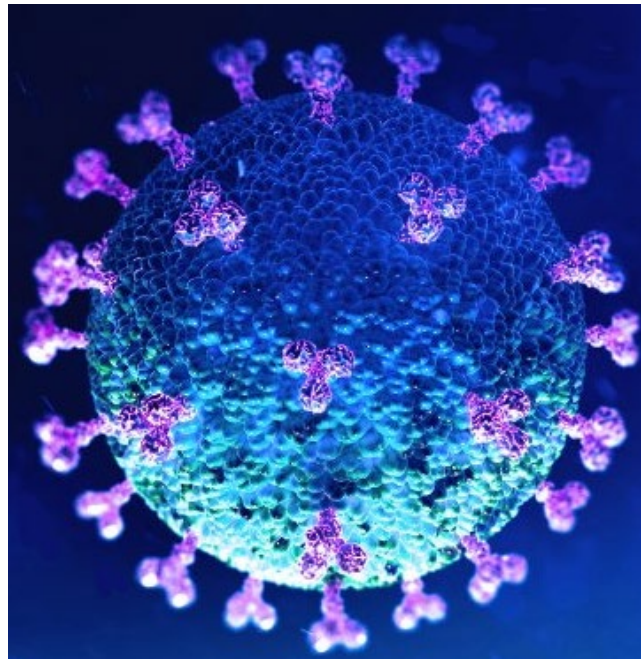


Briefing: COVID-19 and UK Waste Sector

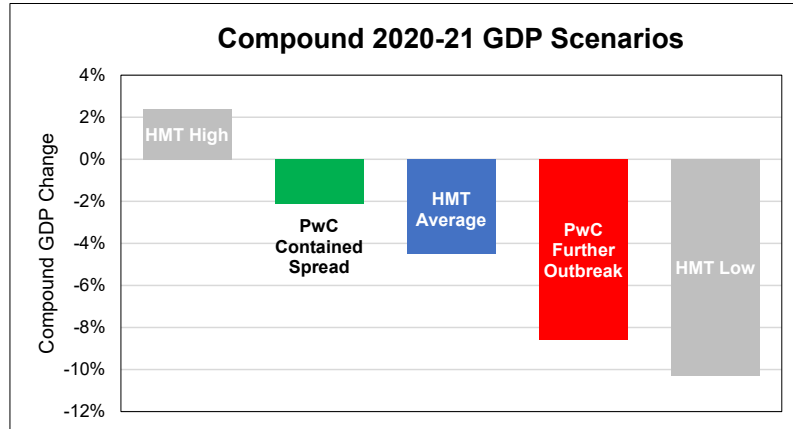
Autumn 2020



10 November 2020

EXECUTIVE SUMMARY

- ◆ During spring 2020 Tolvik released a series of Briefing Reports which considered the potential impact of COVID-19 on the waste sector, with a particular focus on Residual Waste.
- ◆ This Autumn version of the Report, uses provisional data to assess the actual impact of COVID-19 during the second quarter (“Q2”) of 2020 (i.e. April – June) and, in the light of this analysis and recent economic data, revisits the projections set out in earlier reports.
- ◆ Using a range of data sources it is estimated that during Q2 2020, whilst kerbside collected Household Waste rose by around 10.3%, this was offset by a significant reduction in tonnages of Household Waste accepted at HWRCs. The result was a modest fall in overall Household Waste arisings.
- ◆ Tonnages of dry recyclables collected rose by around 16.5% during the period, however reduced garden waste collection and limited HWRC availability meant Household Waste recycling rates fell during Q2 2020 by an estimated 3.2%. The balance of probabilities suggests that when all data is analysed the actual reduction is likely to be greater than that estimated due to challenges in finding markets for the collected recycle.
- ◆ Tonnages of kerbside Household Residual Waste rising on average by 11.8% during Q2 2020. Whilst tonnages from HWRCs recovered towards the end of Q2, they were down overall during the quarter by 50%, meaning that the total tonnage of **Residual Household Waste is estimated to have risen by around 3.8%**. The greater than expected resilience of local authority recycling services means that this increase was lower than previously projected.
- ◆ It is estimated that **average reduction in C&I Waste tonnages during Q2 was 37.5%**. This is less than projected – for whilst, as expected, April saw a much greater reduction of 45-50%, there was a modest recovery in tonnages in May and June and subsequently, as lockdown eased, into Q3.
- ◆ Overall it is estimated that **Residual Waste tonnages in England fell by 15.3%** during Q2. This “top down” analysis is consistent with Tolvik’s previously released analysis based on quarterly site returns provided to the Environment Agency.
- ◆ In considering the future impact of COVID-19 on the sector, projections have been informed by data gathered by HM Treasury (“HMT”) of a range of independent forecasts⁽¹⁾ together with more detailed PwC projections of the impact of COVID-19 on individual sectors of the economy⁽²⁾. The focus of this Briefing Report is upon the three central scenarios shown coloured which suggest that by the end of 2021 the UK economy will be between 2.1% and 8.6% smaller than in 2019.



- ◆ In the light of the new lockdown in England from 5th November, PwC’s “Contained Spread” looks an increasingly unlikely outcome.
- ◆ As noted in previous Briefing Reports, those sectors of the economy most impacted by COVID-19 (e.g. hospitality) tend to be some of the sectors which produce the most waste and so projections of GDP tend to under-estimate the impact of COVID-19 on Residual C&I Waste tonnages.
- ◆ Updated analysis suggests that this under-estimate is around 4.2% - 4.7% meaning that in the “HMT Average” scenario **Residual C&I Waste tonnages in England are projected to be 8.9% lower by the end of 2021 than they were in 2019**. In the PwC “Further Outbreak” scenario the modelling suggests they will be 13.3% lower.
- ◆ Assuming that in the period to the end of 2021 local authority services are sustained at “near normal” levels, so maintaining recycling as well as Residual Waste services, the other factor to consider is the extent to which increased home working will lead to a sustained increase in Household Waste tonnages.
- ◆ Very provisional analysis suggests that in the long term the sustained increase could be around 2.9%. In the near term, home working rates are expected to remain much higher than the projected long term trend – and data suggests that currently kerbside collected Residual Household Waste tonnages are as much as 10% higher than pre-COVID levels. These are partially offset by the ongoing restrictions at HWRCs which means throughputs remain modestly lower than the underlying seasonal average.
- ◆ It is currently unclear the extent to which this change in working patterns will effectively just transfer waste from the C&I Waste stream to the Household Waste stream or whether it will prove to be additive (i.e. result in the generation of additional waste). For the sake of completeness both scenarios have been modelled.
- ◆ Overall the analysis suggests that the longer term impact of COVID-19 on Residual Waste in England (i.e. to 2025) will be a reduction of between 0.5Mtpa and 1.3Mtpa with a median of 0.8Mtpa. These figures are modestly greater than that previously estimated in Version 3 of the Briefing Report – reflecting that the latest independent projections for the UK economy are now more pessimistic than those in May.

BACKGROUND

We released our first Briefing Report in late March 2020 on the potential impacts of the COVID-19 pandemic on the UK waste sector just as the UK was entering COVID-19 lockdown. This was subsequently updated in mid-April and at the end of May.

This Autumn version of the Report uses a range of provisional data sources to assess the actual impact of COVID-19 during the second quarter of 2020 (i.e. April – June). This is broadly equivalent to the period during which the UK experienced its most restricted lockdown.

Informed by this analysis, together with recent economic projections, this version of the Briefing Report develops an updated series of projections for Residual Waste in England for the rest of 2020-21 and through to 2025. The analysis was undertaken before the announcement of the new national lockdown in England from 5th November 2020.

We are very grateful to the support of those who have provided us with confidential and/or provisional data used in preparing this report.

The availability of data means that whilst much of the modelling in this Briefing Report is focussed on England the conclusions have been extended where possible to the UK as a whole. Unless recent information suggests it is not appropriate to do so, we have looked wherever possible to apply a similar methodology to that used in previous Briefing Reports.

As previously in our reports, Residual Waste is defined as non-hazardous, solid, combustible mixed waste which remains after recycling activities and is capable of being processed alongside Residual Household Waste.

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Please note, tables may not total due to rounding.

1. Q2 IMPACT

1.1. Baseline Waste Generation

According to DEFRA data⁽³⁾ and UK Statistics on Waste⁽⁴⁾ in 2018/19 the tonnage of Household Waste generated in England was 23.0 Million tonnes (“Mt”), whilst the total tonnage of Commercial and Industrial (“C&I”) Waste generated in 2018 is estimated to be 37.2Mt. Figure 1 compares this with Tolvik’s estimate of the tonnages of Residual Waste in 2018 based on our own analysis from a range of data sources.

Based on data released to date, the total tonnage of Residual Waste in 2019 was very similar to the estimates for 2018 (within +/-1% of the 2018 total) and so it seems reasonable to now use 2018 data as the baseline for the impact of COVID-19.

England, 2018 Mt	Arisings	Residual Waste
Household - Kerbside Collected	18.9	11.3
Household - HWRCs	4.2	1.7
Commercial Waste	27.1	9.3
Industrial Waste	10.1	1.8
Total	60.2	24.0

Figure 1: Total Waste Arisings – England – 2018 Source: UK Statistics on Waste, Tolvik

1.2. Household Waste

As was comprehensively tracked by ADEPT during Q2 2020⁽⁵⁾, COVID-19 impacted on local authorities’ ability to provide Household Waste services. Residual Waste collection services were least affected whilst Garden Waste collections saw the greatest level of service interruption.

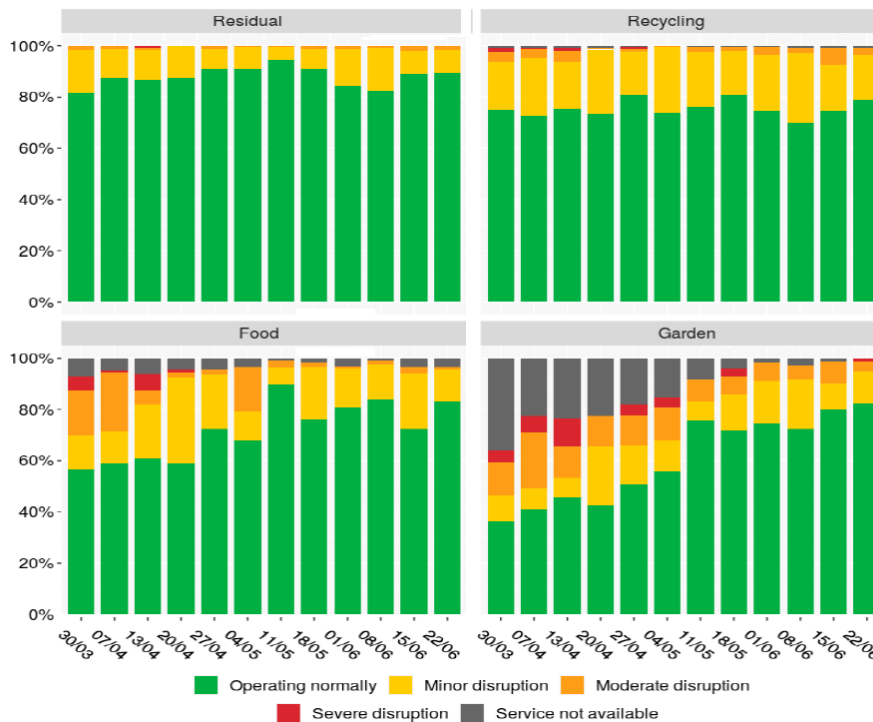


Figure 2: Impact of COVID-19 on Household Waste collection Source: ADEPT

As Figure 3 shows, HWRC services were also significantly affected.

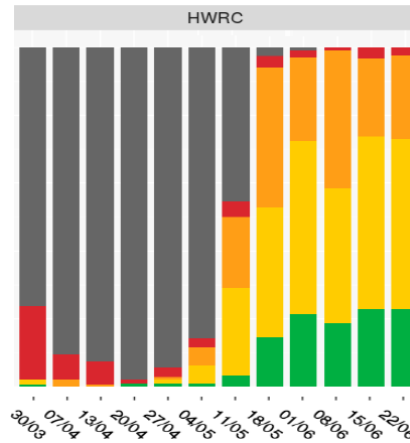


Figure 3: Impact of COVID-19 HWRC (Key as per Figure 2) Source: ADEPT

Local Authority Service	Average Q2 2020 Service Level
Food Waste Collection	97.5%
Dry Recyclable Collection	100.0%
Garden Waste Collection	85.0%
Residual Waste Collection	100.0%
HWRC Operation	40.0%

Figure 4: Average Service Levels Source: Tolvik estimate from ADEPT

Figure 4 provides a rough estimate of the average service level during Q2 2020.

The first version of this Briefing Report included Figure 5 for Household Waste in England.

Waste type, Mt	Baseline Arisings	Baseline Recycling	Baseline Residual Waste	Recycling Rate
Food Waste	4.2	0.4	3.8	10%
Dry Recyclables – Paper, card, metal etc	10.0	4.8	5.2	48%
Garden Waste - Kerbside	3.2	2.2	1.1	67%
HWRCs	4.2	0.1	1.7	59%
Other Generally Residual	1.4	2.5	1.2	11%
Total	23.0	10.0	13.0	43.5%

Figure 5: Household Waste Tonnages Source: Tolvik based on WRAP adjusted

It noted that the composition analysis in Figure 5 was based on some reasonably broadly defined categories which were intended to be indicative but that, given the uncertainty around various assumptions used in the Briefing Report, a detailed analysis was unnecessary. This continues to apply.

The first version also estimated that the impact of a full COVID-19 lockdown would be, on an annualised basis, to increase Household Waste arisings in England by 12.6% (26.0Mt vs 23.0Mt). However this analysis did not fully reflect estimated impact of reduced service levels on waste tonnages which led to tonnages being diverted from the Household Waste stream. It is understood that commercial skip operators were particularly busy during Q2 and there is anecdotal evidence that

the reduced garden waste collection service in particular resulted in greater tonnages of home composting/burning and other “informal” disposal routes.

Figure 6 estimates these effects using the data in Figure 5. The net effect is that during Q2 Household Waste arisings actually fell by an estimated 1.7%.

Waste type, Mt	Baseline Arisings (Figure 5)	V1 Estimate post COVID-19	Revised Estimate post COVID-19
Food Waste	4.2	5.3	5.2
Dry Recyclables – Paper, card, metal etc	10.0	11.2	11.2
Garden Waste - Kerbside	3.2	3.5	3.0
HWRCs	4.2	4.6	1.8
Other Generally Residual	1.4	1.4	1.4
Total	23.0	26.0	22.6

Figure 6: Estimated Annualised Household Waste Arisings for England

From a variety of public and confidential sources, Tolvik has estimated the average impact of the full lockdown on tonnages of Household Waste recycled. These are shown in Figure 7 and, as for the earlier Figures, the impact is shown on an annualised basis.

Waste type, Mt	Baseline Recycling (Figure 5)	Impact on tonnages of COVID-19 in Q2	Estimate of post COVID-19
Food Waste	0.4	+10%	0.5
Dry Recyclables – Paper, card, metal etc	4.8	+16%	5.6
Garden Waste - Kerbside	2.2	-8%	2.0
HWRCs	2.5	-60.0%	1.0
Other Generally Residual	0.1	-50.0%	0.1
Total	10.0		9.1

Figure 7: Estimated Annualised Household Waste Recycling for England

Figures 6 and 7 can then be combined to show the annualised impact of full COVID-19 lockdown on Residual Household Waste tonnages in England. This suggests a reduction in recycling rates during Q2 2020 by circa 3.2%. In practice when figures are finalised the actual reduction is likely to be greater than that estimated due to challenges in finding markets for the collected recycle.

Waste type, Mt	Arisings (Figure 6)	Recycled (Figure 7)	Residual	Recycling Rate
Food Waste	5.2	0.5	4.7	9%
Dry Recyclables – Paper, card, metal etc	11.2	5.6	5.6	50%
Garden Waste - Kerbside	3.0	2.0	1.0	66%
HWRCs	1.8	1.0	0.8	54%
Other Generally Residual	1.4	0.1	1.3	6%
Total	22.6	9.1	13.5	40.3%

Figure 8: Estimated Annualised Impact of COVID-19 on Household Waste in England

The analysis points to overall Residual Household tonnages rising by 3.8% during Q2 2020 as shown in Figure 9. The changes in Residual Waste tonnages from Kerbside and HWRC are consistent with

analysis of data from a variety of public and confidential sources which suggest kerbside Residual Waste tonnages rose during Q2 2020 by 11.8% when compared with Q2 2019 whilst HWRC tonnages fell by 50%.

Waste type, Mt	Baseline (Figure 5)	Estimate post COVID-19 (Figure 8)	Change
Kerbside Residual	11.3	12.7	+12%
HWRC Residual	1.7	0.8	-49%
Total	13.0	13.5	+3.8%

Figure 9: Annualised Impact of COVID-19 on Residual Household Waste in England

1.3. C&I Waste

As always, data with respect to C&I Waste is less readily available. Figure 10 shows three assessments of C&I Waste collection tonnages in the period of Q2 2020 and also for July. Two are confidential but the third is based on public information provided by Biffa⁽⁶⁾. These show a trend of steadily recovering collected tonnages but that, on average, over Q2 2020 tonnages were down 38% when compared with the previous year.

Data on the split between Residual Waste and Recyclable collection is not available, and so it is assumed that during Q2 2020 C&I Waste recycling rates remained unchanged.

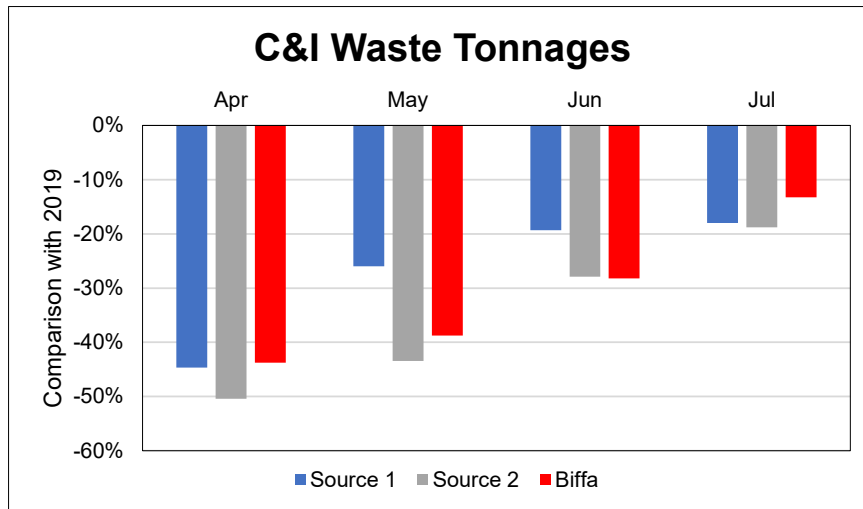


Figure 10: Impact of COVID-19 on C&I Waste tonnages Source: Confidential, Biffa

1.4. Impact in Q2 2020

England Mt	Annualised			Quarterly Baseline	Q2 2020 Estimated
	Baseline (Figure 1)	COVID-19 Impact	Estimated Tonnage		
Household - Kerbside Collected	11.3	+12%	12.7	2.8	3.2
Household - HWRCs	1.7	-49%	0.8	0.4	0.2
Commercial Waste	9.3	-38%	5.8	2.3	1.4
Industrial Waste	1.8		1.1	0.5	0.3
Total Residual Waste	24.0	-15.4%	20.4	6.0	5.1

Figure 11: Impact of COVID-19 on Residual Waste tonnages in England

Figure 11 summarises the analysis in the rest of this section and this points to a 15.4% reduction in Residual Waste tonnages in England in Q2 2020.

This is consistent with the findings for England based on preliminary quarterly information from the Environment Agency and issued as a press release by Tolvik on 15 September and shown in Figure 12.

England Mt	Quarterly Baseline	Q2 2020 Estimated	Change
RDF Export	0.6	0.3	-49%
EfW	2.9	3.0	+6%
MBT	0.1	0.1	-
Co-Incineration	0.1	0.1	-20%
Landfill	2.3	1.5	-33%
Total Residual Waste	6.0	5.1	-15.3%

Figure 12: Q2 2020 Residual Waste tonnages in England

2. PROJECTIONS

2.1. Context

COVID-19 has clearly highlighted the challenges in making projections.

As the analysis of Q2 data shows, the impact of COVID-19 on the waste sector is an interlinked mix of macro economics, service delivery (driven in part by localised variations in infection rates) and behavioural patterns. As we enter the winter months, whilst it becomes increasingly unlikely that some of the more optimistic scenarios will be applicable, experience also suggests that Household Waste services will continue to be more resilient than previously modelled.

As in previous versions of this Briefing Report, this section considers the projected impact of COVID-19 on the sector by the end of 2021. It then uses this as the starting point for projections through to 2025.

Consistent with many of the economic projections, this Briefing Report does not draw any conclusions with respect to the future impact of Brexit on the market.

2.2. GDP as a Driver

The latest official statistics⁽⁷⁾ suggest that in Q2 the UK economy fell by 21.5% when compared with the same quarter the previous year (or 19.8% when compared with Q1). This is significantly less than the 38% reduction in C&I Waste tonnages in Q2 estimated in the previous section.

Such a disconnect over such a period of disruption is not surprising – we noted previously that the expected scale of the variation in GDP and the disproportional impact of COVID-19 on specific sectors of the economy (including some of those which generate the greatest proportion of waste) would mean that the impact of COVID-19 on C&I Waste tonnages would not necessarily mirror GDP trends. It is further complicated by the very significant short term increase in home working which resulted in the shift to Household Waste of tonnages which would otherwise have been collected as C&I Waste.

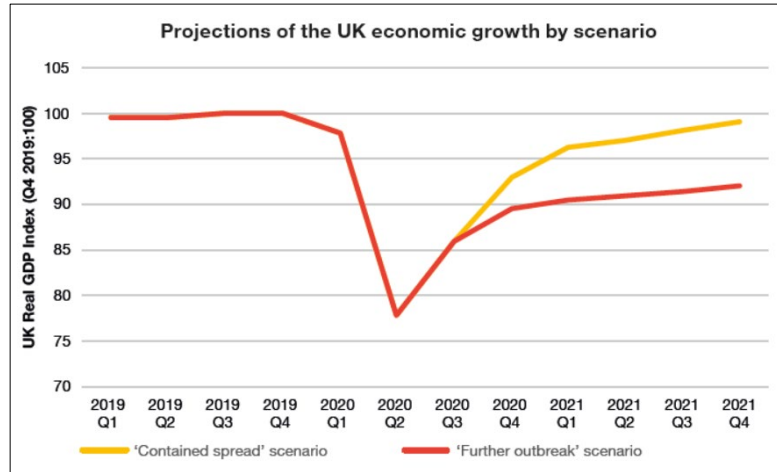
Over a longer period of time, it still seems reasonable to assume that there will be some form of correlation between GDP and C&I Waste arisings.

The latest monthly projections from 20 independent forecasts collated by HMT are summarised in Figure 13. These suggest that, in the longer term, the UK economy will have contracted on average by around 4.5% by the end of 2021 when compared with 2019 – referred to in previous Briefing Reports as the “scarring” effect of COVID-19 on the economy.

	2020 Calendar Year	2021 Calendar Year	Simple Compound
Average Growth – all forecasts	-10.1%	6.4%	-4.3%
Average Growth – new forecasts	-10.2%	6.3%	-4.5%
Lowest Estimate	-12.5%	2.5%	-10.3%
Highest Estimate	-6.6%	9.6%	2.4%

Figure 13: UK GDP Projections Source: HMT

Over the course of the lockdown, we have been following analysis by PwC. Their latest analysis was issued in September 2020 in which their previous “smooth” and “bumpy” exit scenarios have been replaced with “Contained spread” and “Further outbreak” scenarios.



	2020 Calendar Year	2021 Calendar Year	Simple Compound
Contained Spread	-11.1%	10.1%	-2.1%
Further Outbreak	-12.0%	3.9%	-8.6%

Figure 14: Quarterly GDP Index Source: PwC

In the “Contained spread” scenario PwC assumed that R (i.e. reproduction rate) stays slightly above one in the autumn, resulting in a gradual but marked rise in the number of new reported cases as winter approaches. This assumed the continuation of limited restrictions at the national level (or the reimposition of lockdowns at the local level), but excluded a national lockdown. Given the announcement of a lockdown in England from 5th November, this is now a less relevant scenario. In the “Further outbreak” scenario PwC modelled a significant rise in infections leading to a number of simultaneous outbreaks in various parts of the country, possibly at levels close to the May peak, which precipitated the return of a national level lockdown of the type seen earlier in the year.

The PwC scenarios are effectively boundary scenarios for projections for the UK economy, particularly when comparing the compound 2020-21 GDP projections with the average 4.5% contraction in the UK economy from HMT data – although the “Contained spread” appears increasing optimistic in the light of the recent developments.

2.3. Impact on Residual C&I Waste in the UK

In their latest report PwC have updated their projections for the impact of the different scenarios on GVA at a sector level for both 2020 and 2021. As previously noted, given the variable levels of waste generation per sector, the GVA figures provide a much better basis for assessing the future impact of COVID-19 on the C&I Waste sector.

The analysis suggests that, using GVA data, under the two scenarios Residual C&I Waste tonnages by the end of 2021 will be down by between 6.4% and 13.3%. These are 4.2% - 4.7% lower than the equivalent GDP figures in Figure 14.

SIC Sector, Mt	Baseline Residual Waste	Contained Spread		Further Outbreak	
		2020	2021	2020	2021
Residual Commercial	9.3	7.8	8.5	7.6	7.8
Residual Industrial	1.8	1.6	1.7	1.6	1.7
Residual C&I Waste	11.0	9.4	10.3	9.2	9.5
<i>Change from Baseline</i>		-14.3%	-6.4%	-16.1%	-13.3%

Figure 15: Impact of 2020 GVA on Residual C&I Waste in England Source: Tolvik analysis of PwC data

If the 4.5% GDP average reduction from HMT data is the most likely outcome, and assuming an additional 4.4% impact for the activity “mix” relating to GVA when compared to GDP, then HMT data suggests Residual C&I Waste tonnages in England will be 8.9% lower by the end of 2021 than the 2019 baseline.

The most recent data therefore points to Residual C&I Waste tonnages being down 8.9% - 13.3% lower than expected pre COVID-19 – compared with an estimate of 7% and 11% lower in Version 3 of the Briefing Note.

2.4. Impact of Increased Working from Home

With increased working from home (some of which is almost certain to become a permanent change) the long term pressure on Household Waste tonnages is likely to be upward. What is less clear is how much of this increase is waste previously classified as commercial waste effectively transferred to the Household Waste stream and how much is “additive”.

There is clear evidence that, even as lockdown restrictions eased during Q3, Household Waste tonnages remained higher than they were pre-COVID-19. Without more comprehensive data, estimating the longer term impact of this increased working from home is challenging.

Survey data from CIPD⁽⁸⁾ suggests that pre-COVID-19 around 9% of the workforce worked all the time from home but during the peak of the lockdown in Q2 the figure was around 54% - i.e. an increase of 45%. Surveys of employers suggest that post COVID-19 the number working permanently from home is projected to rise to 22% - i.e. a 13% increase.

Figure 6 included a previous calculation for the impact of increased homeworking etc during lockdown with an estimated 2.3Mtpa increase in Household Waste arisings as shown in Figure 16.

Waste type, Mt	Baseline Arisings	Estimate post COVID-19	Increase
Food Waste	4.2	5.3	1.1
Dry Recyclables	10.0	11.2	1.2
Total			2.3

Figure 16: Estimated Impact of Working from Home on Household Waste tonnages in England Source: Tolvik analysis

Crudely, if the numbers of employees working from home were to rise permanently by 13%, the Q2 estimate would suggest Household Waste arisings increase by 2.3Mtpa x 13%/45% = 0.67Mtpa – the equivalent of around 3%. Assuming that, in the longer term, recycling rates return to pre COVID-19 trends, this in turn would suggest a 3% increase in Residual Household Waste.

Two scenarios have been considered.

The first assumes that this tonnage is additive – i.e. that PwC’s GVA estimates for hospitality and retail sectors fully reflect the impact of home working – especially lunches purchased during the working week. The top section of Figure 17 combines this with the projected reduction of 8.9% in Residual C&I Waste based on HMT data.

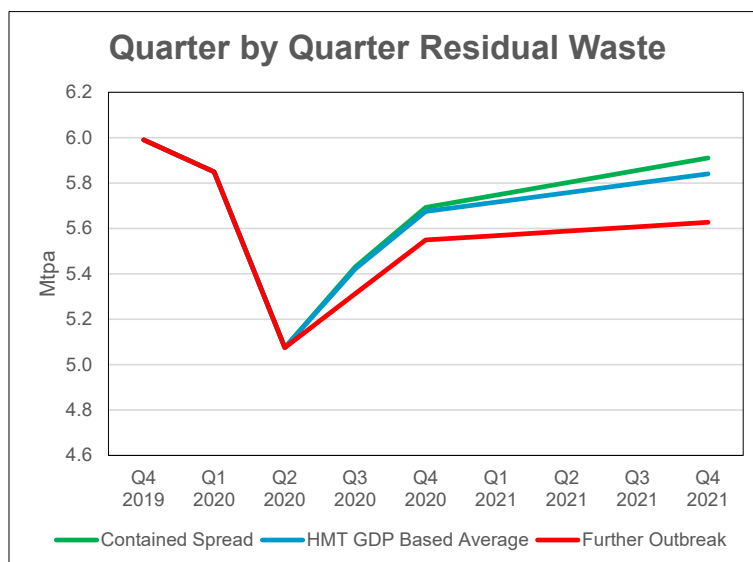
The second assumes a full transfer of these waste tonnages – i.e. that every additional tonne of Residual Household Waste as a result of increased working from home is “lost” from the Residual C&I Waste stream. This has been combined with the “Further outbreak” scenario.

Mt		Baseline Residual Waste	GVA Impact (Figure 15)	Home-working Impact	End 2021 Residual Waste	% Change
HMT Data	Household - Kerbside	11.3	-	0.4	11.7	+2.9%
	Household - HWRCs	1.7	-	-	1.7	
	Commercial Waste	9.3	-0.9	-	8.5	-8.9%
	Industrial Waste	1.8	-0.1	-	1.7	
	Total	24.0	-1.0	0.4	23.4	
Further Outbreak	Household - Kerbside	11.3	-	0.4	11.7	+2.9%
	Household - HWRCs	1.7	-	-	1.7	
	Commercial Waste	9.3	-1.4	-0.4	7.5	-16.7%
	Industrial Waste	1.8	-0.1	-	1.7	
	Total	24.0	-1.6	-	22.5	

Figure 17: Projected Annualised Q4 2021 Residual Waste in England Source: Tolvik analysis

2.5. Quarter by Quarter Projections to end of 2021

Figure 18 shows the projected tonnage of Residual Waste in England under the three scenarios on a quarter by quarter basis.



Scenario, Mt	Q4 2019E	Q2 2019E	Q4 2020F	Q2 2021F	Q4 2021F
Contained Spread	6.00	5.08	5.69	5.88	5.91
HMT GDP Based Average			5.67	5.76	5.83
Further Outbreak			5.55	5.59	5.63

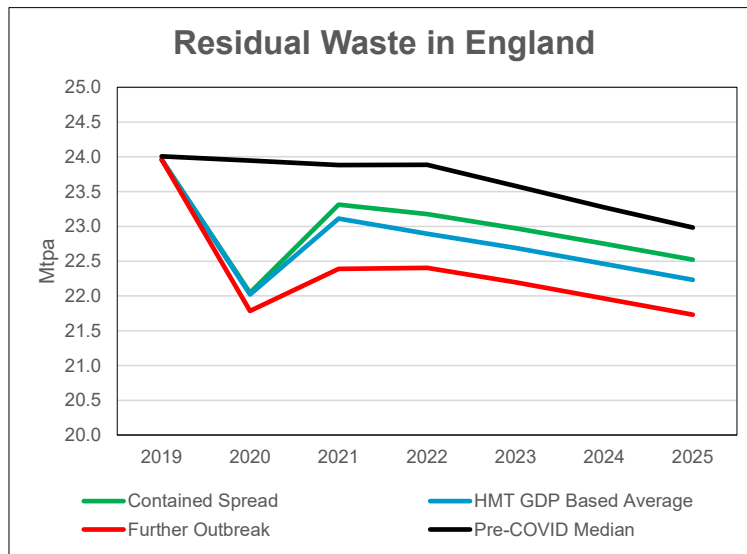
Figure 18: Projected Quarterly Residual Waste Source: Tolvik analysis

2.6. Projecting Tonnages to 2025

Figure 19 shows the impact the forecasts on the projected tonnages of total Residual Waste in England. For the period to the end of 2021, the data in Figure 18 has been used.

For the period post 2021, the GDP projections prepared by the EY Item Club⁽⁹⁾ have been used to model a continued recovery in C&I Waste tonnages. Modelling also assumes that future recycling rates are unchanged from previous Tolvik estimates – as seen with Household Waste in Q2 COVID-19 could have adverse impacts on future recycling rates.

These forecasts have been compared against Tolvik’s median projection for England immediately prior to the COVID-19 outbreak.



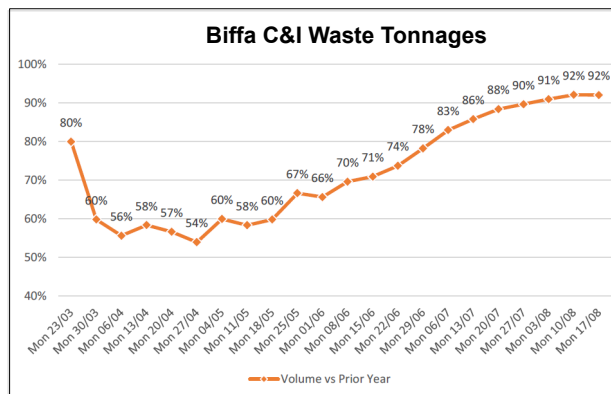
Mt	2020	2023	2025
Contained Spread	22.0	23.0	22.5
HMT GDP Based Average	22.0	22.7	22.2
Further Outbreak	21.8	22.2	21.7
<i>Pre-COVID Median</i>	23.9	23.6	23.0

Figure 19: Projected Residual Waste in England Source: Tolvik analysis

These projections suggest that the long term impact of COVID-19 on Residual Waste in England is projected to result in a reduction of between 0.5Mtpa and 1.3Mtpa with the central scenario being 0.8Mtpa lower. These reductions are modestly greater than those estimated in Version 3 of the Briefing Report.

SOURCES

- (1) <https://www.gov.uk/government/statistics/forecasts-for-the-uk-economy-october-2020>
- (2) <https://www.pwc.co.uk/services/economics/insights/uk-economic-update-covid-19.html>
- (3) <https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables>
- (4) <https://www.gov.uk/government/statistics/uk-waste-data>
- (5) <https://www.adeptnet.org.uk/groups/waste-group>
- (6) <https://www.biffa.co.uk/-/media/files/investors/results-and-presentations/2020/building-back-better-ir-briefing-vfinal-090920.ashx>



- (7) [https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/quarterlynationalaccounts/apriltojune2020#:~:text=Headline%20GDP-.UK%20gross%20domestic%20product%20\(GDP\)%20is%20estimated%20to%20have%20contracted,previous%20quarter%20\(Figure%201\).](https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/quarterlynationalaccounts/apriltojune2020#:~:text=Headline%20GDP-.UK%20gross%20domestic%20product%20(GDP)%20is%20estimated%20to%20have%20contracted,previous%20quarter%20(Figure%201).)
- (8) <https://www.cipd.co.uk/about/media/press/home-working-increases>
- (9) https://www.ey.com/en_uk/growth/ey-item-club

GLOSSARY

ADEPT	Association of Directors of Environment, Economy, Planning and Transport
C&I Waste	Commercial and Industrial Waste
GDP	Gross Domestic Product
GVA	Gross Value Added
HMT	HM Treasury
HWRC	Household Waste Recycling Centre
Mt	Million tonnes
SIC	Standard Industry Classification



Adrian Judge



Chris Jonas



Sally Freshwater



CONSULTING



MARKET ANALYSIS



DUE DILIGENCE

Tolvik Consulting Ltd is a privately-owned specialist provider of independent market analysis, commercial due diligence and advisory services across the waste and biomass sectors.

Our clients include the UK's leading waste companies, project finance investors, developers and equity investors.

This report has been written by Tolvik Consulting Ltd on an independent basis using our knowledge of the current UK waste market and with reference inter alia to various published reports and studies and to our own in-house analysis.

This report has been prepared by Tolvik Consulting Ltd with all reasonable skill, care and diligence as applicable. Whilst we have taken reasonable precautions to check the accuracy of information contained herein, we do not warrant the accuracy of information provided.

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