Surrey Environment Partnership performance – Q1 2021/22

Introduction

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

Performance is reported quarterly against a number of metrics, all of which look at the most recent quarterly data available, although it should be noted that some of these metrics have a longer time lag than others. Unless otherwise stated, this report looks at performance in the period up to and including Q1 2021/22 (i.e. up to and including the 3-month period Apr-Jun 2021). 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 Q1 are as follows:

- All the results in this report continue to be influenced by the COVID-19 pandemic, with residents having spent more time at home over the last year. We now have over a year of results which show the long-term impact of the pandemic on waste volumes.
- DMR, food and residual tonnages are all down for kerbside collections from the last quarter.
- The proportion of DMR material, which is then recycled has increased again this quarter, with overall contamination rates now being at their lowest level since pre-2018/19.
- Collected food waste tonnage is still over 10,000 tonnes this quarter but lower than the preceding four quarters.
- Kerbside garden waste tonnages have continued to increase this quarter, although tonnages at the CRCs have seen a slight downward trend.
- The D&B recycling rate increased this quarter, but only very marginally. Most Districts & Boroughs did see an increase in their recycling rates, although overall this was balanced out with lower recycling at the CRCs.
- The amount of material being sent for recycling overseas, outside the EU, has increased again, and this now represents 9% of total waste disposal.
- Close to 41,500 tonnes of material was sent to UK energy from waste plants in the latest quarter, the highest amount since at least the beginning of 2018/19. Material going to energy from waste plants overseas decreased from 12% to 6% of total waste disposed.
- Material management costs have seen very little change this quarter, apart from DMR which saw a decrease from £54.29 per tonne to £39.35 per tonne, the lowest it has been since Q2 2019/20.
- Material market prices have continued to rise this quarter, particularly for dry mixed recycling, and we should expect to see this having an impact on MRF gate fees in due course. Textile prices continue to increase in 2021.

Contents

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 Q2 2019/20 to Q1 2021/22 for dry-mixed recycling, including the proportions of this which are recycled and not recycled.

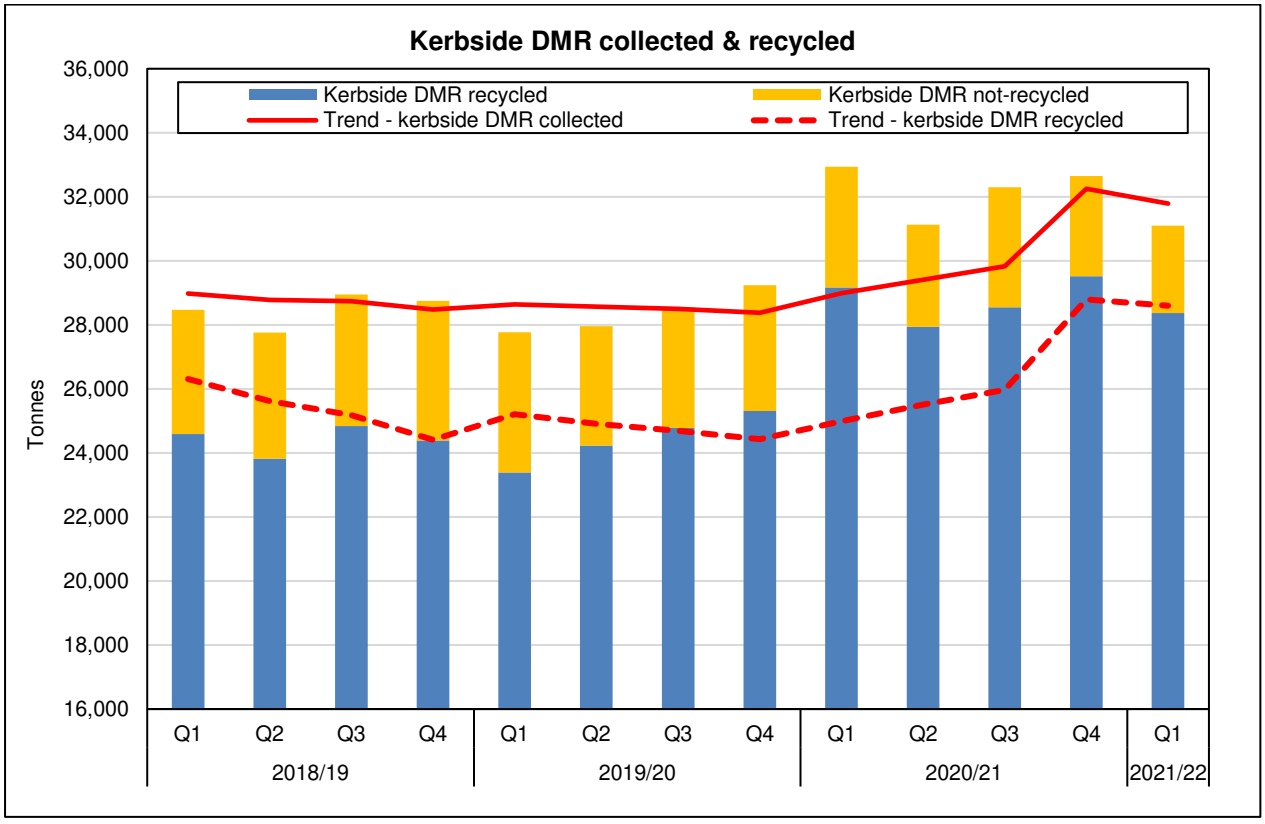
Table 1: Tonnages collected, Q2 2019/20 – Q1 2021/22

	2019/20			2020/21				2021/22	Trend (MAA)	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q4	Q1
Dry-mixed recycling – kerbside collections										
DMR collected	27,962	28,537	29,239	32,936	31,130	32,299	32,645	31,097	32,252	31,793
DMR recycled	24,232	24,783	25,314	29,166	27,939	28,550	29,523	28,373	28,794	28,596
% recycled	86.7%	86.8%	86.6%	88.6%	89.7%	88.4%	90.4%	91.2%	89.3%	89.9%
Not-recyclable	3,730	3,754	3,925	3,770	3,192	3,748	3,123	2,725	3,458	3,197
% not-recycled	13.3%	13.2%	13.4%	11.4%	10.3%	11.6%	9.6%	8.8%	10.7%	10.1%

"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 2018/19 to Q1 2021/22.

Chart 1: DMR tonnages collected and recycled, Q1 2018/19 – Q1 2021/22



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 shown above as not recycled represents the sum of rejected loads and MRF contamination.

Since the introduction of restrictions related to COVID-19 we have seen higher than usual tonnages compared to previous years. The latest quarter shows this trend slowing slightly which may have resulted from a relaxing of restrictions.

As shown in Table 1 and Chart 1 above, the latest quarterly trend is therefore showing a slight decrease in the DMR tonnage both collected and recycled for the year to Q1 2021/22. SEP Officers have been monitoring the impact on services of having to manage higher tonnages across all main kerbside collections throughout the year.

All authorities have seen decreases in tonnages collected this quarter, with the exception of Reigate & Banstead and Guildford who continue to see slight increases.

As stated above, the proportion of DMR not recycled is the volume of DMR collected that has been rejected by the MRF at arrival and the proportion deemed non-recyclable by the MRF. Collected DMR is defined as the sum of tonnages collected either as co-mingled or source segregated material.

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 sometimes be recycled, for example, plastic bags or tetrapaks.

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 decreased this quarter, with a reduction of around half a percentage point in the trend between Q4 and Q1. For the last two quarters the contamination rate has been below 10%. The Q1 rate was 8.8% an improvement of 0.8% since Q4.

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. While Surrey Heath has seen the largest improvement in its proportion of material recycled with a reduction of 4.9 percentage points. Spelthorne have also seen a significant improvement of nearly 2 percentage points.

Food waste

Table 2 below shows the quarterly tonnages from Q2 2019/20 to Q1 2021/22 for food waste.

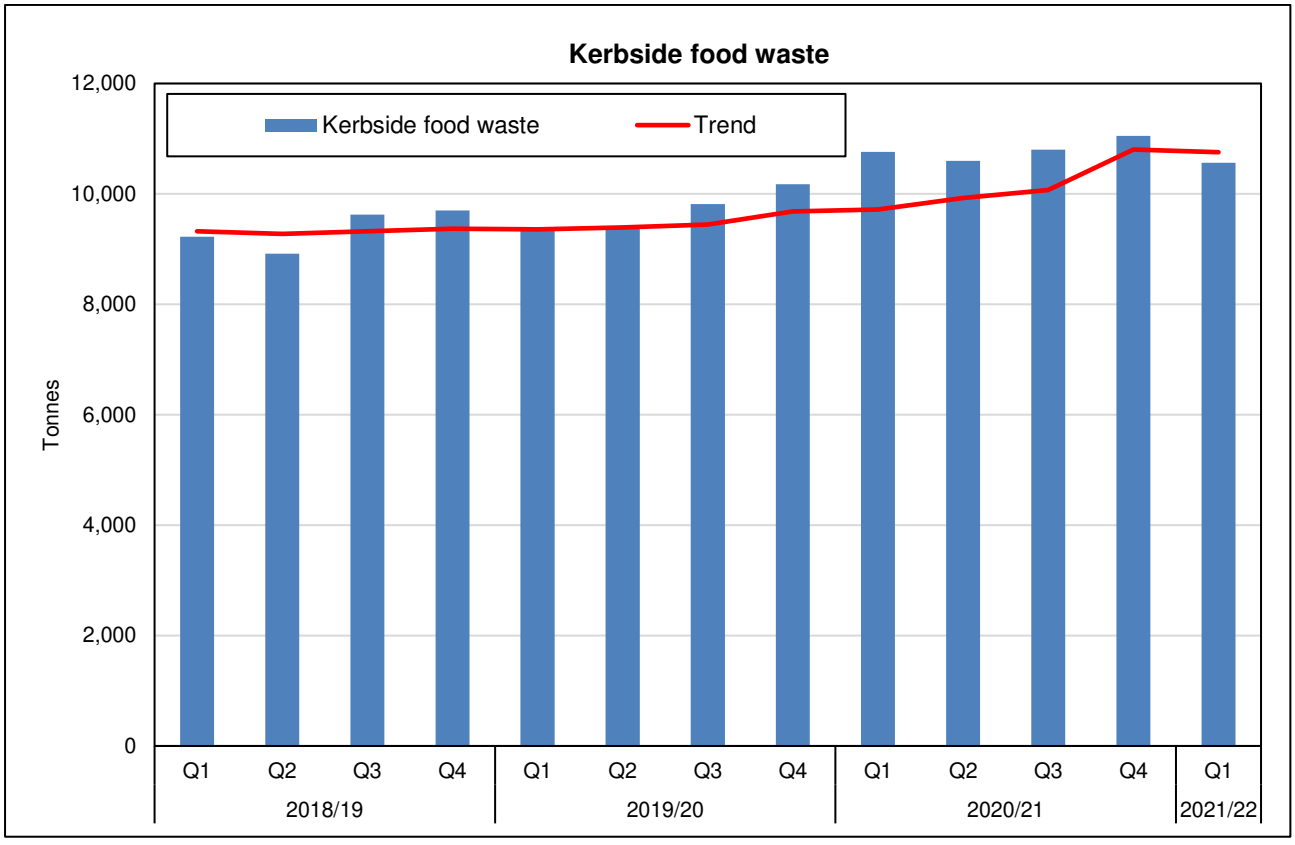
Table 2: Food waste tonnages collected, Q2 2019/20 – Q1 2021/22

	2019/20			2020/21				2021/22	Trend (MAA)	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q4	Q1
Food waste										
Food waste collected	9,395	9,819	10,177	10,762	10,600	10,800	11,053	10,564	10,804	10,754

"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 2018/19 to Q1 2021/22.

Chart 2: Food waste tonnages collected, Q1 2018/19 – Q1 2021/22



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

For the sixth consecutive quarter, more than 10,000 tonnes of food waste have been collected at the kerbside. As with DMR, there was a slight decrease in tonnage in Q1 most likely related to a relaxation in COVID-19 restrictions. Tonnages remain high when compared to pre pandemic levels.

Epsom & Ewell, Runnymede and Surrey Heath have all seen increases in their collected tonnage. All other authorities have seen a decrease with Elmbridge seeing the largest decrease.

Garden waste

Table 3 below shows the quarterly tonnages from Q2 2019/20 to Q1 2021/22 for garden waste.

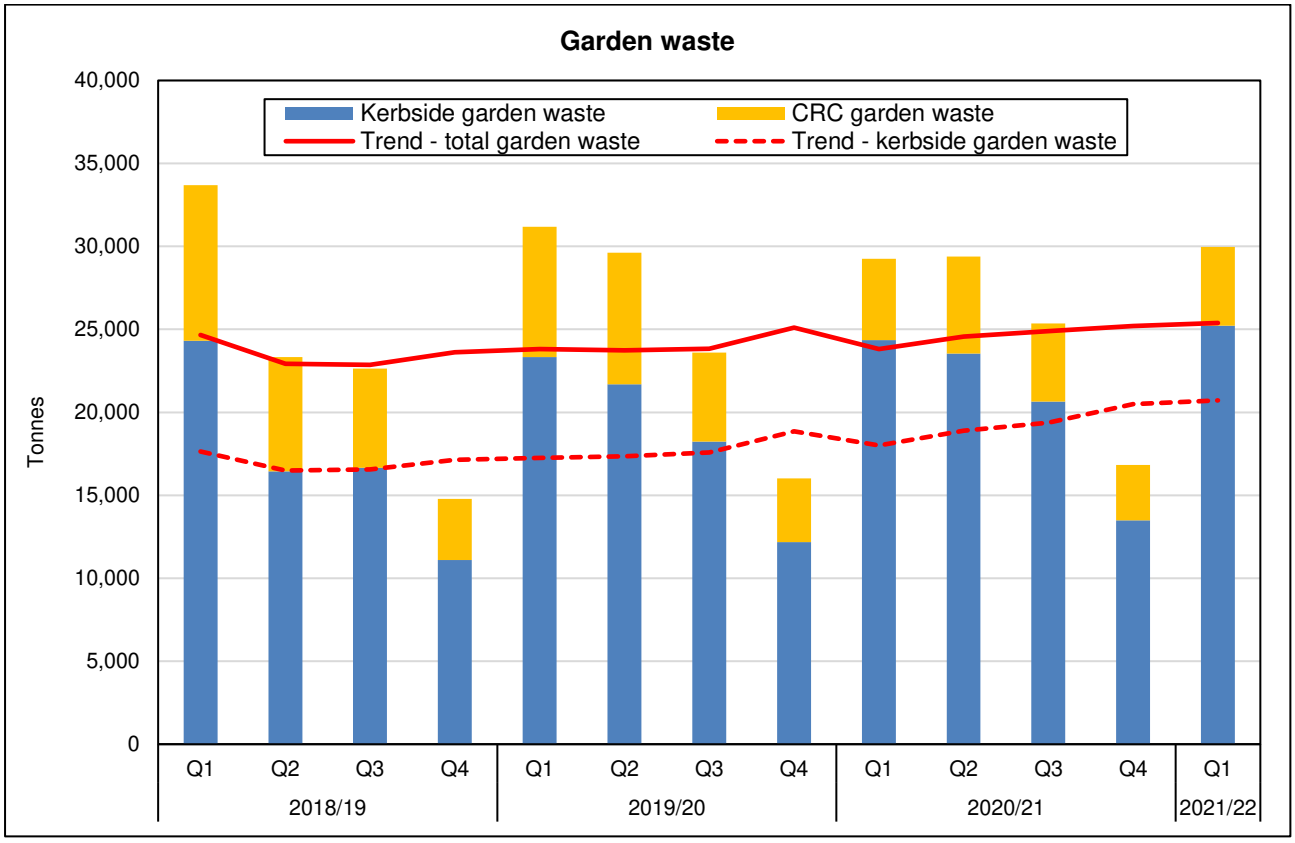
Table 3: Garden waste tonnages collected, Q2 2019/20 – Q1 2021/22

	2019/20			2020/21				2021/22	Trend (MAA)	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q4	Q1
Garden waste										
Kerbside	21,691	18,235	12,173	24,349	23,536	20,642	13,485	25,217	20,503	20,720
CRC	7,903	5,431	3,407	4,903	5,849	4,715	3,338	4,757	4,701	4,665
Total	29,594	23,666	15,579	29,251	29,385	25,357	16,823	29,974	25,204	25,385

"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 2018/19 to Q1 2021/22.

Chart 3: Garden waste tonnages collected, Q1 2018/19 – Q1 2021/22



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 only seen a slight increase.

The Q1 garden waste tonnages are up this quarter when compared to the same period in the previous year. There has been a slight reduction in tonnages collected at CRCs which supports the long term move towards kerbside collections.

Residual waste

Table 4 below shows the quarterly tonnages from Q2 2019/20 to Q1 2021/22 for residual waste.

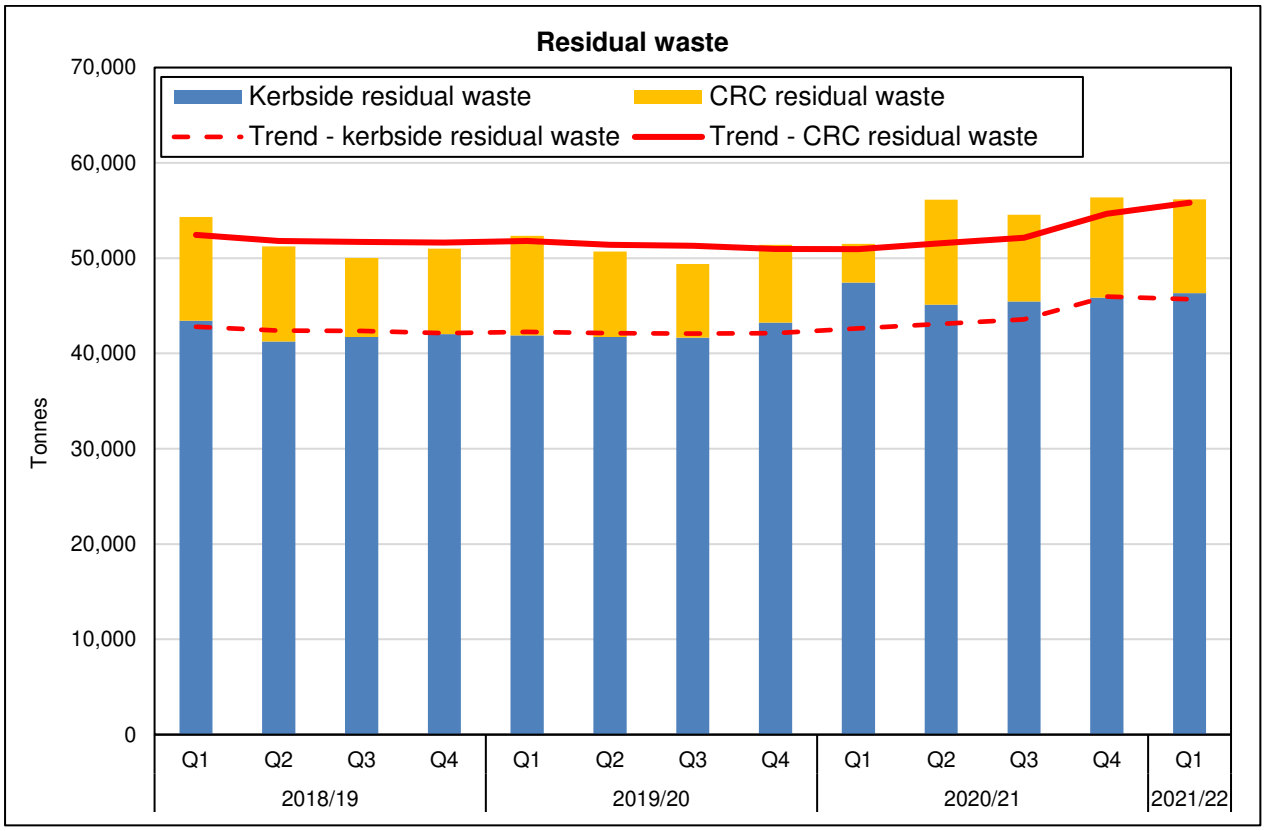
Table 4: Residual waste tonnages collected, Q2 2019/20 – Q1 2021/22

	2019/20			2020/21				2021/22	Trend (MAA)	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q4	Q1
Residual waste										
Kerbside	41,707	41,652	43,231	47,439	45,115	45,441	45,871	46,322	45,966	45,687
CRC	9,002	7,671	8,179	4,056	11,024	9,130	10,507	9,856	8,679	10,129
Total	50,709	49,324	51,410	51,495	56,139	54,571	56,378	56,178	54,646	55,816

"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 2018/19 to Q1 2021/22.

Chart 4: Residual waste tonnages collected, Q1 2018/19 – Q1 2021/22



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.

Overall, the residual tonnage collected in the Q1 has been consistent with the previous four quarters. We have continued to see an overall increase in residual waste as a result of the COVID-19 pandemic. However, excluding CRCs we can see that there has been a slight

reduction in the volume of residual waste collected. With the temporary closure of CRCs in Q1 last year collected tonnages were artificially low. We should expect to see the overall trend for residual waste flatten or decrease in the next quarter.

Tonnages per household have decreased in all authorities, except for Reigate & Banstead and Surrey Heath, with the most noticeable decreases in Elmbridge and Woking.

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, and also because these particular metrics are likely to continue to be of interest to the wider public, 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 Q4 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.

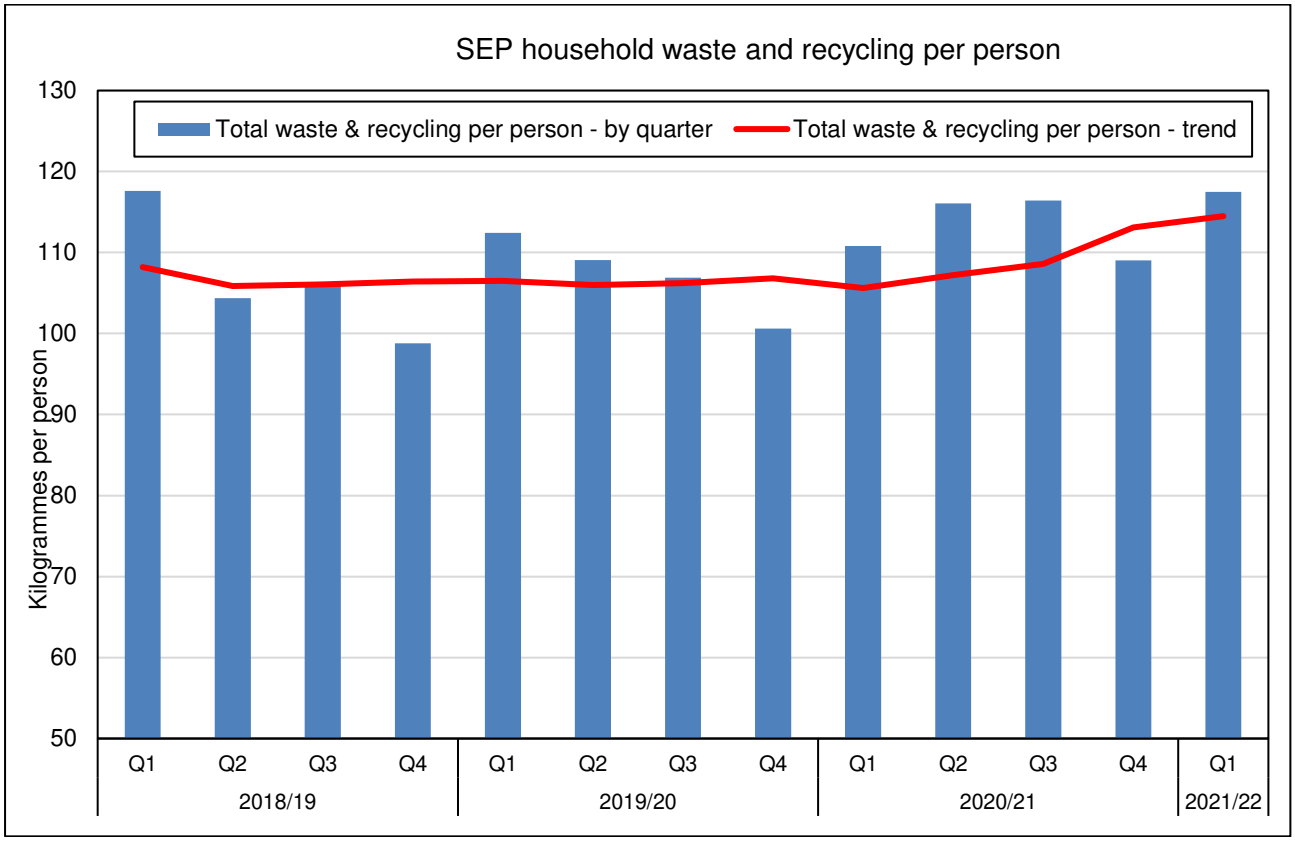
Collected household waste and recycling per person

Table 5 and Chart 5 below show household waste and recycling per person from Q2 2019/20 to Q1 2021/22 and from Q1 2018/19 to Q1 2021/22 respectively.

Table 5: Household waste and recycling per person, Q2 2019/20 – Q1 2021/22

	2019/20			2020/21				2021/22	Trend (MAA)	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q4	Q1
Waste & recycling per person (kg)	109.1	106.9	100.6	110.8	116.1	116.4	109.0	117.5	113.1	114.7

Chart 5: Household waste and recycling per person, Q1 2018/19 – Q1 2021/22



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 increasing trend which has been observed throughout 2020/21 continued this quarter. For the four quarters to Q1 2021/20, household waste and recycling per person stood at 114.7 kg on average per quarter, up from 113.1 kg per person in the year to Q4.

Most authorities have seen a decrease in waste and recycling per person since Q4. Conversely Surrey County Council (SCC) and Reigate & Banstead have seen an increase, in both instances because of a reduced service in Q1 2020/21. This meant that tonnages were artificially low.

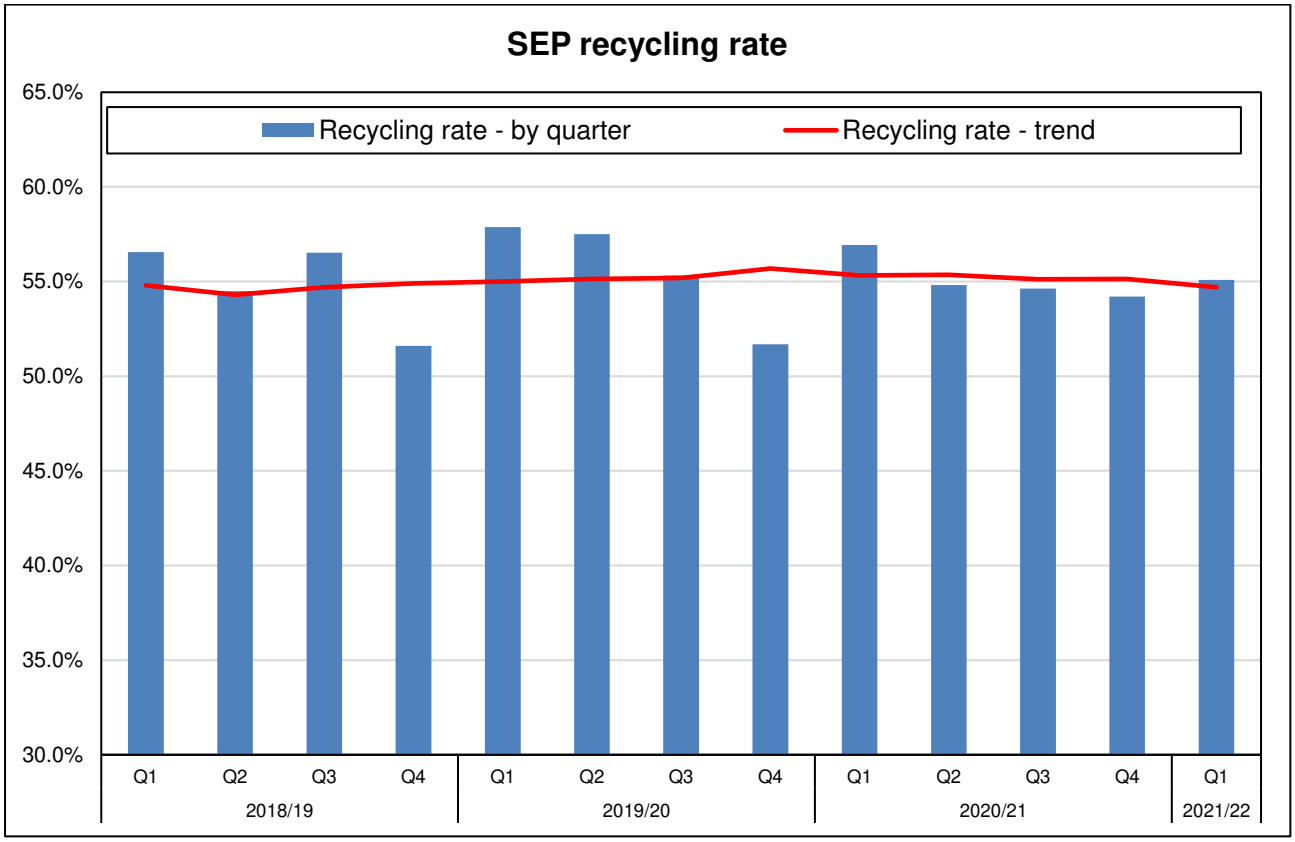
Percentage of household waste sent for reuse, recycling or composting (recycling rate)

Table 6 and Chart 6 below show the recycling rate from Q2 2019/20 to Q1 2021/22 and from Q1 2018/19 to Q1 2021/22 respectively.

Table 6: Recycling rate, Q2 2019/20 – Q1 2021/22

	2019/20			2020/21				2021/22	Trend (MAA)	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q4	Q1
Recycling rate	57.5%	55.3%	51.7%	56.9%	54.8%	54.6%	54.2%	55.1%	55.1%	54.7%

Chart 6: Recycling rate, Q1 2018/19 – Q1 2021/22



Note: Vertical axis is truncated.

The long-term trend for this measure indicates that there was an increase in the overall recycling rate to the end of 2019/20. However, this trend has since then flattened out, before decreasing in the first quarter of 2021/22. The recycling rate for the year to Q1 2021/22 stood at 54.7%, which represents a decrease of 0.4 percentage points from the previous quarter. We have seen increased kerbside waste tonnages due to the COVID-19 pandemic, however, this has affected both recycling and residual waste. Please note there was an increase in the Q4 2020/21 recycling rate for Surrey County Council because of a significant amount of recovered material from the residual waste stream.

Overall districts and boroughs have seen an increase in their recycling rates, with Reigate & Banstead seeing the largest. This is partly due the suspension of the garden waste service in Q1 last year, which lowered the recycling rate for that quarter and impacted the trend. Surrey County Council have seen the largest decrease in their recycling rate which has dropped from 54.6% to 50.4%. Again, this is partly caused by the closure and restriction of materials at many CRCs in Q1 of last year.

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

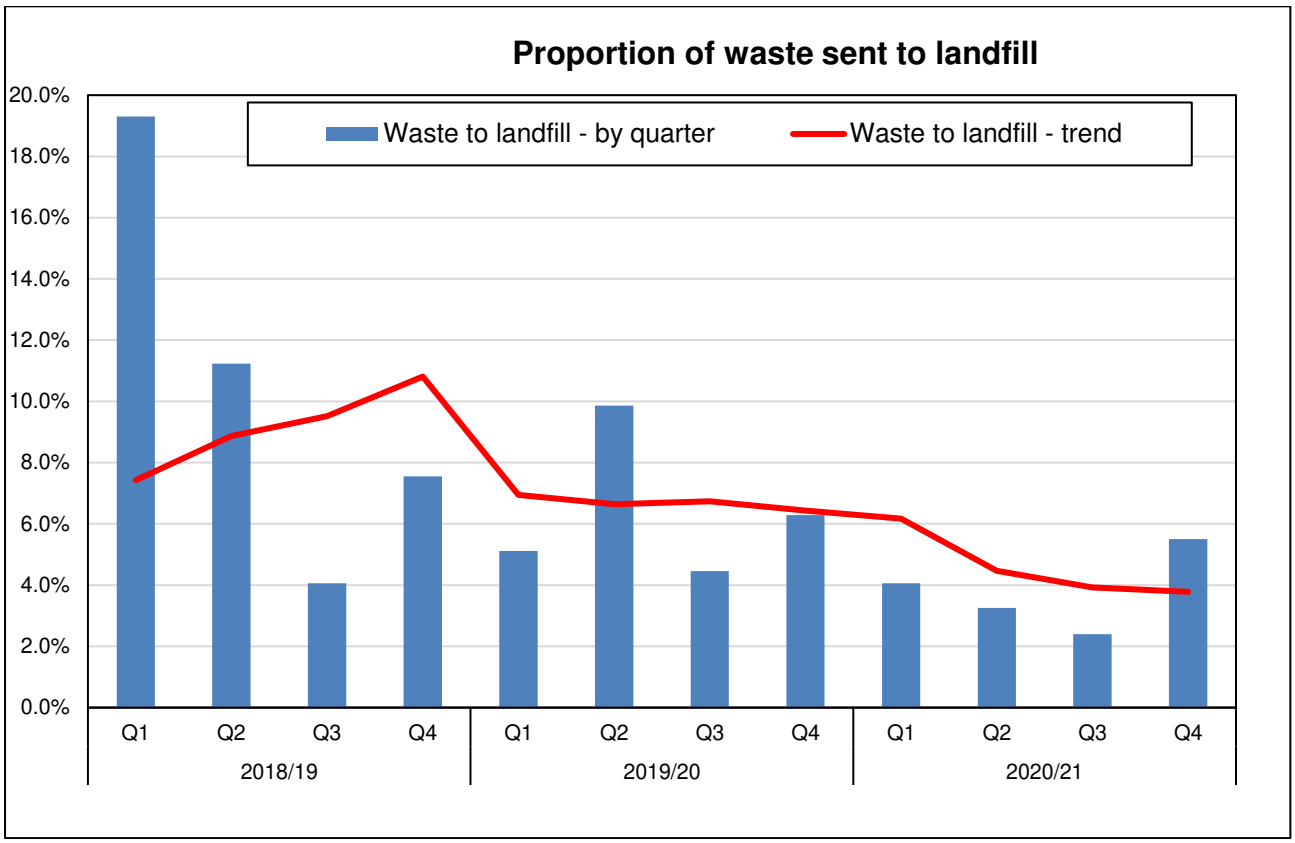
Percentage of municipal waste sent to landfill

Table 7 and Chart 7 below show the percentage of municipal waste sent to landfill from Q1 2019/20 to Q4 2020/21 and from Q1 2018/19 to Q4 2020/21 respectively. In both cases, data have been sourced from *Waste Data Flow*, which does not yet hold data for the latest quarter.

Table 7: Percentage of municipal waste sent to landfill, Q1 2019/20 – Q4 2020/21

	2019/20				2020/21				Trend (MAA)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q3	Q4
Waste to landfill	5.1%	9.9%	4.5%	6.3%	4.1%	3.3%	2.4%	5.5%	3.9%	3.8%

Chart 7: Percentage of municipal waste sent to landfill, Q1 2018/19 – Q4 2020/21



The long-term trend in this measure has been fairly stable from Q1 2019/20 to Q1 2020/21. This was then followed in both Q2 and Q3 by a decrease in the tonnage of material being sent to landfill. In Q4, 5.5% of municipal waste was sent to landfill. In the year to Q4 2020/21, 3.8% of Surrey's waste was sent to landfill, down 0.3 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 Q1 2019/20 to Q4 2020/21. The data are sourced from Defra's *Waste Data Flow* reports, which does not yet hold data for the latest quarter. Note that re-use tonnages are not included in these figures.

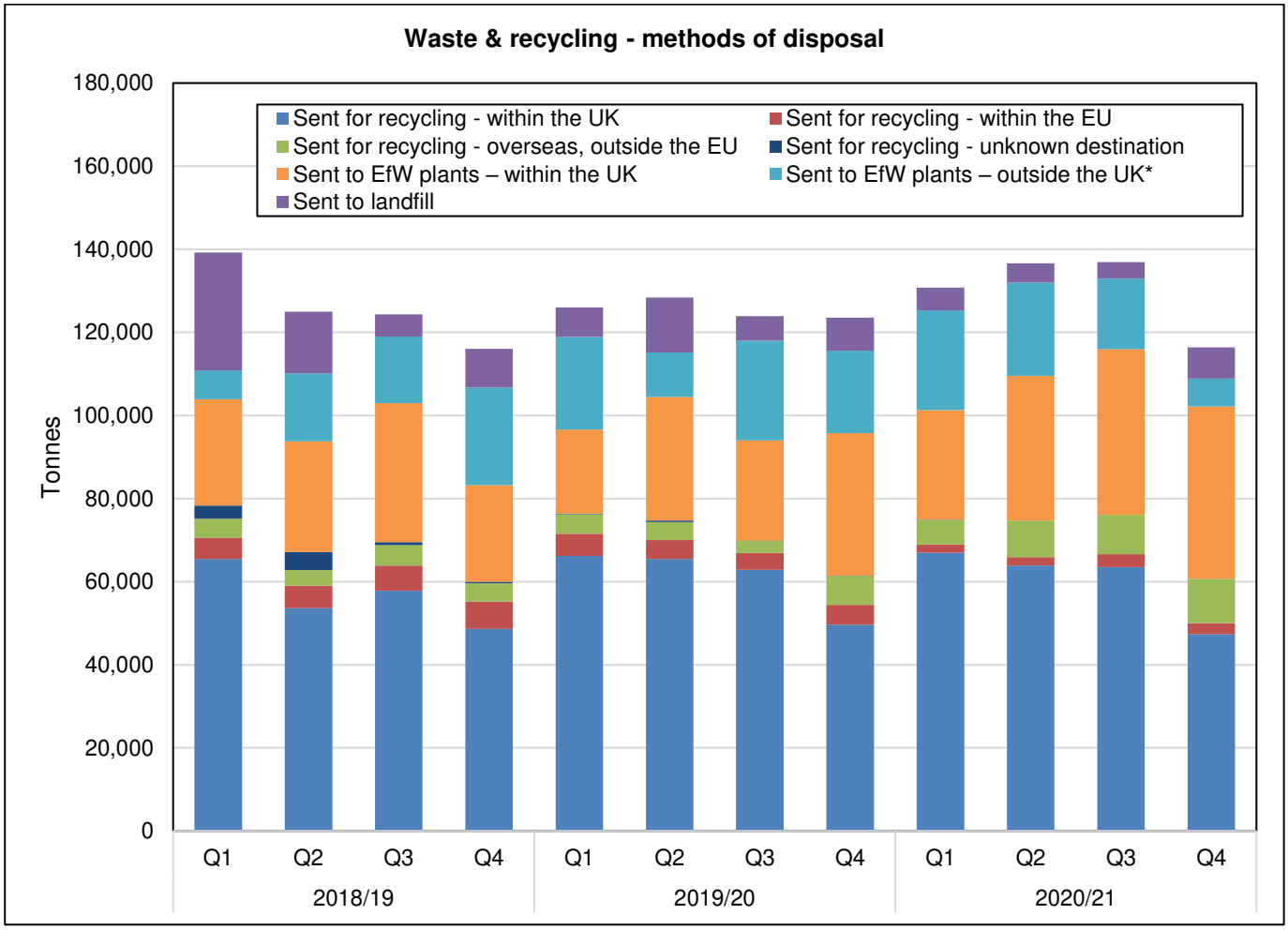
Table 8 also shows the amount of material that is recovered as recycling from residual waste by SCC each quarter. This could be a variety of materials, including DMR material separated from black-bag waste at the reprocessing stage, compost-like material that can be used for landfill cover, or mattresses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

Table 8: Waste & recycling tonnages by method of disposal, Q1 2019/20 – Q4 2020/21

	2019/20				2020/21			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Collection								
Collected as residual – recycled	6,488	5,379	7,359	4,681	3,697	2,550	6,178	5,679
Disposal - tonnages								
Sent for recycling - within the UK	66,158	65,479	62,834	49,664	66,957	63,860	63,508	47,348
Sent for recycling - within the EU	5,344	4,560	4,054	4,733	1,967	2,035	3,098	2,668
Sent for recycling - overseas, outside the EU	4,724	4,329	2,984	6,921	5,948	8,818	9,473	10,709
Sent for recycling - unknown destination	120	368	16	85	35	0	0	0
Sent to EfW plants – within the UK	20,243	29,696	24,121	34,335	26,393	34,780	39,900	41,422
Sent to EfW plants – outside the UK(1)	22,326	10,691	23,947	19,871	23,955	22,508	16,966	6,727
Sent to landfill	7,062	13,270	5,952	7,911	5,483	4,639	3,923	7,479
Total disposal	125,977	128,394	123,907	123,520	130,738	136,640	136,868	116,353
Disposal - percentages								
Sent for recycling - within the UK	53%	51%	51%	40%	51%	47%	46%	41%
Sent for recycling - within the EU	4%	4%	3%	4%	2%	1%	2%	2%
Sent for recycling - overseas, outside the EU	4%	3%	2%	6%	5%	6%	7%	9%
Sent for recycling - unknown destination	0%	0%	0%	0%	0%	0%	0%	0%
Sent to EfW plants – within the UK	16%	23%	19%	28%	20%	25%	29%	36%
Sent to EfW plants – outside the UK	18%	8%	19%	16%	18%	16%	12%	6%
Sent to landfill	6%	10%	5%	6%	4%	3%	3%	6%
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 tonnages by method of disposal, Q1 2018/19 – Q4 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 EfW, both within the UK and overseas.

Recycling

The amount of material being processed as recycling at UK facilities significantly decreased this quarter from 63,508 to 47,348 tonnes, and this now represents 41% of the total disposal tonnage, the lowest proportion since 2018/19. The drop in Q4 is expected and has occurred previously in Q4 2019/20 and 2018/19. Most recycling has continued to stay within the UK this quarter, with a smaller percentage being sent to facilities either within the EU or elsewhere overseas, outside the EU. However, in absolute terms the amount of recycling being sent overseas (outside the EU) has increased this quarter, whilst recycling sent within the EU has decreased. Recycling sent within the EU went from 3,098 in Q3 to 2,668 tonnes in Q4; however, this still represents 2% of total waste disposal and has remained flat. Recycling sent outside the EU went from 9,473 in Q3 to 10,709 tonnes in Q4; this now represents 9% of total waste disposal (up 2% from Q3).

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. However, in this quarter tonnages sent to landfill has increased.

Tonnages sent to UK EfW plants increased in Q4 and are now at its highest point than since at least the beginning of 2018/19. Precisely 41,422 tonnes were sent to UK EfW plants; this was 36% of total waste disposal, an increase from 29% in Q3. The amount of material being sent to EfW plants outside the UK significantly decreased in Q4, to 6,727 tonnes. This represented 6% of all disposal tonnages (down 6% from Q3).

The amount of material 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. However, the drop in sending tonnages in overseas EfW plants has led to an increased in tonnage sent to landfill. In Q4 , 7,479 tonnes was sent to landfill and this represents 6% of total waste disposal, an increase from 3% in Q3.