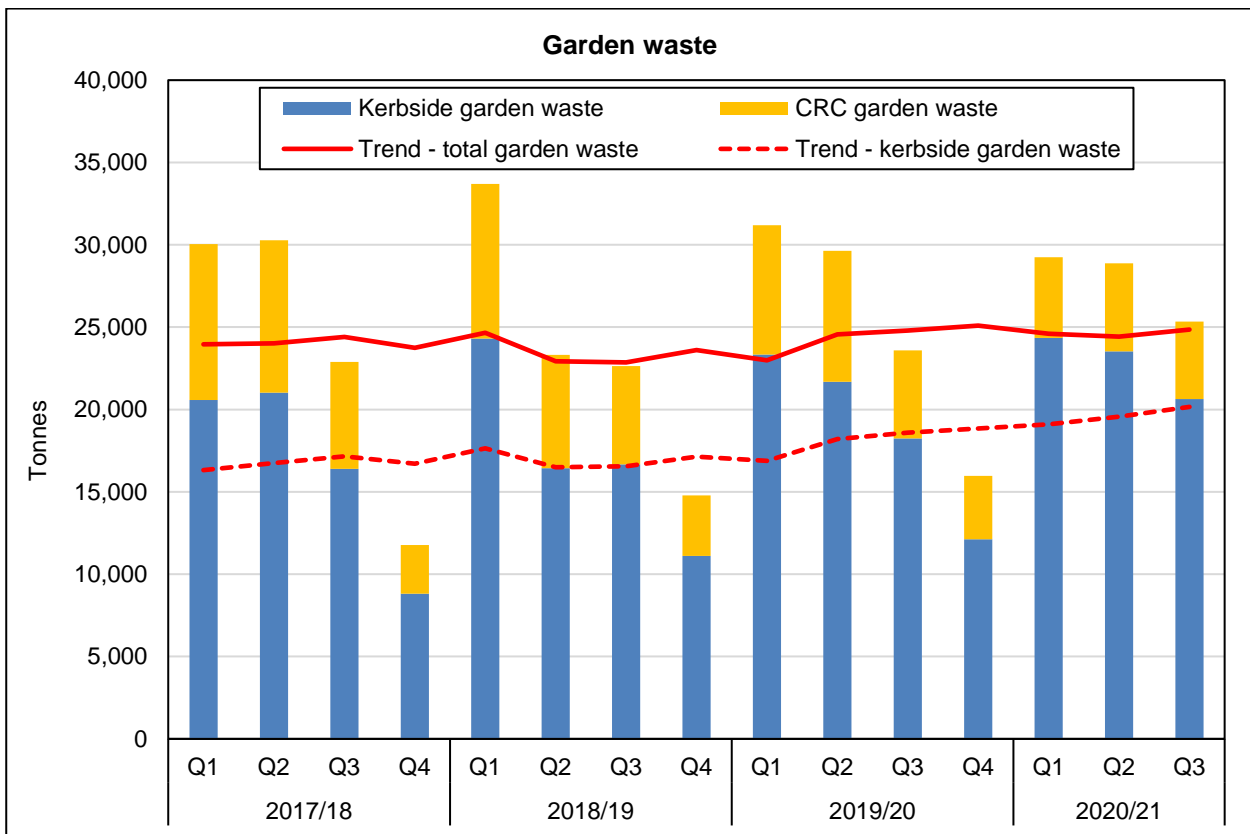
Table 3: Garden waste tonnages collected, Q4 2018/19 – Q3 2020/21

	2018/19	2019/20				2020/21			Trend (MAA)	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q2	Q3
Garden waste										
Kerbside	11,104	23,340	21,694	18,235	12,111	24,349	23,532	20,642	19,557	20,158
CRC	3,674	7,851	7,934	5,361	3,851	4,903	5,346	4,692	4,865	4,698
Total	14,778	31,191	29,628	23,596	15,962	29,252	28,879	25,334	24,422	24,857

“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 Q3 2020/21.

Chart 3: Garden waste tonnages collected, Q1 2017/18 – Q3 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 historic trend in total tonnages over this period has therefore not shown any noticeable change.

In 2020/21, Covid-19 restrictions have meant that many residents have spent more time at home. As with other waste streams this has led to higher tonnages being collected. In Q3 we continued to

see high tonnages, with the highest third-quarter tonnages observed for over five years. It is reasonable to assume that this was at least partly due to the second national lockdown in November, when residents will have been spending more time at home.

CRCs remained open in Q3, and there has been little impact on the tonnage collected. The volumes of waste collected at CRCs across the county have remained very stable in 2020/21, with approximately 4,500 tonnes collected across all sites in Q3.

Residual waste

Table 4 below shows the quarterly tonnages from Q4 2018/19 to Q3 2020/21 for residual waste.

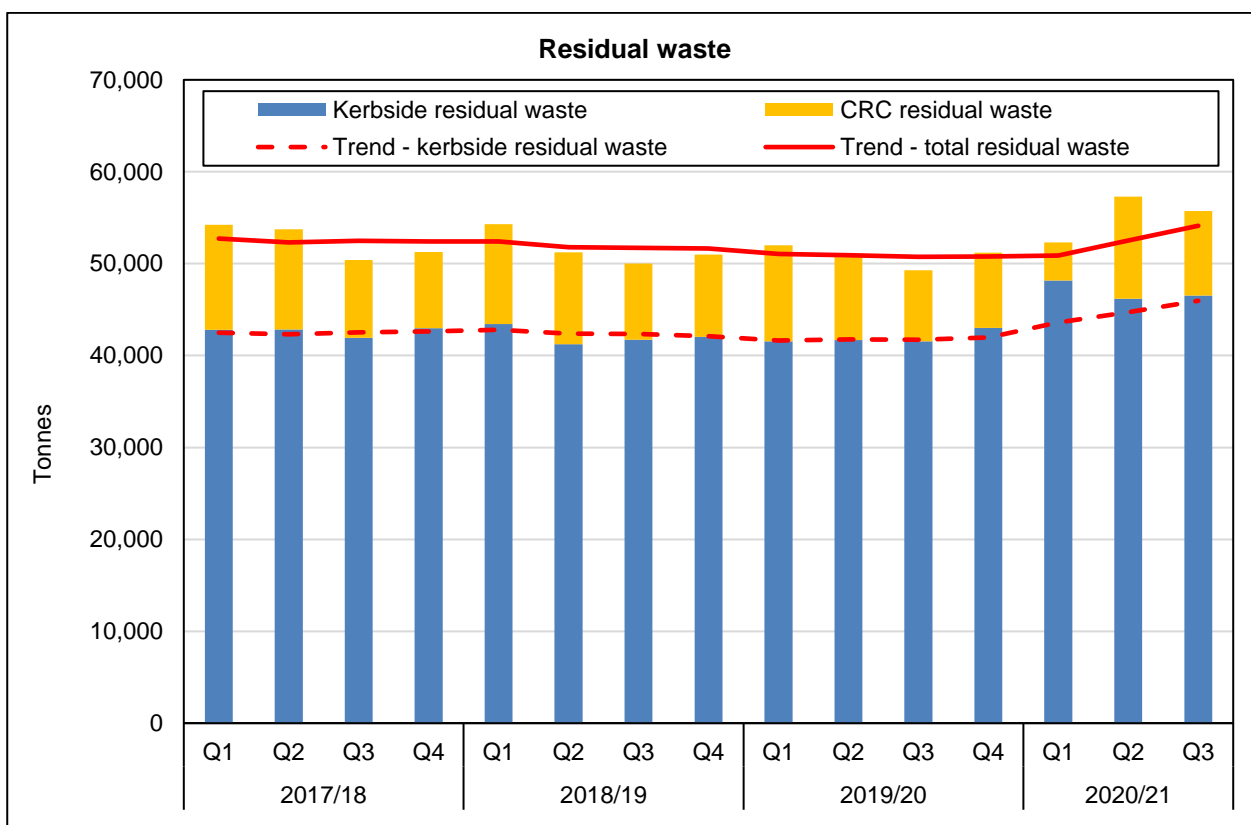
Table 4: Residual waste tonnages collected, Q4 2018/19 – Q3 2020/21

	2018/19	2019/20				2020/21			Trend (MAA)	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q2	Q3
Residual waste										
Kerbside	42,024	41,538	41,702	41,560	43,011	48,157	46,166	46,520	44,724	45,963
CRC	8,959	10,471	9,002	7,721	8,176	4,151	11,113	9,194	7,790	8,159
Total	50,983	52,009	50,704	49,281	51,187	52,308	57,279	55,713	52,514	54,122

“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 Q3 2020/21.

Chart 4: Residual waste tonnages collected, Q1 2017/18 – Q3 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 saw a noticeable 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 remained relatively flat in that quarter. Q2 then saw very high tonnages as CRCs reopened, after restrictions were lifted towards the end of Q1, and the increased amounts of this material may have been due simply to a backlog of this waste being deposited.

Tonnages collected at the kerbside have remained high in Q3, although lower than in the first quarter, and the increasing trend in tonnages has continued. With the CRCs remaining open during the second national lockdown, we did not see the decrease which was observed during Q1, and these tonnages were consistent with third-quarter tonnages in previous years.

Tonnages per household have increased significantly in all authorities, most noticeably in Epsom & Ewell, and for the Partnership as a whole. Waverley has seen the smallest increase in tonnage of all 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 *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. Note that some of the figures which were included in the Q2 report have been updated for this reason. 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

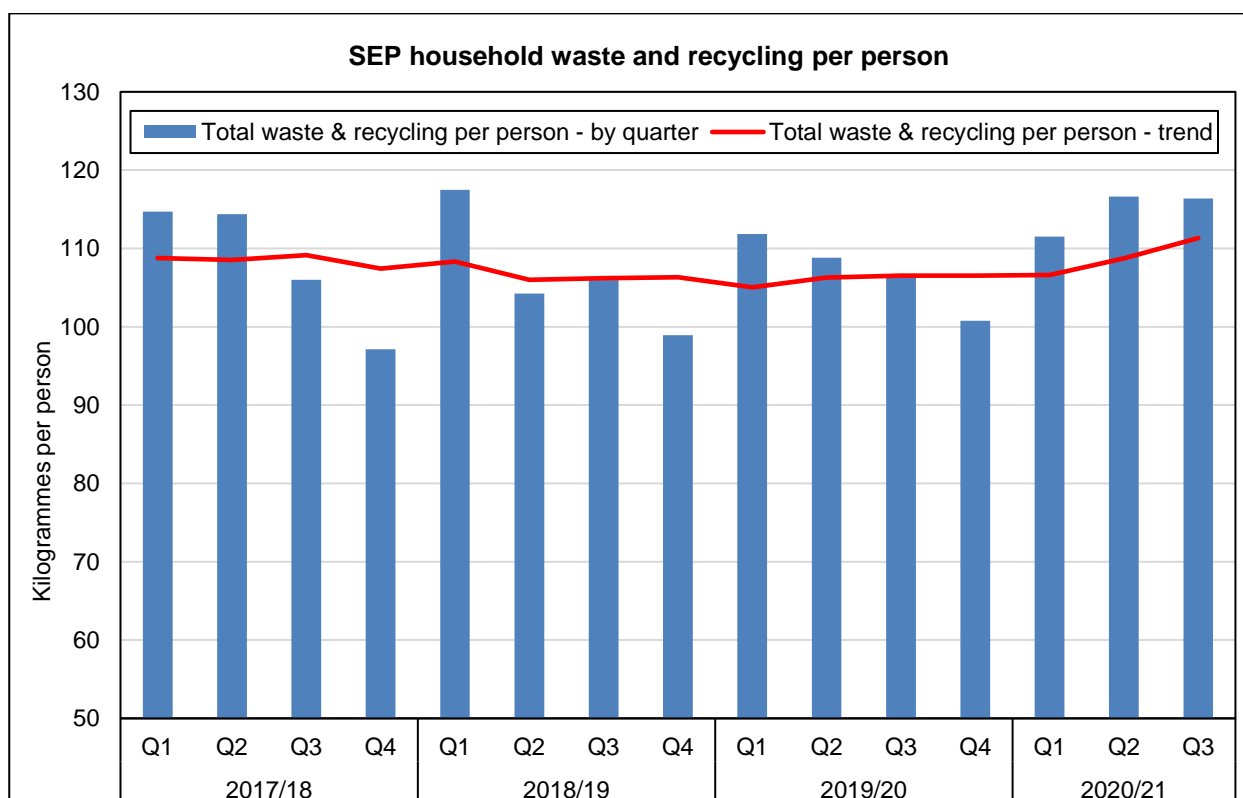
Table 5 below shows household waste and recycling per person from Q4 2018/19 to Q3 2020/21.

Table 5: Household waste and recycling per person, Q4 2018/19 – Q3 2020/21

	2018/19	2019/20				2020/21			Trend (MAA)	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q2 2020/21	Q3 2020/21
Waste & recycling per person (kg)	99.0	111.9	108.9	106.4	100.8	111.5	116.6	116.4	108.8	111.3

Chart 5 below shows household waste and recycling per person from Q1 2017/18 to Q3 2020/21.

Chart 5: Household waste and recycling per person, Q1 2017/18 – Q3 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. The increase in tonnages observed in Q1 and Q2 2020/21 has been sustained into Q3, and this measure continues to show an increasing trend. For the four quarters to Q3 2020/21, household waste and recycling per person stood at 111.3 kg on average per quarter, up from 108.8 kg per person in the year to Q2.

All Districts and Boroughs have seen an increase in waste and recycling per person since Q2. For Surrey County Council, waste and recycling at CRCs is also showing an increase in the year to Q3 since the previous quarter.

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

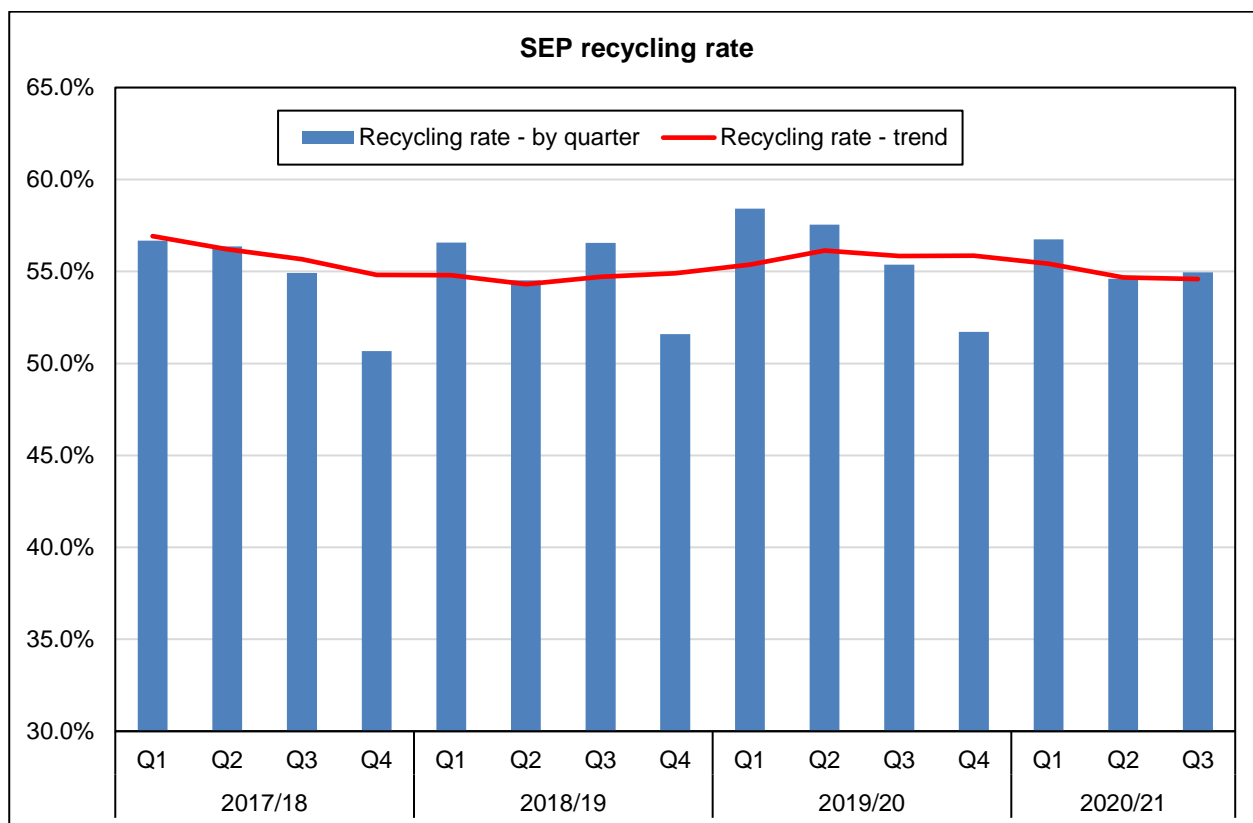
Table 6 below shows the recycling rate from Q4 2018/19 to Q3 2020/21.

Table 6: Recycling rate, Q4 2018/19 – Q3 2020/21

	2018/19	2019/20				2020/21			Trend (MAA)	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q2 2020/21	Q3 2020/21
Recycling rate	51.6%	58.4%	57.5%	55.4%	51.7%	56.7%	54.6%	55.0%	54.7%	54.6%

Chart 6 below shows the recycling rate from Q1 2017/18 to Q3 2020/21.

Chart 6: Recycling rate, Q1 2017/18 – Q3 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. However, this trend then flattened out in the second quarter, before decreasing in the first two quarters of 2020/21. In Q3, the rate has reduced further, although only slightly. The recycling rate for the year to Q3 2020/21 stood at 54.6%, which represents a decrease of just 0.1 percentage point from the previous quarter.

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 the overall SEP recycling rate 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

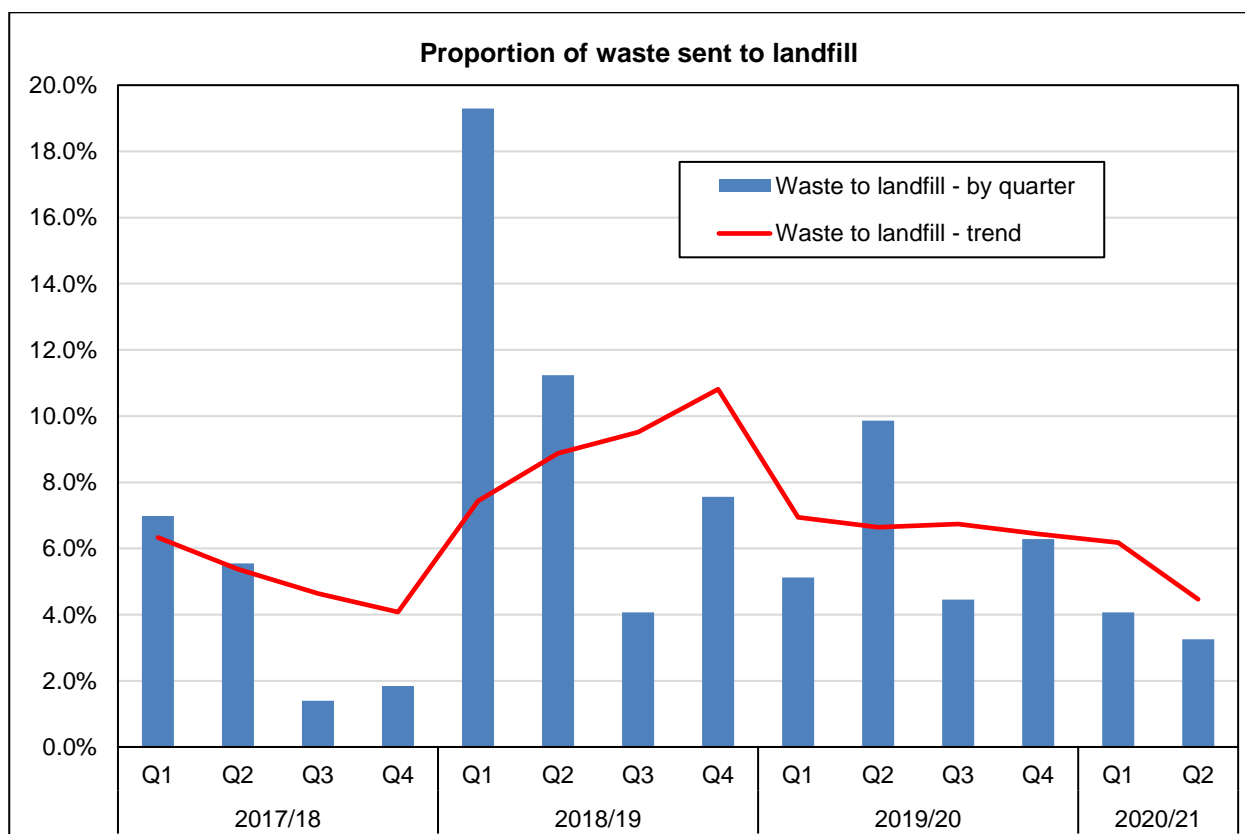
Table 7 below shows the percentage of municipal waste sent to landfill from Q3 2018/19 to Q2 2020/21. Data have been sourced from Defra’s *Waste Data Flow* reports, which do not yet hold data for the latest quarter.

Table 7: Percentage of municipal waste sent to landfill, Q3 2018/19 – Q2 2020/21

	2018/19		2019/20				2020/21		Trend (MAA)	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1 2020/21	Q2 2020/21
Waste to landfill	4.1%	7.6%	5.1%	9.9%	4.5%	6.3%	4.1%	3.3%	6.2%	4.5%

Chart 7 below shows the percentage of municipal waste sent to landfill from Q1 2017/18 to Q2 2020/21.

Chart 7: Percentage of municipal waste sent to landfill, Q1 2017/18 – Q2 2020/21



The long-term trend in this measure has been fairly stable since Q1 2019/20 until the previous quarter. In Q2 however, there was a decrease of 0.8 percentage points in the amount of waste being sent to landfill compared with that quarter. In the year to Q2 2020/21, 4.5% of Surrey’s waste was sent to landfill, down 1.7 percentage points from the previous quarter. A lower proportion of waste has been sent to landfill 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 Q3 2018/19 to Q2 2020/21. The data are sourced from Defra's *Waste Data Flow* reports.

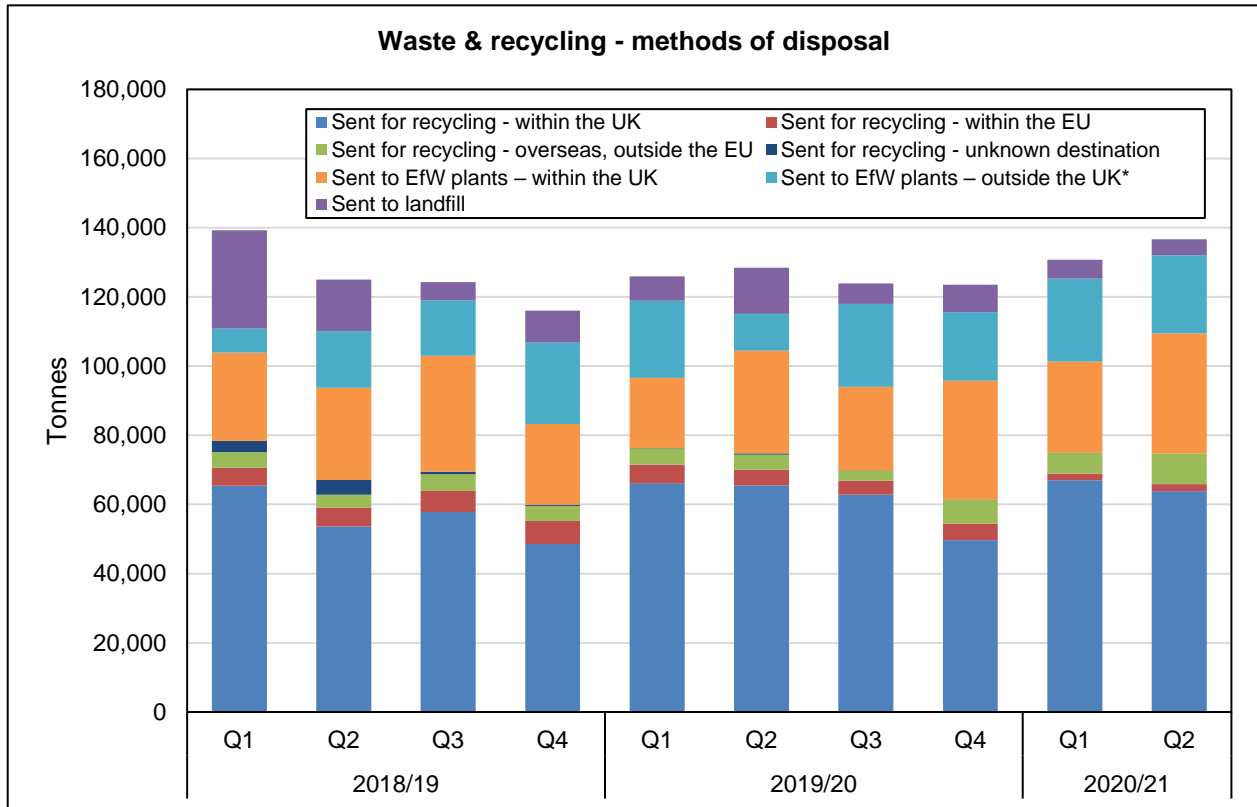
Table 8 also shows the amount of material that is recovered as recycling from residual waste by SCC each quarter. This could be variety of materials, including DMR material separated from black-bag waste at the reprocessing stage, compost-like material that can be used for landfill cover, or mattresses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

Table 8: Waste & recycling, methods of disposal, Q3 2018/19 – Q2 2020/21

	2018/19		2019/20				2020/21	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Collection								
Collected as residual – recycled	7,784	5,217	6,488	5,379	7,359	4,681	3,697	2,550
Disposal - tonnages								
Sent for recycling - within the UK	57,833	48,609	66,158	65,479	62,834	49,664	66,957	63,860
Sent for recycling - within the EU	6,054	6,598	5,344	4,560	4,054	4,733	1,967	2,035
Sent for recycling - overseas, outside the EU	4,867	4,388	4,724	4,329	2,984	6,921	5,948	8,818
Sent for recycling - unknown destination	749	379	120	368	16	85	35	0
Sent to EfW plants – within the UK	33,478	23,255	20,243	29,696	24,121	34,335	26,393	34,780
Sent to EfW plants – outside the UK ⁽¹⁾	16,014	23,510	22,326	10,691	23,947	19,871	23,955	22,508
Sent to landfill	5,307	9,286	7,062	13,270	5,952	7,911	5,483	4,639
Total disposal	124,302	116,025	125,977	128,394	123,907	123,520	130,738	136,640
Disposal - percentages								
Sent for recycling - within the UK	47%	42%	53%	51%	51%	40%	51%	47%
Sent for recycling - within the EU	5%	6%	4%	4%	3%	4%	2%	1%
Sent for recycling - overseas, outside the EU	4%	4%	4%	3%	2%	6%	5%	6%
Sent for recycling - unknown destination	1%	0%	0%	0%	0%	0%	0%	0%
Sent to EfW plants – within the UK	27%	20%	16%	23%	19%	28%	20%	25%
Sent to EfW plants – outside the UK	13%	20%	18%	8%	19%	16%	18%	16%
Sent to landfill	4%	8%	6%	10%	5%	6%	4%	3%
Total disposal	100%	100%	100%	100%	100%	100%	100%	100%

(1) "Sent to EfW plants – outside the UK" includes some material with unknown destination.

Chart 8: Waste & recycling, methods of disposal, Q1 2018/19 – Q2 2020/21



Please note that there have been some retrospective changes to some of the figures for Q1 presented in the previous report, which have resulted in an increase in the reported tonnages going to energy from waste (EfW) in that quarter. However, this has not impacted on the key messages in that report.

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 EfW, both within the UK and overseas.

Recycling

Most recycling has continued to stay within the UK, with a smaller percentage being sent to facilities either within the EU or elsewhere overseas, outside the EU. However, the amount of recycling being sent overseas has increased in Q2 2020/21. Recycling sent outside the EU in particular increased from 5,948 to 8,818 tonnes in Q2 2020/21; this now represents 6% of total waste disposal. The amount of material being processed as recycling at UK facilities decreased in the latest quarter by over 3,000 tonnes, and this now represents 47% of the total disposal tonnage, the lowest proportion since 2018/19.

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 increased in Q2 2020/21 and are now higher than since at least the beginning of 2018/19. Around 35,000 tonnes were sent to UK EfW plants; this was 25% of total waste disposal, an increase from 20% in Q1. The amount of material being sent to EfW plants

outside the UK decreased in Q2 2020/21, to around 22,500 tonnes. This represented 16% 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 Q2 2020/21 meant that only 4,639 tonnes of waste (3% of the disposal total) was sent to landfill, a decrease from the first quarter.