

Scrutiny Committee 6th June 2024

Procurement of Waste & Recycling Collection Vehicles / Update on Waste and Recycling.

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CONFIRMED DECISIONS

February 2024 Cabinet
(CAB3439) agreed:



To seek to introduce a separate collection of food waste by 31st March 2026 with the Councils current contractor Biffa, including to provide quoted prices for the required food waste collection vehicles.



That the Council will pursue the current lowest carbon viable options as a priority for service delivery.



WHAT IS A FOOD WASTE SERVICE?

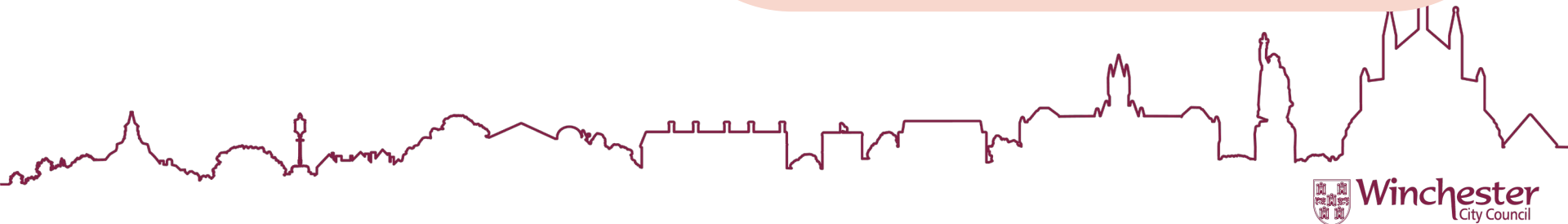
- ❖ 23ℓ kerbside caddy, animal proof, equivalent but larger for communal properties
- ❖ 5ℓ kitchen caddy - provided to each household
- ❖ Collected once a week alongside existing collections
- ❖ About 1/3 of household residual waste is food waste
- ❖ Will go to anaerobic digestion facility to generate energy and soil improver
- ❖ Runs in many other authorities – Eastleigh, Rushmoor and Portsmouth collect food waste in Hampshire



MODELLING THE FUTURE



- ♣ Recycling the food waste currently mixed in with resident's black bin waste, could save the district circa 1,900 tonnes of CO₂e per year.
- ♣ Biffa and our own consultants, WSP, have determined that we need nine 12 tonne specialist vehicles to collect food waste.
- ♣ To get the most reliable service at the lowest carbon practicable, we need to consider our vehicle choices.



VEHICLE CHOICE

AVAILABILITY AND RELIABILITY OF VEHICLES

- ❖ Our external consultants have identified only one supplier of EV food waste vehicles.
- ❖ Assembled, not manufactured – Warranty? Maintenance? Spare parts?
- ❖ Uncertainty about delivery timescales
- ❖ Only c130 of these vehicles in operation by local authorities around the UK – most as pilot vehicles on short routes in dense urban areas.
- ❖ Diesel vehicles running on HVO are very reliable, tried and tested, with a competitive supplier market.

DEPOT INFRASTRUCTURE

- ❖ The current electricity supply to the depot can only charge 4 small EVs – maximum
- ❖ Infrastructure to support a fully electric fleet is being investigated – will need a sub-station to supply power needed.
- ❖ Infrastructure won't be in place in time for Government deadline for food waste service implementation.



VEHICLE CHOICE

VALUE FOR MONEY

- ❖ HVO reduces CO₂ emissions by up to 94% compared to diesel.

Vehicle Type / fuel	Annual CO ₂ e tonnes per vehicle	Annual tCO ₂ e for 9 vehicles
12t Diesel	24.68	222
12t HVO	0.35	3.15

- ❖ Removing the last 3.15t CO₂e to zero emissions is extremely costly.
- ❖ Currently, EV food waste vehicles are more than double the price and unproven in terms of reliability, lifespan and maintenance costs.

HVO vehicle cost	Electric vehicle cost
£135,000	£318,000

- ❖ Only 3 out of 7 rounds are suitable for current EV range capability.
- ❖ Over time the EV market is expected to mature, and range improve.





To optimise the current service Biffa have prepared a round re-route resulting in a mileage reduction of circa 35,000 miles per year, reducing carbon emissions by 13%.



New round created for increasing household numbers needs a new RCV.

This could be an **electric RCV**.

Benefits:

- ❖ Electric RCV's have been around for longer and are proven reliable
- ❖ Pilot to test EV capability and range
- ❖ Relatively low cost to the council
- ❖ Interim solution with HVO backup vehicle to maintain reliable service

Pilot Electric RCV



SUMMARY

Since February's Cabinet decision we have:



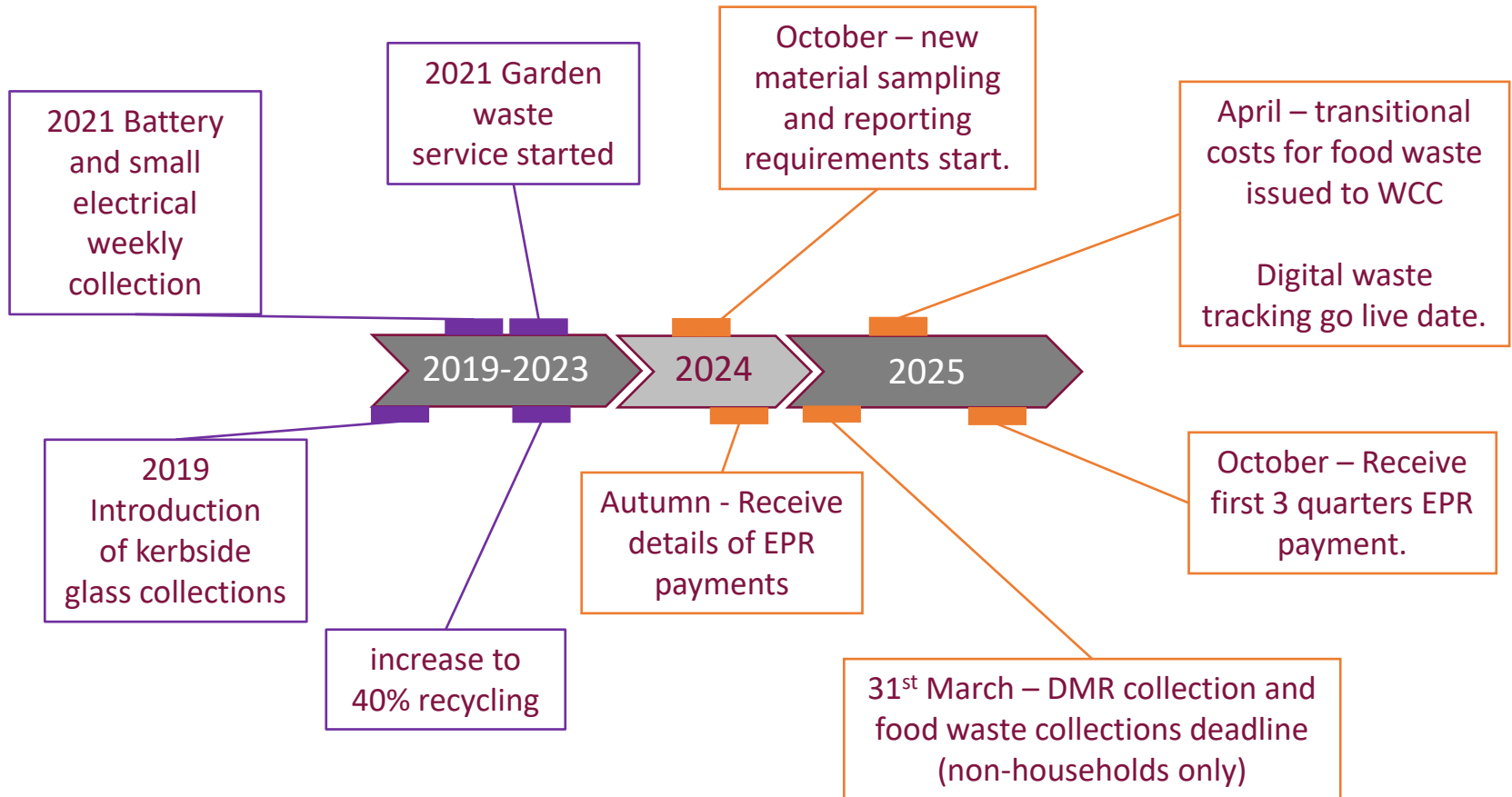
- ✓ Assessed finance, carbon reduction costs, depot infrastructure, availability, and reliability of vehicle options.
- ✓ Determined that nine 12t HVO powered vehicles would provide the best value for money, low carbon, reliable option to start the new service.
- ✓ Sourced a low cost electric RCV to pilot in the district as we prepare to transition to zero carbon.
- ✓ Started assessing the process to prepare the depot for a full EV fleet.



NEXT STEPS

- ❖ Cabinet decision 19th June
- ❖ Govt decision on funding and timing - 24/25
- ❖ Non municipal household waste food waste collection to start April 2025!
- ❖ Current vehicle lead-in time 8 months - 1 year
- ❖ Household food waste collection be fully implemented by April 2026





DMR – Dry Mixed Recycling inc. pots tubs trays and cartons
DRS – Deposit Return Scheme est. 20p on all non-glass drinks containers
EPR - Extended Producer Responsibility e.g. TESCO pays for packaging



