



Caru Cymru Local Trial

Local Authority:	Powys County Council (PCC)	
Project Title:	Community on-street Recycling in Powys	
Issue addressed:	The contents of recycling-on-the-go (ROTG) compartmentalised street bins, presumed significantly contaminated, are currently disposed of as mixed waste	
Brief outline:	Monitoring the contents of ROTG bins in an urban location	
Timescales:	Start Date: Sunday 30 January 2022	End Date: Sunday 6 March 2022

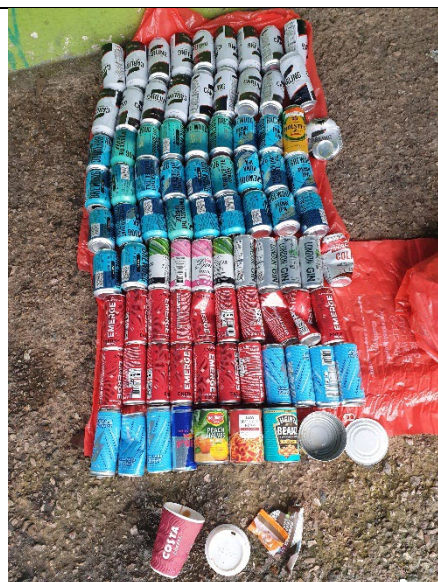
Project Outline

What is LEQ problem?		<p>Much of the street litter on the ground and in mixed waste bins in Powys is not sorted for recycling.</p> <p>Alongside the assumption that the ROTG bin contents will always be badly contaminated, there are practical and logistical barriers to PCC Street Cleansing staff sorting it easily, quickly and safely.</p>
Who is the target audience?	<ol style="list-style-type: none"> 1) Members of the public using Recycling-on-the-Go facilities 2) PCC Waste Awareness & Street Cleansing teams 	
Where will you run it?	Dark Lane car park Rhayader LD6 5DD <i>///overlooks.snores.hangs</i>	
What is the intervention?	<p>Bins to be emptied and the contents recorded weekly for 6 weeks. Positive signage to be introduced at week 4 to encourage use of the ROTG bins</p> <p>Levels of contamination/misplacing to be monitored to review effect of signage and overall contamination level compared with that of local household kerbside collections</p>	
What is the gross cost of intervention to KWT (including vat, postage etc)?		<p>Temporary bilingual signage for two sites with ROTG bins £300, examples in use illustrated</p> <p><i>The recycling bins were signposted near to heavily used mixed waste bins in the same location</i></p>
Who is procuring the intervention?	PO 6365 Get Noticed (Abergavenny) - Rachel Palmer, KWT	

What are you trying to measure?

In each ROTG bin compartment, weekly count:

- Total items
- Recyclable items correctly placed. Weights of this material.
- How many contaminants (wrongly placed)
- How many contaminants (non-recyclable)
- The actual level of contamination in a 4-compartment ROTG bin



The contents of each ROTG compartment in Rhayader – labelled ‘Plastic Bottles’; ‘Drinks Cans’ (left); ‘Glass’; and ‘Paper’ (right) was counted, categorised and photographed early on six successive Sunday mornings. Sundays were chosen as the bins were usually full, the car park location was quiet (safety when working on the ground) and a nearby bus shelter was deserted and could be used for the count and photographs on windy and wet days



Who will be involved?

KWT Officer
PCC Street Cleansing teams

Monitoring and Evaluation

What monitoring is in place for the project?

Amounts of appropriate and inappropriate litter in each Rhayader ROTG bin compartment will be recorded weekly. (NB Similar records also exist for the contents of the Rhayader ROTG bin May-June 2020).

Trial report

	PLASTIC					CANS					
	Total items	Correctly placed	Weight	Wrongly placed	Non-recyclable	Total items	Correctly placed	Weight	Wrongly placed	Non-recyclable	
30/01/22	65	55		4	6	61	61		0	0	
06/02/22	53	50		0	3	12	12		0	0	
13/02/22	63	26		7	30	91	87		3	1	
20/02/22*	11	10	0.49 kg	1	0	47	46	1.53 kg	1	0	
27/02/22	29	23	1.94 kg	1	5	16	12	0.44 g	2	2	*Storm Eunice
06/03/22	61	53	1.075 kg	0	8	55	55	1.225 kg	0	0	

	GLASS					PAPER					TOTAL contamination
	Total items	Correctly placed	Weight	Wrongly placed	Non-recyclable	Total items	Correctly placed	Weight	Wrongly placed	Non-recyclable	
30/01/22	37	31		1	5	94	86		2	6	6.61%
06/02/22	21	21		0	0	0	0		0	0	3.4%
13/02/22	15	15		0	0	121	114		1	6	3.79%
20/02/22*	6	6	1.1 kg	0	0	8	8	0.465 kg	0	0	0%
27/02/22	17	15	5.265 kg	1	1	38	21	0.940 kg	1	16	25%
06/03/22	15	13		1	1	21	14	1.105 kg	0	7	10.52%

Headline results	VERY LOW LEVELS OF CONTAMINATION IN ROTG BINS!
Data and outcomes (including any unexpected outcomes)	<ul style="list-style-type: none"> • The issue is not of ROTG bins being contaminated, but instead of mixed waste bins containing so much recyclable litter. As part of this exercise, I emptied adjacent mixed bins and recovered around one third of the waste they contained. The figures can be skewed by one individual. • The highest % of contamination recorded (25%) was affected by someone putting 16 identical sweet wrappers in the paper bin. This may have been what is sometimes known as ‘wishcycling’ - when someone hopes that something non-recyclable will actually be recycled if it goes into a recycling bin. • The presence of multiple bottles and cans with identical labels suggests that the ROTG bins are often used for domestic or trade waste.
Lessons	<ul style="list-style-type: none"> • The ROTG bins should be more widely available, but I suggest that only two compartments are offered. One for plastic AND cans, because these are already collected mixed in Powys’s domestic kerbside recycling, and the other for clean paper and card. • Glass bins should be omitted as handling the contents is hazardous. The bin is always heavy and nearly always includes broken glass. • It was absurd that after each survey I carried all the glass and paper to the Glass and Paper recycling skips in the same car park. • There is no evidence that the signage made a significant difference to the amount that the recycling bins were used or the proportion of contamination. However, further signage in additional locations may have made a difference and the recycling arrow might have been useful to locals when the ROTG bins were moved a few yards (in week 5) to make way for a new electric vehicle charger unit.
Opportunities	<ul style="list-style-type: none"> ▪ It may be that ROTG bins located in town centre car parks in an area like this popular with tourists gets ‘household’ refuse from caravans. It would be interesting to trial a ROTG bin in a street location. ▪ Information has been shared with local authority colleagues to clarify the actual level of contamination present in ROTG bins. This should help inform how the Council disposes of waste from these particular bins going forward, i.e. whether it’s considered to have an acceptable level of contamination to recycle or not. The information passed to local authority colleagues should also help to make informed decisions on whether the roll out of further ROTG bins is feasible. ▪ As a result of this trial Powys CC replaced the mixed waste bin shown in the photo above with a 2 compartment recycling bin (July 2022)