

ANGUS COUNCIL

INFORMATION REPORT

REPORT BY GRAEME DAILLY, DIRECTOR OF INFRASTRUCTURE AND ENVIRONMENT

ABSTRACT

This report provides information to members with regard to services in the Infrastructure and Environment Directorate, albeit that a decision is not required in terms of the current Scheme of Delegation to Officers and the Order of Reference of Committees.

1. BACKGROUND

Angus Council, at a special meeting on 19 November 2013 took a number of decisions which changed the way the Council conducted its committee business. Fundamental to this was the streamlining of processes with a focus on key strategy and policy matters.

One element of this was the production of "Information Reports". These information reports summarise information that would in the past have gone to a council committee for "noting".

The information schedules are in accordance with that principle.

2. SIGNIFICANT INFORMATION – SCHEDULES

There is one schedule which contains key background information related to services to be delivered in the Infrastructure and Environment Directorate for the period April 2024 to March 2025.

Where there are references to other documents (e.g. consultation documents/ audit reports) that are associated with the relevant schedule a link to that document has also been included.

3. REPORT AUTHOR

This report and associated schedules have been compiled by Susanne Austin, Team Leader – Waste Strategy & Compliance, who can be contacted at austins@angus.gov.uk

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Schedule1 – Revised Kerbside Recycling Service: High level assessments and timeline update

SCHEDULE 1

REVISED KERBSIDE RECYCLING SERVICE: HIGH LEVEL ASSESSMENTS AND TIMELINE UPDATE

1. Background

Angus Council, at a special meeting held on 24 October 2023 (rescheduled from 19 October 2023), agreed to the revision of the Kerbside Recycling Service (KRS) whereby an additional blue bin would be provided for paper and card, the existing grey bin would be for plastic bottles and cans only, and that residents would be required to bring their glass for recycling at a significantly increased network of recycling points. The proposal is detailed in Section 5 of Report [276/23](#).

It was agreed at the special meeting of Council held on 24 October 2023 that the Director of Infrastructure and Environment would provide an Information report covering the following:

- a. A high-level assessment (given the Climate Change Emergency), of the effect on the council's carbon footprint due to the likely increased travel by Angus residents due to implementation of the revised kerbside recycling service,
- b. Confirmation to elected members of any new bin siting required to implement the revised kerbside recycling service following engagement with relevant residents and businesses in their respective areas.
- c. An assessment on the effect that potential extra travel would have on people with a disability and the vulnerable.
- d. Confirmation of what would and would not be contamination of bins (relating to the procedure that purple bins be tagged and not emptied when they contain an unacceptable level of recyclables that should have gone in recycling bins), to safeguard the council from any legal challenge.

Further to the above, an update is provided on the project programme.

2. High level carbon impact assessment: increased travel to glass recycling points

The cessation of kerbside glass collections and the introduction of glass recycling points is to be examined in light of concerns that this service change will have a negative effect on the council's carbon footprint. This change must however be looked at within the context of all the KRS revisions, specifically the improvements that are expected in the capture of recyclables and the carbon benefits this will bring.

As detailed below, it is estimated that the revision to the KRS will have an overall positive benefit on the council's carbon footprint. It is highlighted that this is a high-level assessment which is in part based on assumptions.

Attitudes towards recycling and climate change

Angus is one of the top performing recycling councils in Scotland and the habit of recycling is well established for most households. Glass comprises only 1.75% of residual waste in Angus, showing that residents currently recycle nearly all their glass. Recycling has become a behavioural norm and this would suggest that those who can, will continue to recycle glass.

The APSE Public Attitudes to Local Council Services survey 2023 found that 68% of people think their local community will need to respond to climate change, and when asked what actions would be required to combat the effects of climate change, 'improved recycling and reducing waste' was the second from top answer (and 5% higher than in 2022), beaten only by 'making homes more energy efficient'.

The Office for National Statistics [Climate Change Insights](#) report (August 2023) found that 64% of adults in Great Britain had been worried about the impact of climate change in the past 12 months; the same proportion said they had made some changes to help tackle climate change and a further 7% said they had made a lot of changes.

While these results are not Angus specific, they indicate that people see recycling as a top priority for tackling climate change and suggest that Angus residents are likely to be willing to change the way they recycle glass, and would take glass to a recycling point in passing rather than making an extra journey.

Current glass capture and comparison with other local authorities

Currently our glass is mixed with other recyclables in the grey bin and requires to be separated from other materials. This increased handling results in the glass breaking into smaller pieces, some of which become too small to recycle; we lose approximately 15% of our glass in this way. Collecting glass at bring sites allows for a 'closed loop system' where all the glass that is collected is captured for remelting into more glass bottles and jars.

Aberdeenshire Council, a more rural authority than Angus, has been collecting glass at bring sites for many years and only 4% of their residual waste is comprised of glass. Data from a national waste composition study carried out by Zero Waste Scotland (2021 – 2023) found that on average, the residual waste of those local authorities with glass recycling points comprised of 6% glass, and 3% for those with kerbside collections. Given Angus is performing so highly in relation to glass collection (currently 1.75% in residual) it is reasonable to assume that we would be on a par with Aberdeenshire and that only 4% of glass would end up in purple bins.

Carbon impacts – travel and other

The intention is to site glass recycling points in locations where residents will already be making vehicular journeys to or passing by, such as supermarkets and village halls, or can walk to. An online form is to be developed where residents can suggest suitable glass recycling sites. We have been awarded a significant level of funding from the Scottish Government's Recycling Improvement Fund to support the revised KRS and it is possible that we may even exceed the expected number of 190 points. It is expected that these measures will make it as easy as possible for residents to recycle their glass.

It is not possible to estimate the potential effect of introducing glass recycling points on the council's carbon footprint with any degree of accuracy within this high-level assessment paper. This is due to the number of unknown variables, for example, how many households might make an additional journey, how long that journey would be, and how often it would be made – the type of vehicle used would also influence carbon impact.

A calculation has been undertaken to provide a sense of what the impact of glass recycling points may have on household travel however it must be noted that the number of assumptions mean the calculation is indicative only.

Table 1 Calculation to estimate the effect of increased travel to glass recycling points on the council's carbon footprint.

Number of households in Angus (National Records of Scotland 2022)	55,441
Estimated percentage of households likely to make an extra journey to recycle their glass	10%
Estimated number of households likely to make an extra journey to recycle their glass	5,544
Estimated average kilometres per journey	5
Estimated number of additional journeys per year	24
Estimated extra kilometres travelled to glass recycling points	665,292
kgCO ₂ e/km (CO ₂ e conversion factor for an average car - Public Duties Climate Change Duties Report 2022/23)	0.17067
Tonnes of CO₂e per year associated with extra car journeys to glass recycling points	113.5
<i>Tonnes of CO₂e total Angus area wide emissions estimates for 2021 (published 2023)</i>	<i>1,262,700</i>
<i>Increase of emissions area wide</i>	<i>0.009%</i>

While there is potential for increased travel to have a negative impact on the council's carbon footprint, in terms of the benefits that the wider project brings, any negative travel impacts should be more than outweighed by the positive impacts associated with improved recycling.

Glass recycling points are being introduced to ensure that the maximum amount of glass collected is recycled into more bottles and jars – this approach is far less impactful in terms of carbon (as well as significantly cheaper) than the introduction of a separate kerbside glass collection.

Twin-stream recycling services in high-performing areas such as Angus typically have low levels of contamination and once the revised KRS is fully implemented it is expected that recycling contamination levels will reduce by half from the 2023 level of 12.65%. This, in conjunction with the extensive communications and engagement that will be undertaken to ensure people recycle as much as they can (including promotion of the policy whereby if too many recyclables are placed in purple bins they may not be emptied), will result in substantial carbon savings.

Table 2 shows a conservative estimate of the carbon savings associated with materials being recycled correctly at the kerbside instead of being put in the purple bin. With a minimum of 206 tonnes CO₂e expected and potential for there to be significantly more diverted, it is expected that any negative impact from increased travel will be more than offset by the positive benefits brought by increased recycling under the revised KRS.

Collecting our glass in the grey bin results in a loss of around 15% of our glass, approximately 285 tonnes per year and equivalent to 215 tonnes of carbon. Taking this into account, and assuming that 4% of glass is placed in purple bins, the additional carbon impact would be 65 tonnes CO₂e.

As shown in Table 2 it is expected that the net carbon savings will be in the region of 27.5 tonnes CO₂e.

In addition to the above CO₂e savings related to kerbside collected materials it is expected that there will be savings associated with textiles due to our communications campaign. Waste composition analysis of Angus kerbside waste streams (in 2022) showed that there were 406 tonnes of clothes put in purple bins per annum and 88 tonnes in grey recycling bins. For every 10 tonnes of textiles that are diverted to recycling, 60 tonnes CO₂e are saved. The new twin-stream system also paves the way for collection of plastic films in the containers bin, a mandatory requirement by 2027 (as a result of the Extended Producer Responsibility Regulations), and one that could result in saving almost 2000 tonnes CO₂e.

Table 2 Estimation of carbon impacts from glass bring sites offset against carbon savings through increased recycling

Material/ reason	Projected Carbon Savings (tonnes CO ₂ e per annum)	Projected Carbon Impact (tonnes CO ₂ e per annum)
Food waste	-24	
Mixed paper & card	-44	
Mixed plastic bottles, pots, tubs & trays	-80	
Metal cans	-58	
Total carbon saved	-206	
Potential increased travel		113.5
Increased glass in the purple bin		65
Total carbon impact		178.5
Net carbon savings	-27.5	

The carbon savings and impacts were calculated using Zero Waste Scotland's [carbon metric factors](#).

3. Assessment on the effect that potential extra travel would have on people with a disability

It is not expected that those with disabilities should transport glass to recycling points if they are unable to do so. It is expected that the volume of glass generated in households with no able-bodied persons in them is likely to be small and thus where people are unable to recycle their glass, the effect on the overall capture rate will be minimal (this experience is borne out by Aberdeenshire where the level of glass in the residual waste stream is low).

When communicating with people with disabilities we will ensure, when requested to do so, that we use methods that suit the individual e.g. in person or by telephone, or the provision of text provided in a format that is suitable for a 'text to speech' reading programme.

Difficulty in lifting glass bottles and jars

Residents with a physical disability or those who are elderly may experience difficulty in lifting bags containing glass bottles or jars. There will be some residents who may manage on a little and often approach, e.g. taking smaller volumes of glass to a glass recycling point each time they visit a supermarket, and this could be equally true whether driving or walking.

Where it is not possible for residents to take their glass to a recycling point, friends and family will be encouraged to help however where this is not possible, glass could be disposed of in the purple non-recyclable waste bin.

It is worth noting that the KRS Survey in November 2022 found that respondents aged 65 or over, along with those aged 55-64, were more receptive to bringing their glass to recycling points than younger respondents.

Vulnerabilities

Some residents may suffer from a mental health condition that means they are unable to sort their glass and transport it to a recycling point. It is considered that such instances (and where someone has no other able-bodied support) are relatively rare. Someone with impaired vision may be comfortable walking to a glass recycling point if there is one nearby.

Where those with disabilities or vulnerabilities cannot take their glass to a recycling point

Our messaging to residents will be that glass should be recycled and we will encourage this through use of social media channels and activities such as community talks and door-knocking. Collection crews will monitor purple bins and highlight where too many recyclables are found. The waste strategy team will follow up crew feedback and engage with residents to ensure they understand they must recycle as much as possible to save money and resources, and will also ensure that crews do not leave bins unemptied where a household has no able-bodied members capable of taking glass to a recycling point.

4. Contamination of non-recyclable (general) waste bins

Clarification has been sought as to what would constitute contamination of purple non-recyclable waste bins relating to the procedure that purple bins be tagged and not emptied when they contain an unacceptable level of recyclables that should have gone in recycling bins. Table 3 overleaf confirms the recyclables that are not accepted in the purple bin.

The tagging system will follow a similar procedure to the current system used for all recycling collections where bins are left when they contain too much contamination, however in the case of purple bins, there will first be more in-depth communication with a household to ensure that only where the household has showed continued disregard for the need to recycle, will a purple bin be left unemptied; this process will ensure a proportionate response by the council and that residents are aware that putting too many recyclables in their purple bin may result in it being left unemptied.

Where it is identified that a household is unable to take their glass to a recycling point the contamination process will cease and purple bins will not be left unemptied.

The council's waste and recycling bin policy will be amended to fully incorporate the extended contamination policy and will be brought to committee prior to implementation of the revised KRS.

Table 3 Recyclables that are not accepted in the purple bin

Material type	Examples of items not accepted in the purple bin
Paper	Newspapers & magazines
	Letters and envelopes
	Paper-backed books & catalogues
Card	Cereal boxes
	Packing boxes/ corrugated card
	Toilet rolls
	Food and drink cartons
Glass	Glass bottles and jars*
Metal	Food and drinks cans
	Aerosols
Plastic bottles	Milk or Juice bottles
	Shampoo bottles
	Cleaning products
Plastic containers	Margarine or yoghurt tubs
	Fruit punnet or meat trays
Food waste**	Cooked or uncooked food, including bones
	Egg-shells, tea bags and coffee grounds

*Residents who are unable to take their glass to a recycling point due to disability will be exempt from the requirement to do so (providing there are no able-bodied persons in the household).

** This will not be applied to the very small number of properties in more rural areas that will not receive a kerbside food recycling service.

5. Siting of Recycling Points and revised Kerbside Recycling Service programme

Assessments to find suitable sites for glass bins and blue recycling bins at communal bin sites, flatted blocks, and where collections are carried out from the end of private roads, has been delayed due to recruitment issues but key posts are now covered, and assessments have begun.

It is also now planned that we introduce an online form inviting suggestions from residents regarding where they think glass recycling points should be sited (we will also engage by non-digital means). The project timelines have been revised as per Table 4 in order to allow sufficient time for this exercise, and also the aforementioned assessments, to be carried out in advance of Phase 1.

Once assessments have been completed and proposed locations of new glass recycling points have been confirmed for each phase, these will be communicated to elected members.

The Forfar area was previously Phase 3 however has been swapped to become Phase 2 to assist with route planning and maximise the number of households on the revised scheme before the end of the year. This should still be considered as the provisional timeline and phasing and, although no further change is anticipated, could be subject to change.

Table 4 Phased roll-out of the revised KRS

Phase	Date of commencement	Area (including surrounding villages/ areas)
1	June 2024	Arbroath, Carnoustie and Monifieth
2	October 2024	Forfar, Kirriemuir and Sidlaw area
3	March 2025	Montrose and Brechin