

APPENDIX III: Modelling Update SUMMARY

1. Modelling update due to depot location changes

The original modelling assumed that all kerbside recycling from the north would be delivered to a new waste transfer and sorting facility at Kinmel Depot, Bodelwyddan. However, it has since been determined that the costs of accommodating new infrastructure at Kinmel Depot were far in excess of the affordability envelope. The modelling has been updated to reflect an alternative delivery point at Conwy's Gofer facility in Abergele. The change in location resulted in an increase in revenue savings and is expected to reduce the amount of Capital investment required.

2. Modelling update due to amendments to textile collections service design

The new model assumes additional income of £23,000pa from the sale of newly collected textiles to be collected weekly on the same kerbside vehicle as other household recyclables. However, if the Council ceased its arrangement with a Denbighshire based social enterprise currently collecting textiles fortnightly on many existing rounds, the impact on the community would be considerable. Unless textiles can be sourced at low cost (by collecting them themselves or receiving them well below market rate), the social enterprise textile project would become unviable, resulting in 9 out of 10 employees being made redundant and 18 less people with learning disabilities being supported. It would also mean that supply of free clothing to the homeless and low cost clothing through their charity shop would cease. Officers believe the third sector are best placed to collect textiles. Residents are more likely to go to the effort of separating them from their general waste if they recognise their efforts have positive social benefits. Maximum value and "life" is also gained from the material because of the work involved in cleaning and preparing clothing and shoes for re-sale. We therefore should not attempt to compete for this material, but enhance our joint working arrangement with this social enterprise to increase material capture rates and community benefit through the re-investment of the textile income into the promotion and operation of textile collections and re-use projects.

The Well-being Impact Assessment assumes an arrangement with the social enterprise will continue and will enhance current socio-economic benefits due to the potential to increase the amount of goods collected and made available at low cost for re-use by the wider community. The diverted tonnages are counted towards Denbighshire Council's recycling rate and officers believe that in partnership we can yield the similar tonnages to the model, even though the social enterprise would collect every two weeks through an aligned service, as opposed to weekly. The collections would take place on the same day of the week as the household's main recycling service. The social enterprise would increase their coverage to service all towns and villages, with the Council collecting from the more remote areas on the new collection rounds. This will free up vital space on the Council's kerbside collection vehicles for collecting other materials and provide space for welfare

facilities and items that need to be given out to residents such as food caddy liners and instructional leaflets.

Officers recommend that the Council continue to partner with the social enterprise to facilitate the kerbside collection of textiles and small WEEE (Waste Electrical and Electronic Equipment). This will reduce the revenue saving by £23,000 as the Social Enterprise continue to retain the value from the materials they collect on our behalf.

3. Modelling update to accommodate households requiring “non-standard” waste containers.

It is recognised that not every household will be able to use the same containers, or manage on the same residual waste collection frequency. The proposed exceptions are highlighted below:

Communal Bin Stores

Additional resource has been modelled to ensure that communal collection points (often apartment complexes and sheltered accommodation) can continue to be serviced through a 2 or 4 wheeled bin system. Separate bins for glass, paper, card and mixed cans/plastic streams will be provided, along with brown wheeled bins for food waste (freshly lined with a large bio-degradable bag by the waste collection crews every week). Bins will have restricted apertures to discourage black bag contamination and to prevent items being deposited in plastic bags. At least one dry recycling stream will be collected weekly from communal bin stores each week - alternating over a 4-weekly cycle appropriate to each location. Food waste will be collected weekly. The frequency of the residual waste collection will be bespoke to each location and predicated by the storage space available. Where practical, 4 weekly collections will be implemented. Residual collections will take place at least once every four weeks. The draft waste collection policy (**Appendix I [B]**) details how collections from private bin stores will be regulated to encourage households to use the correct containers for their rubbish.

Properties with no/limited access to outside storage, or with challenging access

Around 3200 households will need to be retained on a sack collection system due to limited storage on their properties, or because we cannot service the property on a Refuse Collection Vehicle with a bin lift. In all cases, households will be required to separate their food waste into the sealable orange caddies and these will be collected weekly. Where practical, glass, paper, card and mixed cans and plastic containers will be presented in separate re-useable sacks (option of boxes also available) instead of mixing them all together in one single box or bag. Dry recycling will be collected weekly, and residual waste will be collected fortnightly or weekly (determined by availability of outside storage). Disposable sacks will continue to be provided for residual waste but additional measures will be put in place to restrict the number of sacks permitted, in accordance with the draft

Household Waste Collections Policy (**Appendix 1 [B]**). Subject to the outcome of a current trial of “gull-proof” sacks, households may also be provided with fold down re-usable sacks to contain their disposable sacks. It is intended that these sacks, and reusable recycling sacks, will be bar coded to enable us to monitor the frequency and quality of recycling put out from each household. This is to overcome historical issues with contamination and poor recycling rates attributed to this service that may be compounded by a further reduction in residual waste frequency. The re-useable sacks will clearly display the household address to ensure sacks are returned to the correct property after collection. The current trial will include feedback from residents, landlords and waste collection crews to inform the bags final design specification. This work is likely to be concluded in spring 2019.

4. Consideration of human hygiene waste (known as AHP)

A weekly free service for the collection of nappies and incontinence waste has been modelled. This Opt-In service is available free of charge to any qualifying household, defined in the draft Household Waste Collections Policy (**Appendix 1[B]**). Participants will be provided with a kerbside collection caddy for presentation of this waste, and will be required to renew the service on a regular basis.

5. Consideration of Pet Waste

The model does not include provision of a separate pet waste collection service for the following reasons:

- The additional residual capacity provided through this model accounts for pet waste being produced and the draft Household Waste Collection Policy enables further capacity to be requested as long as the household can prove it is adequately recycling.
- The operation of collecting dog and cat faeces is specialised and poses potential health / manual handling risk to the collection crews which is likely to cause objections from the workforce and Unions. There is currently no service operating in the UK like this to better understand these impacts.
- Unpleasant odours can be adequately contained by thoroughly sealing smelly waste in strong plastic bags. Advising dog owners to use plastic poo bags instead of biodegradable ones will significantly reduce any issues a household may experience. We accept dog waste in all litter bins in the County for “on-the-go” waste. We will carry out promotion of this as an integral part of our on-going campaign requirements.
- It is estimated that one in three homes in Wales own a cat or dog¹. Demand for a separate collection service is very difficult to determine but is likely to require

¹ Pet manufacturer’s survey cited 35% of Welsh homes owned a dog. BBC Wales Online (27th May, 2014)

no less than two full time collection rounds at a minimum cost of cost of £146K per annum. Therefore this service has not been included in the latest KAT modelling.

- Pet waste cannot be co-collected with AHP (nappy and incontinence waste) as AHP waste is recyclable. The Welsh Government are exploring the benefits and demand of AHP recycling infrastructure and DCC officers have requested further discussion about this with the aim of sending this waste stream for recycling in the future.