

The future structure of refuse and recycling collections

Annexe 1 – Detailed proposals and rationale

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1. Timescale for decision

- 1.1 The key driver is the renewal of the Council's transport fleet.
- 1.2 The Council's current vehicle leases expire in March 2017. The leases are already in a 2-year extension period so cannot be extended beyond that date, other than by agreement with the lessor for short-term, tactical reasons.
- 1.3 Therefore, this report seeks a decision about the desired future service structure in order that officers have sufficient time to then procure suitable, new vehicles to be used from April 2017 onwards.

2. Why not simply continue the current collections structure?

- 2.1 Since its launch in 2003, kerbside-sort has been at the core of the service. Crews hand-separate paper, glass, cans and textiles for recycling.
- 2.2 Kerbside-sort has served the Council well. It is understood and liked by residents, and has produced clean streams of materials that have brought the Council income.
- 2.3 However, concerns over the sustainability of kerbside-sort have developed over time, as markets, technologies and behaviours have changed:
 - Hitherto reasonably consistent markets for clean, kerbside-sorted materials have suffered heavily in 2015. For example, the collapse of Aylesford Newsprint in February halved the Council's income from recycled paper.
 - Overall kerbside-sort tonnages have fallen. For example:
 - Separate paper tonnages have fallen as on-line publishing has advanced, and crews report many residents' preference for putting paper in their black bin rather than their kerbside box.
 - Glass tonnages have fallen as buying habits have changed and retailers have moved to thinner, or plastic, bottles and jars.
 - The relative simplicity of co-mingled recycling leads, in general, to higher recycling rates (because they are simpler to understand and more convenient to use) at a lower collection cost (they are simpler to collect, so require fewer vehicles and staff). This has prompted many councils to switch to co-mingled recycling. In Surrey, the almost universal adoption of co-mingled recycling has resulted in average recycling rates climbing above 50% and in some cases reaching 60%+. This proposal itself demonstrates that co-mingling can reduce the numbers of vehicles and staff needed.

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2.4 This general decline in kerbside-sort has led the supplier of our 'Kerbsider' vehicles to withdraw the type from the market after 2015.

2.5 Officers have evaluated various types of alternative kerbside-sort vehicles (see examples below):



Current, discontinued 23-tonne 'Kerbsider' design with fixed-height, near-side loading and capacity for bulk bins



Latest 12-tonne 'Kerb-sort' design with variable-height, double-sided loading (no capacity for bulk bins)



Traditional 12-tonne 'stillage' vehicle with variable-height, internal- and external-, double-sided loading (no capacity for bulk bins)

2.6 However, no vehicle design has been found to be either as effective or as safe to operate as the 'Kerbsider' design. Issues are:

- Smaller vehicles with lower payloads and restricted crew accommodation.
- Safety concerns e.g. double-sided loading and variable/raised loading heights.
- Less flexibility (no new type allows the loading of bulk bins for flats and businesses).

2.7 These issues – in particular health and safety – lead officers to recommend that the available kerbside-sort vehicle designs should not be used in Epsom & Ewell.

2.8 Officers have investigated the potential for creating bespoke vehicles that could operate similarly to our current 'Kerbsider' vehicles. However, both cost and technical barriers mean that officers cannot recommend such an option

2.9 In summary, concerns over the practical and economic sustainability of kerbside-sort systems, and the lack of suitable vehicle designs, lead officers to recommend that the current collection structure cannot be continued after March 2017.

3. Proposal: 'Weekly Premium Recycling'

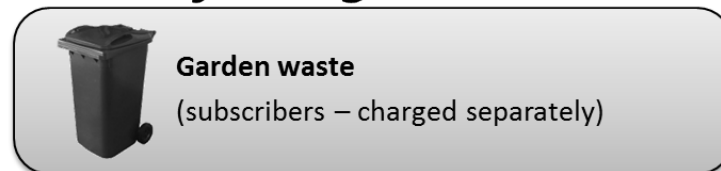
3.1 Instead, this report proposes the adoption from April 2017 of a new, streamlined collections structure that officers have called 'Weekly Premium Recycling':

3.2 For **houses** the new services would look like this:

Every week:



Once a fortnight:



3.3 **Flats and businesses** would also receive the same service (except garden waste, which would continue to serve domestic properties only, as there is negligible demand from businesses). Flats and businesses would, of course, use different sized, communal bins to suit their specific circumstances.

3.4 In this way, for the first time collections would be consistent across the entire Borough.

3.5 All collections would be made weekly (except garden waste recycling).

3.6 At houses, green and black bins would be 'switched' so that the green 240-litre bin would be used for co-mingled recycling, and the black 180-litre bin would be used for refuse.

4. Key features and benefits

4.1 The key features and benefits of streamlining services in this way are:

- 4.1.1 **Simpler** to understand, **easier** to use and collect, and **cheaper** to provide than alternative options.
- 4.1.2 **Noticeably different:** evidence from other councils, particularly Surrey Heath Borough Council, suggests that noticeable, well-communicated, clearly-explained change results in stronger recycling behaviours.
- 4.1.3 **Higher recycling:** Co-mingled collections generally increase recycling because of their higher convenience. This is shown both locally and nationally. In Surrey, where the majority of dry recycling is collected co-mingled, the average recycling rate is 52% compared to 45% in Epsom & Ewell. The highest performing English councils recycle around 60% of their waste using co-mingled dry recycling.
- 4.1.4 **Good practice – separate glass collection:** Discussions and visits to reprocessors and other councils show that even the most modern sorting plants cannot remove all glass shards from co-mingled recycling. This hurts co-mingled material values. Separate glass collection results in a ‘cleaner’ co-mingled recycling bin with a higher value, plus a bonus income stream from the glass itself. Therefore, the proposed separate-glass approach offers a pragmatic balance for long-term market price sustainability. However, should future technologies and markets change, there remains the option to co-mingle glass at some future point if it were to become advantageous.
- 4.1.5 **Weekly collections** are designed to further increase convenience, creating a ‘premium’ Epsom & Ewell service that will support the popularity of easier-to-use recycling.
- 4.1.6 **Switching green and black bins** means that the co-mingled recycling bin (240-litre green bin) will be the largest, and the refuse bin (180-litre black) will be the smallest.



So there will always be plenty of capacity for recycling, sending a clear message about the preference for, and ease of, doing so.

Further details are shown within section 10, below. It may be noted that the potential costs of a bin-switch are significantly reduced by the adoption of weekly, rather than fortnightly, collections.

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4.1.7 Weekly collections offer the potential for **improved quality and fewer missed bins**:

- **Fewer vehicles and crews:** No need for separate, dedicated crews for weekly flats, nappies and trade refuse collections, which can be incorporated within weekly refuse routes.
- **Fewer containers:** No need to provide blue bags for paper recycling, or separate nappy bins.
- **Simpler to use and operate:** The removal of alternate-week green/black bin collection schedules will remove potential confusion about which bin to put out, and give greater stability and ownership to crews. We will no longer need the general annual collections calendar, and Christmas hookies will be simpler, smaller and cheaper.
- **Improved visual impact:** Weekly collections mean less pressure on bin capacity, reducing the likelihood of side waste or bins being overfilled with waste spilling over the top.
- **Improved safety:** In Epsom & Ewell, kerbside-sort collections have a personal injury rate one third higher than for dustcarts. Collecting co-mingled bins with contained waste is proven to be safer than hand-sorting recyclables. Reduced side waste and fewer overfilled bins will further improve safety.
- **Just one collection vehicle type:** The proposed service uses just one collection vehicle design as opposed to the three vehicle designs currently used (see [Annexe 2](#)). This will improve fleet flexibility, streamline training and operations, and reduce reliance on spare/hired vehicles in cases of breakdown. This will help to control costs and further enhance service quality.

4.1.8 **Fewer vehicles and staff:**

- 12 LGV collection vehicles will be required versus 15 currently. All vehicles will tip at Epsom (Kerbsiders currently tip at Leatherhead), saving fuel.
- One collection vehicle type will be needed, as opposed to the three types needed now (see [Annexe 2](#)). This will help to control costs and enhance quality by improving fleet flexibility, streamlining training and operations, and reducing reliance on spare/hired vehicles in cases of breakdown.
- A total of 32 drivers/operatives will be required versus 38 currently. Officers are also considering ideas to restructure and simplify operational management accordingly, which may offer further savings

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- 4.1.9 **Potential for joint sale of recyclables across Surrey:** Hitherto, Epsom & Ewell's singular use of kerbside-sort has provided stocks of materials that could not be combined for sale with the co-mingled recycling predominant in Surrey. 'Weekly Premium Recycling' offers the potential, for the first time, to jointly sell Epsom & Ewell's dry recycling along with that of other Surrey councils. The Surrey Waste Partnership is currently testing a model for this with the joint sale of garden waste across Surrey. However, we do not yet know how Epsom & Ewell's separate collection of glass may affect this option.
- 4.1.10 **Potential for local sorting:** Surrey County Council and its contractor, Sita UK Ltd, are working to develop a Surrey-based co-mingled recycling sorting plant. This may further reduce costs compared with current forecasts (see section 7). Sita wishes to build a glass-exclusive sorting plant, and has stated its support for Epsom & Ewell leading the way with the separate collection of glass.
- 4.1.11 **No change to food and garden waste collections:** It may be noted that no change is proposed to the current collection styles for food and garden waste. These are established best-practice collection styles that are not recommended for change. However, officers are currently considering options for further reducing the resources required to collect garden waste.
- 4.2 In summary, the proposed, streamlined services offer a blend of advantages in terms of cost, quality, simplicity and recycling performance that could not be matched by the continuation of the current service.

5. Risks

- 5.1 Officers consider that there are two primary risks associated with the proposed structure. However, each risk is mitigated by various factors.
- 5.2 **Risk 1: That weekly refuse collections might inhibit recycling performance:**
- 5.2.1 Many councils have adopted fortnightly refuse and recycling collections with the aim of saving cost and forcing up recycling. Recently, we have seen the first three-weekly refuse collections introduced.
- 5.2.2 It may be noted that the Surrey Waste Partnership's latest strategy document advocates fortnightly refuse collections of no more than 180 litres per collection, accompanied by fortnightly collections of recycling. However, the Committee specifically excepted that clause, pending local proposals for Epsom & Ewell.
- 5.2.3 Epsom & Ewell introduced fortnightly refuse collections in 2009, alongside the introduction of the fortnightly black bin and weekly food waste recycling. The existing weekly box/bag collections were retained. Within this relatively complex system, fortnightly refuse collections helped to reduce costs and helped us to introduce the black recycling bin. However, the launch of substantial, new

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recycling services at the same time means that we cannot estimate how/whether fortnightly refuse collections directly affected recycling performance.

- 5.2.4 Since 2009 the Council has worked to discourage refuse by reducing the number of larger, 360-litre bins in use, increasing the annual charge for additional refuse bins and raising the threshold for larger households that qualify for a free additional refuse bin. We have not, however, reduced the standard 240-litre refuse bin size.
- 5.2.5 There is a risk that weekly refuse collections may tempt some residents to use the refuse bin rather than the recycling bin. However, taken as a whole, 'Weekly Premium Recycling' offers significant counteracting advantages:
- Recycling will also be weekly. This is more frequent than the norm.
 - Co-mingled recycling makes recycling more convenient.
 - The green/black bin-switch increases recycling capacity, and makes the refuse bin smaller than the recycling bin.
 - Further measures have been proposed, as below, to reasonably constrain refuse capacity and support recycling.
- 5.2.6 Officers have visited other councils that operate a fortnightly, alternate-week refuse/recycling structure with 180-litre refuse bins (or smaller). We have seen that such services can experience significant levels of side-waste or overloaded refuse bins. While 'no side waste' policies were in place, operatives told us that they still did usually collect side waste in order to avoid complaints from residents.
- 5.2.7 Further, with refuse bins being regularly seen to be full or overflowing, there is a risk of recycling bins being used for general rubbish. Therefore, officers expect that collecting both refuse and recycling weekly should alleviate the problems of side waste and overloaded bins, avoid the potential for recycling to go in the refuse bin and contribute to a tidier Borough.
- 5.2.8 Officers have also looked at the performance of some councils who currently operate weekly refuse collections. While performances varied, there was a clear correlation between better recycling services and higher recycling performance. For example, some of the poor performing councils continue to offer complex, multi-box/bag kerbside-sort services on a fortnightly basis. It is hard to understand why such services should be expected to drive strong recycling, irrespective of the frequency of refuse collections.
- 5.2.9 In summary, officers consider that the provision of a simple, convenient, high capacity and high quality recycling service will be welcomed by Epsom & Ewell residents, and is the key to higher recycling rates in Epsom & Ewell. The majority

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of residents simply want to do the right thing, and have strongly supported recycling since 2003. They will find that 'Weekly Premium Recycling' makes it even easier for them to do so, and at the lowest cost (see section 7, below).

5.2.10 However, to further mitigate this risk, this report recommends that any future lost, stolen or damaged 180-litre refuse bins should be replaced with smaller, 140-litre versions. Over time, this will naturally reduce refuse capacity, and will be funded through existing annual budgets. (It may be noted that officers considered the option of switching all houses to a 140-litre refuse bin at launch. However, the estimated cost of c.£500,000 would be prohibitive, so this is not recommended).

5.3 Risk 2: The value of recyclable materials:

5.3.1 We have seen that the value of recyclable materials can fluctuate. In the past kerbside-sort has produced a steady income stream with which to offset higher collection costs. However, recent events as described above have shown that this may not be sustainable.

5.3.2 'Weekly Premium Recycling' is designed to enhance sustainability. Collecting glass separately means that the co-mingled recycling is not contaminated by glass shards, so its value is maximised. The separate glass also provides its own, additional, income potential. Officers have worked with Sita UK Ltd (who operate Surrey's tips on behalf of Surrey County Council, and with whom the majority of the Council's recycling is therefore transacted) to understand material values for our financial modelling. This currently shows that co-mingled recycling *without* glass (as proposed) is significantly more valuable than co-mingled *including* glass (the standard model across Surrey). This is a key driver of the more positive financial outcome described in section 7.

5.3.3 Further, the adoption of co-mingled collections creates, for the first time, the potential to explore the joint sale of recycling with other Surrey councils. The Surrey Waste Partnership is piloting this approach with the joint sale of garden waste which, while not resulting in savings, has successfully avoided recent market cost increases. Any such project with co-mingled recycling would, of course, need to understand the effect of other Surrey councils' glass-inclusive co-mingled recycling on the overall outcome. Therefore, this aspect has not been factored into the financial modelling for this report.

6. Additional refuse bins/missed bin returns

6.1 Additional refuse bins:

6.1.1 The Council's current policy on additional refuse capacity at houses is:

CURRENT REFUSE POLICY:

- The provision on request of a free, additional 240-litre refuse bin to households of more than 5 people.
- The provision of paid-for, additional 240-litre refuse bins to any household for an annual charge (currently £138pa)

6.1.2 However, weekly refuse collections remove the need for additional domestic refuse capacity except in exceptional circumstances. Therefore, this report proposes that, with the launch of 'Weekly Premium Recycling' the Council's current policy should be replaced as follows:

PROPOSED REFUSE POLICY:

- No additional refused bins to any household, irrespective of size.
- Replacement of the standard black 180-litre refuse bin with a 240-litre version, free of charge to households of 10 or more, subject to a corroborative officer visit to establish that recycling services are being correctly used and that the need for extra refuse capacity remains. (It may be noted that this would provide the same effective refuse capacity – 480-litres per fortnight – as our current 'larger household' provision, but with the household size increased in recognition of the higher recycling capacity of 'Premium Recycling'.)
- The Council should no longer offer the option of paid-for additional domestic refuse capacity.
- No more than one black refuse bin per house, with no refuse bin larger than 180-litres unless agreed as above.

6.1.3 These proposals will help to promote recycling through the reasonable constraint of refuse capacity.

6.1.4 The removal of paid-for additional refuse bins will mean the loss of c.£5,000 pa in income from such charges. However, the constraint of refuse capacity will be an important part of ensuring that valuable recycling is maximised and costly refuse is minimised.

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6.1.5 It will be necessary, at launch and on-going, to ensure that no household – including those currently provided with additional bins through the current policy – has more than one refuse bin, and that no refuse bin is larger than 180-litres unless agreed within the new policy as above. This must be clearly explained to residents and enforced by collection staff.

6.2 Missed bin returns:

6.2.1 The Council's current missed bin return times are relatively complex:

CURRENT MISSED BIN TIMESCALES:

Fortnightly black recycling bin:	No return
Weekly kerbside box/bag:	No return
Fortnightly refuse bin:	Return on collection day next week
Weekly nappy bin:	Return within two working days
Organics (food/garden waste):	Return within two working days

6.2.2 However, weekly collections offer the chance to rationalise returns as follows:

PROPOSED MISSED BIN TIMESCALES:

Weekly green recycling bin:	No return
Weekly glass recycling box:	No return
Weekly refuse bin	No return*
Organics (food/garden waste):	Return within two working days

* *No more than 2 standard refuse sacks of excess refuse to be collected alongside the refuse bin on the following week's collection. We will, of course, accept any amount of excess recycling.*

6.2.3 These proposals are all either equal to or better than existing return timescales, as well as being much simpler for residents to understand.

6.2.4 This report also recommends that the Council should seek options to improve the reporting of missed bins e.g. smartphone apps. With the new, simpler collections system such convenient, efficient interfaces will become more pertinent than ever and may have the potential to significantly reduce the number of telephone calls made to the Council.

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7. Summary of costs

- 7.1 Officers have modelled the annual operating costs of various potential collection systems, as summarised below.
- 7.2 These financial models have been calculated using the key operational aspects of vehicles (including fuel etc.), staff and potential incomes from the sale of recyclables.
- 7.3 Other costs, such as central service costs, depot rental, etc. are unlikely to change so have not been included in the comparisons.
- 7.4 Although, as has been stated, it will not be possible to continue the current service structure beyond March 2017, officers have included the theoretical cost had it, in fact, been possible to do so. This allows the Committee to understand the costs of the various options against what it might have expected had the current system simply continued without change.

The future structure of refuse and recycling collections

Financial summary – modelled annual operational costs of various service options (rounded to nearest £000)

Collection system	Current 1: Current arrangements at standard fleet costs pre-2015-2017 fleet extension	Current 2: Current arrangements including 2015-2017 fleet extension saving	Current 3.* Theoretical future costs if it were possible to extend the current system exactly as it is	Weekly co-mingled with separate glass ('Premium Recycling'): all weekly collections	Fortnightly co-mingled ex-glass: as 'Premium Recycling' but with all fortnightly collections	Weekly pure co-mingled: Co-mingled collections including glass – all weekly collections	Fortnightly pure co-mingled: Co-mingled collections including glass – all fortnightly collections
No. of LGVs	17	17	17	14	18	14	15
No. of LGV types	3	3	3	1	3	1	2
Operational drivers/loaders	38	38	38	32	36	32	32
Vehicle costs	£814,000	£743,000	£966,000	£819,000	£919,000	£819,000	£859,000
Staff costs**	£1,031,000	£1,031,000	£1,031,000	£871,000	£967,000	£871,000	£859,000
Net recyclables income including fees and recycling credits	(£488,000)***	(£488,000)	(£488,000)	(£313,000)	(£313,000)	(£32,000)	(£32,000)
Net annual operating cost	£1,357,000	£1,286,000	£1,509,000	£1,377,000	£1,573,000	£1,658,000	£1,686,000
Versus Current 1		(£71,000)	£152,000	£20,000	£215,000	£301,000	£329,000
Versus Current 2			£223,000	£91,000	£286,000	£372,000	£399,000
Versus Current 3				(£132,000)	£63,000	£149,000	£177,000

* Current 3 is for illustrative purposes only, this is not an adoptable system going forward due to non-availability of current 'kerbsider' vehicles

** Staff costs are based on staff budget for 16/17

*** The £488,000 is the current income projected with adverse drop in market conditions. The budget for 15/16 is £590,000

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- The above table demonstrates the budgetary impact of ‘Weekly Premium Recycling’:

	Draft Budget 2016/17	‘Weekly Premium Recycling’	Variance
Vehicles	£814,000	£819,000	£5,000
Staffing	£1,031,000	£871,000	(£160,000)
Total expenditure	£1,845,000	£1,690,000	(£155,000)
Recycling Income	(£488,000)	(£313,000)	£175,000
Net Total	£1,357,000	£1,377,000	£20,000

- There was a negative change of £102,000 for waste income during the first half of 2015/16 due to adverse market conditions. This change has been incorporated into the draft budget for 2016/17. This change has moved the income budget from £590,000 in 15/16 to £488,000 in 16/17 first draft as shown above. Therefore, the additional cost to the Council's budget position for ‘Weekly Premium Recycling’ is estimated at this time as £20,000.

7.5 It should be noted that:

- The financial modelling assumes current actual prices for existing recyclable materials (paper, glass, cans etc.) and modelled prices for co-mingled recycling that the Council does not collect now, after discussions with Sita.
- As previously stated, the current forecast value for fully co-mingled recycling *including* glass is significantly worse than for co-mingled recycling *without* glass as proposed. This is why ‘Weekly Premium Recycling’ is forecast to be so much cheaper to offer than a standard, fully co-mingled system.
- The modelling assumes a 45% recycling rate for the ‘Current’ models (i.e. performance as now) or 53% for all co-mingled models (based on the Surrey average excluding Epsom & Ewell – it may be recalled that most other Surrey councils offer fortnightly collections of both refuse and fully co-mingled recycling i.e. including glass).
- It could be argued that collecting glass separately may lower recycling rates compared to fully co-mingled systems, due to slightly reduced convenience. However, it could equally be argued that this is counterbalanced by weekly recycling collections (against fortnightly in the rest of Surrey), the high recycling capacity offered by the bin-switch, and the other measures proposed to reasonably constrain refuse capacity. Officers therefore believe that it is pragmatic to model all co-mingled systems at the same recycling performance.

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- While top-performing councils can achieve recycling rates around 60%, officers consider it prudent to assume conservative performance for financial modelling so as not to overstate the potential for income from recycling materials (which are, in any case, always subject to market forces).
- ‘Weekly Premium Recycling’ keeps glass separate in order to protect the value of the co-mingled bin, and no longer requires separate vehicles for flats, nappies and trade refuse collections. These aspects both have a significant effect on its overall cost-effectiveness.
- There will be a cost to extend the leases of some current vehicles in order to facilitate a phased launch of ‘Weekly Premium Recycling’. With exact launch phases yet to be established, it is hard to accurately predict this cost. However, individual lease extension costs are unlikely to cost more than current rates, and the need for such vehicles will in any case progressively reduce as each phase is launched. These costs will be considered further and included within budget calculations for 2017/18 (launch year).

7.6 No option provides a saving versus current operating costs. Steeply-rising vehicle prices since 2009, due to current emissions legislation as well as general inflation, mean that all future systems would be more expensive than today.

7.7 The proposed ‘Weekly Premium Recycling’ service, with weekly collections, offers the lowest absolute modelled cost. Lower income from materials, compared to kerbside-sort collections, is more than offset by the system’s lower vehicle and staff costs. Residents benefit further from the higher level of recycling which reduces dependence on expensive refuse disposal. While refuse disposal costs are borne by Surrey County Council, not the Borough, they are, of course, ultimately borne by residents.

7.8 In summary, ‘Weekly Premium Recycling’ offers a blend of financial benefits to complement the blend of operational benefits already described.

8. Legal implications

8.1 Any collection service must comply with the Waste (England and Wales) (Amended) Regulations 2011, which transpose the EU’s Waste Framework Directive 2008/98/EC into English and Welsh law.

8.2 On the face of it, the Regulations might appear to require councils to separately collect paper, glass, metals and plastics for recycling (as opposed to co-mingling them). However, two tests must first be applied to see if separate collection is, in fact, required:

- **The Necessity test:** is kerbside-sort necessary to facilitate or improve recycling (in terms of the overall level of waste recycled and the outcomes)?

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- **The Practicability test:** is kerbside-sort technically, environmentally and economically practicable? This is often referred to as the 'TEEP' test.

8.3 Officers consider that 'Premium Recycling' is compliant with the Regulations because:

- **The Necessity test:**
 - Evaluation by a Surrey Waste Partnership project team in 2014 concluded that fully co-mingled collections generate the highest recycling rates, followed closely by co-mingled with separate glass, and kerbside-sort last. However, that data assumed the fortnightly, alternate-week collection of both co-mingled systems (with or without glass). As discussed above, officers would expect 'Weekly Premium Recycling' to generate higher recycling levels at least equal to fortnightly, fully co-mingled systems.
 - The Regulations also consider the issue of quality. Recycling can be 'closed-loop' (made into something similar e.g. glass bottles recycled into more glass bottles) or 'open-loop' (made into something different e.g. saucepans recycled into Spitfires). The Regulations judge closed-loop to be more desirable.
 - Traditionally, kerbside-sort systems have tended to generate more closed-loop recycling. However, recent developments have eroded this. An example is paper, where the 2015 closure of Aylesford Newsprint resulted in 500,000 tonnes a year of paper no longer going automatically to newsprint (closed-loop) but often now being used to make packaging (open-loop). Similarly, some councils have been unable to achieve closed-loop recycling of glass due to contraction in the market for glass bottles/jars. This has resulted in some glass being used as aggregate, which Defra does not consider to be recycling. It should be noted that this issue does not affect Epsom & Ewell, whose glass is recycled into more bottles/jars. However, it does illustrate the potential for volatility in kerbside-sort results.
 - Co-mingled systems tend to compensate through their higher overall recycling levels, coupled with the lower resources needed to collect them. It may be noted that the separate collection of glass in 'Weekly Premium Recycling' is specifically designed to provide a higher-quality output from the co-mingled bin that may facilitate greater 'closed-loop' recycling opportunities.
 - Overall, therefore, it may not, in fact, be necessary for recycling to be collected using kerbside-sort methods in order to facilitate or improve recycling. It is clear that, while an absolute level of closed- versus open-loop recycling may be assessed at any point in time, this is continually changing and it is prudent to plan for what we believe will be the most sustainable

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system. This underpins the proposal for 'Premium Recycling'.

- **The Practicability test (known as 'TEEP')**: this must be applied only if kerbside-sort is deemed to pass the Necessity test. While that may not be the case, the Practicability test may still be helpful in understanding the overall position with regard to the regulations:
 - **Technical practicability**: it is clearly technically feasible to continue collecting using available kerbside-sort vehicles. However, as advised above, officers do not recommend these vehicles on operational or health and safety grounds.
 - **Environmental practicability**: co-mingled systems have traditionally tended to produce better overall environmental results while needing fewer vehicles and journeys to do so, leading to lower emissions per tonne collected. As above, kerbside-sort systems have recently had their ability to generate closed-loop recycling eroded. Overall, then, co-mingled systems can be said to generate better environmental outcomes. 'Weekly Premium Recycling' seeks to strike a sustainable balance through its combination of weekly co-mingled recycling but with separate glass collections.
 - **Economic practicability**: 'Weekly Premium Recycling' offers a clear economic benefit to the Council. In simple terms, other forms of collection are unaffordable. Alongside this, the investment planned by Sita in a Surrey sorting centre for co-mingled recycling, and its preference for separate glass collections, clearly shows that Sita also recognises the economic benefits of this structure.

8.4 In addition to the Waste Regulations, it is important that the Council meets its obligations under the Health & Safety At Work Act 1974, to take action to ensure the health and safety of its workforce and anyone impacted by our operations:

- Co-mingled (bin-based) collections have higher implicit safety levels than kerbside-sort (box/bag-based) systems. Much external advice centres on the risks of lifting and sorting kerbside-sort boxes and bags. Evidencing this, the Council's 'Kerbsider' vehicles have a staff accident rate a third higher than our dustcarts and 'pods' as well as having collection noise issues that the Health & Safety Executive acknowledges cannot be eradicated.
- Section 2, above, describes officers' concerns over the safety implications of available kerbside-sort vehicles, which feature various numbers/types of loading apertures and variable-height/double-sided loading and tipping. Consequently, officers do not recommend the use of such vehicles. Of itself, this suggests co-mingled collections as the basis for any new arrangements.

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8.5 In summary, officers consider that 'Weekly Premium Recycling' complies with relevant legislation for a variety of reasons. Not least are health and safety considerations attached to available kerbside-sort vehicles.

9. Staff implications

9.1 This proposal includes a reduction of six operational staff.

9.2 Natural staff turnover suggests that some short-term agency loaders would be likely to be working within the team when the new service starts in 2017. The release of such workers may minimise any potential redundancies within directly-employed operational staff.

9.3 Any one-off redundancy costs that have not been included in the financial summaries in section 7, as it is not possible to quantify them at this time.

10. Switching green and black bins

10.1 Switching green and black bins is fundamental to the success of 'Weekly Premium Recycling'. Along with other measures described above, it will reasonably constrain refuse capacity, and offer excellent and highly-visible recycling capacity.

10.2 Switching green and black bins is estimated to require a budget of c.£30-50,000 to complete. This is because a significant minority of households (perhaps up to 20%) do not have a 'standard' current bin set (green 240-litre/black 180-litre) and so some new/replacement bins would be required. Officers have submitted a capital bid for this exercise.

10.3 It should be noted that a bin-switch will not be possible without this funding. However, it may also be noted that the adoption of weekly collections – with its consequent positive impact on effective waste capacity – means that a bin-switch will be much more cost-effective than if fortnightly refuse collections were to remain in place (in 2013 officers estimated that c.£100,000 would be needed if the exercise were to be carried out within the existing fortnightly-collections structure).

10.4 Detailed proposals for the bin-switch operation will be brought to the Committee at a future date.

11. Launching the new services

11.1 Though simple to understand the new services will, of course, require clear and thought-through launch communications to ensure that residents are aware of and understand the changes. Officers will liaise with Consultations and Communications accordingly. This will include consideration of internal communications, such as to Members, operational and Contact Centre staff, as well as to residents.

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- 11.2 While a detailed communications plan will be developed and presented to the Committee at a later date, officers initially consider that a minimum spend of c.£60,000 would be advisable. This is based on the WRAP (Waste and Resources Action Programme) advised spend of £2 per household for major launches. Officers consider the effective, high-quality communication of 'Weekly Premium Recycling', both before and at launch, to be an absolute pre-requisite of the service's success. The pressure to recycle more while keeping operational costs to a minimum demands excellence from our launch. Failure to do so lead to resident dissatisfaction and extra costs, which must be avoided.
- 11.3 Officers recommend that the new services should be launched in phases across the four main collection routes. This will ensure a controlled launch with any lessons learned from each phase used to improve the next.
- 11.4 It should be noted that a phased launch will require the temporary, short-term extension of some existing vehicles to facilitate existing services after March 2017 where the new service has yet to be launched. It is therefore proposed that officers are authorised to enter negotiations with the Council's transport fleet provider to that effect.
- 11.5 Further, in order to effectively integrate weekly trade and flats within the new, weekly domestic refuse collections, officers advise that some measure of re-routing will be required in order to ensure that routes remain balanced. A small number of residents may therefore need to move to a new collection day, and some traditional collection times may vary.
- 11.6 Detailed launch and re-route proposals and costs will be brought to the Committee at a future date

12. Summary of proposals

- 12.1 That from April 2017 (exact date to be confirmed) the Council should adopt the new, streamlined, consistent refuse and recycling collections structure that officers have called 'Weekly Premium Recycling'.
- 12.2 That 'Premium Recycling' should be launched in phases starting April 2017:
- Officers to be authorised to enter into negotiations with the Council's transport fleet provider for the temporary, short-term extension of some existing vehicles to facilitate this.
 - Detailed launch and communications plans and funding requirement to be presented to the Committee at a future date.

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12.3 That, with the launch of 'Weekly Premium Recycling':

- Green and black bins are switched i.e. green 240-litre bin becomes for recycling; black 180-litre bin becomes for refuse. Detailed operational plans and funding requirement to be presented to the Committee at a future date.
- Lost, stolen or damaged 180-litre black refuse bins at houses are replaced with 140-litre versions, funded from within existing annual bin replacement budgets.
- Missed bin return timescales are rationalised i.e.:
 - No return for missed, weekly collections of dry recycling or refuse (2 refuse sacks of excess refuse collected next collection, no limit on excess recycling).
 - Retention of the existing two-working-day return for food and garden waste recycling.
- The Council's policy on additional refuse capacity at houses is amended i.e.:
 - Replacement of the standard black 180-litre refuse bin with a 240-litre version, free of charge to households of 10 or more on request, subject to a corroborative officer visit to establish that recycling services are being correctly used and that the need for extra refuse capacity remains.
 - Removal of the existing option of charged, additional domestic refuse bins.
 - Maximum one refuse bin per house, with no refuse bin larger than 180-litres unless agreed as above.