

Number: WAG10-11236



Llywodraeth Cynulliad Cymru
Welsh Assembly Government

www.cymru.gov.uk

Welsh Assembly Government

Municipal Sector Plan Part 1

Towards Zero Waste
One Wales: One Planet

Collections Blueprint

For affordable and sustainable local authority
collection services for recyclable, compostable
and residual waste

(Version 01 – 10 March 2011)

March 2011

OVERVIEW

This Blueprint describes the Welsh Assembly Government's recommended service profile for the collection of waste from households. It provides a system that, if adopted across the whole of Wales, would result in high rates of high quality recycling, significant cost savings and improved sustainable development outcomes. Whilst achieving a far greater degree of consistency of service across Wales, it nevertheless allows a degree of flexibility in approach; it will allow the service to be tailored for specific circumstances and in accordance with local needs. It is a service that maintains a balance in respect of engaging householders in undertaking sustainable development behaviours, whilst not being too complex to use. It takes advantage of recent innovations in the practice of kerbside sorting that mean the use of a single vehicle to collect all dry recyclables and food waste in one go. This new breed of vehicles are relatively lightweight and fuel-efficient. They have multi-compartments that can take the full range of commonly collected waste materials, including food waste. This results in significant cost savings, whilst maximising the income received from the high quality recycle that it yields. Other service approaches are recommended that will help reduce the amount of waste generated. The Blueprint should help local authorities achieve the recycling targets set in the Waste (Wales) Measure 2010, and provide the best overall service for the people of Wales and future generations. It is acknowledged that local authorities not using this approach will need time to change to it, taking advantage of vehicle and contract renewal cycles in order to reduce significantly the transition costs. Change can take place over a phased approach, with joint contracts between local authorities for new vehicles delivering further costs savings.

INTRODUCTION

In June 2010 the Welsh Assembly Government consulted on Part 1 of the draft Municipal Sector Plan. As part of that it consulted on its preferred policy on collections for recycling and discussed mechanisms to promote its policy. The responses to this consultation highlighted two key issues associated with collections for recycling:

- That many stakeholders considered that the Welsh Assembly Government approach to collections for recycling needed to be better explained; and
- That the Welsh Assembly Government needs to work collaboratively with local authorities to assist them to change to collection approaches that are consistent with its strategy rather than use legislative or financial instruments to promote change.

The Welsh Assembly Government consideration of these issues and its responses have informed the development of this Blueprint.

EVIDENCE

The Welsh Assembly Government takes an evidence based approach to policy development, consistent with its promotion of the principles of sustainable development (SD). The evidence base used to prepare *Towards Zero Waste*, the overarching waste strategy document for Wales, and the consultation draft of Part 1 of the Municipal Sector

Plan is available on the Welsh Assembly Government's website, and is listed in an Annex in the final version of the Municipal Sector Plan – Part 1 .

RATIONALE FOR A SUSTAINABLE APPROACH

Under Section 2 of the Local Government (Wales) Measure 2009, local authorities have a statutory duty to make arrangements to continuously improve how they exercise their functions and, in doing so, have regard to, inter alia, sustainability.

The key sustainable development outcomes and underlying principles of the Welsh Assembly Government approach to waste management are set out in *Towards Zero Waste*, the overarching waste strategy document for Wales and in the Municipal Sector Plan – Part 1.

The key factors determining a sustainable environment are:

- Resource consumption as measured by ecological footprint (the key indicator of the Welsh Assembly Government's Sustainable Development Scheme – 'One Wales: One Planet'.
- Greenhouse gas emissions and climate change impact

The key factors determining a prosperous society are:

- The creation of green jobs
- The creation of opportunities for acquiring skills and training
- The creation of a resilient economy that manages resources efficiently and protects the security of supply of raw materials

The key factors determining a fair and just society are:

- Opportunities for individuals and communities to participate in and contribute to a resource efficient economy and society
- Promotion of sense of community, social cohesion and wellbeing
- Creation of equality of opportunity for individuals and communities to contribute in an informed way to a resource efficient economy

Ecological footprint reduction is achieved by reducing waste production and by recycling what waste is produced in the right way. This means recycling them in a "closed loop" way where they are used again for their original purpose (e.g. waste glass from bottles being used again in new bottles) or in a way that adds value (e.g. enhances greenhouse gas benefits – as in using waste newspapers to make insulation products), which is termed 'up-cycling'. When recyclate is used for a different purpose, which then prevents it being used again for the original purpose, this is known as "open loop". When open loop recycling is for a lower value purpose it is termed 'down-cycling'. An example is waste glass being used as a secondary aggregate. For some materials (including plastics and glass), recycling them in 'open loop' ways is actually worse in ecological footprint terms than landfilling them. The emphasis is therefore on closed loop recycling of materials to optimise ecological footprint reduction. Greenhouse gas emissions are reduced by

reducing the amount of waste produced and by recycling waste that is produced in a 'closed loop' way or by 'up-cycling'.

The key to achieving closed loop recycling is ensuring that the recyclate is of a sufficiently high quality that it can be used for its original use. Here, the way the recyclate is collected is critical. If it is kept separate at source its quality is assured; if it is mixed with other recyclate at source then expensive and energy using mechanical processing usually need to be employed to separate it out again. The more materials are mixed together at source, the more mechanical effort is required to separate them out again. This can never be 100% efficient.

There is also an added problem in respect of the way that recyclable materials can be mixed together by the householder, if a mixed collection system is employed. If wheeled bins are used, it is very difficult for collection staff to spot if a householder has put out a material that the authority does not collect for recycling. This leads to higher contamination rates during the mechanical sorting, and can contaminate the material that is separated out for recycling (e.g. food waste put in with paper can contaminate it easily). This problem can be exacerbated if an alternative weekly collection system is used, with residual one week and recyclables co-mingled in a wheeled bin the next. Some householders may be tempted to hide residual waste in the wheeled bin reserved for recyclables.

An analysis of where Welsh recyclate ends up, and the demand for recyclate in Wales, reveals a mismatch. Poor quality recyclate has a limited market in Wales, and is often exported. At the same time Welsh manufacturers want high quality recyclate, and cannot source enough from Wales. It is imperative that there is a focus on the generation of quality recyclate in Wales – this Blueprint is designed to achieve this.

Green jobs are created in Wales when as much as possible of the material that is collected in Wales is managed in Wales in the secondary materials sector. They are also enhanced by producing in Wales as many of the vehicles and as much as possible of the machinery used for recycling in Wales. A growing secondary materials economy will be reliant on a suitably skilled and trained workforce and so skills and training provision will be optimised by expansion of this sector of the economy.

As the world's population grows so the pressures on food, water and materials resources increase. Whether resources are grown, extracted from mineral ores or from fossil deposits, they are being consumed at unsustainable levels. The rapidly growing economies of China and India illustrate that resource consumption will continue to increase as more of the world's population aspire to levels of consumption seen in Wales. Competition for resources will create geopolitical tensions and make most commodities more expensive. Against this background the more material resources produced as waste in Wales are collected and re-processed in Wales and the UK the more they can be re-circulated within the economy helping to reduce reliance on imports and protecting against both scarcity and high prices of raw materials.

The creation of opportunities for individuals and communities to contribute to a resource efficient economy and society relies upon the provision of suitable information and services.

The promotion of social wellbeing and cohesion is enhanced when direct links are made between the collection of materials and their subsequent re-processing and the

manufacture of products from them. It is the direct connection between citizen participation in collection and employment creation dependent upon those collected materials that contributes to social cohesion and wellbeing.

It is important that individuals and communities from all parts of Wales have the opportunity to contribute to the resource efficient society of the future, irrespective of whether they live in rural or urban areas, whether they have their own private transport or not and whether they have disabilities or not.

These are the outcomes that the Welsh Assembly Government is seeking and they can be influenced by the kind of service delivery provided. The Welsh Assembly Government's priorities for collection may be summarised as:

- Provision of as many local bring sites, collecting as wide a range of materials, as possible so as to provide choice to householders on the way that they can access a recycling service
- Provision of well signed, equipped and staffed Household Waste Recycling Centres (HWRCs) that enable as many people as possible to access facilities for recycling as wide a range of materials as possible. The recycling rates of HWRCs should be high (in excess of 70%)
- Provision of kerbside collection services that reduce residual waste arisings, collect high levels of clean recyclables in ways that can be recycled 'closed loop' and locally (preferably in Wales or elsewhere in the UK) and at lowest overall financial cost, and in ways that help elicit the desired behavioural changes amongst householders whilst at the same time providing convenience
- Provision of kerbside collection services that can provide source segregated food wastes to anaerobic digestion (AD) facilities that produce renewable energy and soil conditioner/fertiliser.

IMPLEMENTATION

The strategic direction and policies set in *Towards Zero Waste* and Part 1 of the Municipal Sector Plan are those that the Welsh Assembly Government will promote and take forward for the next forty years. It would be unreasonable for the Welsh Assembly Government to expect local authorities to make rushed service changes in a way that negates recent investment, or that is outside important contract cycles (e.g. for vehicles). It would be similarly unreasonable for local authorities not to take account of the policy preferences expressed in *Towards Zero Waste* and Part 1 of the Municipal Sector Plan.

The way forward is for the Welsh Assembly Government and local authorities to work together to ensure that progress is made towards providing the most cost effective and sustainable services for householders in Wales. This will be done through a Collaborative Change Programme jointly developed by the Welsh Assembly Government and the Welsh Local Government Association (WLGA).

The basis of the change programme will be a long-term business plan setting out how a local authority, or a group of authorities working together, would meet the targets in way which meets sustainable development outcomes. It is likely that plans will need to cover at least a ten year period to show how the higher rate of 64% recycling would be met in 2019-20 if not the full fifteen years to meet 70% recycling in 2024-25. This would ensure that targets and service change could be aligned over the whole period. This compares

with a fifteen to twenty-five year planning period for the infrastructure programme (for AD and residual waste treatment).

In order to maximise financial efficiency and sustainability outcomes, as well as recycling performance, local authorities will carry out a comparative study of service delivery options as part of their business planning process. One option would be the Welsh Assembly Government's kerbside sort preference – as exemplified in this Blueprint. Options modelling would also need to take into account more than just kerbside provision for a waste plan to be holistic - and it is through this process that the SD service for an authority would be defined. Other services could for example be civic amenity sites, bring sites, provision for bulky items and other materials not collected from the kerbside or provision for trade wastes.

In preparing their business plans, local authorities will need to take account of the legacy of their current collection and treatment practices and design change to move towards more sustainable waste collection and treatment practices over time taking account of where they are starting from.

If financial savings in service provision are potentially to be had they cannot be ignored. Many local authorities will need to consider radical changes in how they collect and treat waste in order to realise potential savings. It is the purpose of the proposed collaborative change programme for the Welsh Assembly Government to work with and help local authorities achieve this outcome whilst meeting recycling targets.

HEALTH AND SAFETY

In terms of health and safety, there is no clear generic evidence that indicates whether any one system is more 'safe' than any other, with each having different types of potential injury and severity of injury (for example severe injuries, including death, have occurred through the operation of refuse compaction vehicles and material recovery facilities, deaths due to reversing have occurred through accidents with all types of collection vehicles, and manual handling incidents have occurred with the use of boxes, bags and wheeled bins). The Welsh Assembly Government has considered the evidence referred to in the Centre for Health and Environment Research and Expertise (CHERE) report (2006), which includes the following conclusions: "This study failed to identify any significant risks within kerbside recycling operations using boxes and bags that could not be effectively managed and controlled. The risks identified included twists and strains which were most obvious with certain rear-loading vehicles where operatives found it necessary to adopt un-safe postures in order to load the vehicle. Side-loading or purpose built rear loading vehicles appeared to present significantly less risks. Road traffic risks could be effectively managed by using side loading vehicles and waiting on the collection side of the road. A review of available data and reports on the health and safety issues associated with the collection of recyclate is provided in the Kerbside Collections Options: Wales report (February 2011; commissioned by WRAP).

It is the responsibility of local authorities and contractors to ensure that high standards of health and safety are achieved and maintained during collections of waste and recyclables, irrespective of the method of collection employed. High standards of health and safety are currently being achieved in Wales by local authorities whose services align

with this Blueprint and it is expected that as vehicles, receptacles and collection practices develop that health and safety of both staff and public will continue to be protected.

In respect of collection systems, it is important that local authorities as employers and commissioners of services exercise their duty of care. In the absence of clear generic evidence one way or the other regarding collection systems, risk assessments for specific systems in specific areas should be factored in to local decision making processes.

THE BLUEPRINT

The table below lists the Welsh Assembly Government's preferred service configuration for waste collection from households – in order to comply with the policies, outcomes and targets laid down in *Towards Zero Waste*, and in order to deliver key financial, economic, social and environmental outcomes. This Blueprint primarily enables local authorities to reduce costs, both through the adoption of the standard service configuration, and through the benefits that can accrue from a consistent approach that enables further costs savings in terms of procurement of boxes, bags, vehicles etc and in the promotion of common advice and instructions to householders.

This is a “Blueprint” for local authorities to follow at their discretion, to enable them all to achieve the benefits identified, especially costs savings.

The approach preferred by the Welsh Assembly Government is based on:

- The use of a new generation of high performing specialist vehicles that facilitate efficient kerbside sort approaches. These vehicles typically carry a payload of around 4 tonnes and operate most efficiently with one driver and one loader. Two such vehicles are required to replace a conventional refuse collection vehicle (RCV). They are each less than half the capital cost of most RCVs and typically, each use less than half of the fuel.
- The new 8 tonne (plus 4 tonne payload) vehicles enable a range of materials (including food) to be collected in a single vehicle on a single pass, including plastic bottles, aluminium and steel cans, glass (potentially colour separated), paper, food and cardboard (which is compacted).
- The contractor serving the Somerset Councils and Bridgend Council uses two boxes and a reusable bag for dry recyclables and a caddy for food waste. All these materials are sorted onto the same collection vehicle.
- Conwy Council is going to pilot a similar approach, but with the use of stackable boxes for the dry recyclables. Three boxes are contained within a frame which has a handle and wheels. The boxes further enhance health and safety of public and operators by reducing the amount of lifting needed. They also reduce the space used on the kerbside. However, whether they are practical will only be discovered during the pilot.
- The use of ‘modern’ kerbside sort approaches enables collectors to feed back to householders on what items should be placed out for collection and what items are contaminated.

In Wales, Bridgend adopts this approach to collection of dry recyclables from the kerbside – and collects more materials for recycling than authorities using co-mingling, including

those using wheeled bins (source: Q2 2010-11 WasteDataFlow). Bridgend has lower reject rates than those authorities using co-mingling.

The approaches to collection of recyclables from the kerbside has tended to focus primarily upon paper and packaging wastes. To reach 70% recycling targets other wastes will need to be recycled, including textiles, shoes and other non-packaging materials. Kerbside sort approaches such as those in Somerset collect textiles on the same vehicle as the packaging materials.

TRANSITION

The costs of transition can be regarded as “investing to save”. It is very important that the costs of transition are managed in a way that reduces them to a minimum. Where local authorities switch from co-mingled services to kerbside sort approaches the potential costs could include replacement fit for purpose vehicles, new bulking facilities, different receptacles and the communications to support service changes. Some indicative costs are included in the technical annex of the Kerbside Collections Options: Wales report.

The costs of transition can be reduced by aligning service changes with scheduled changes to vehicle fleets and by collaborative approaches to the procurement of receptacles. The costs of bulking stations will depend on whether existing depots can be adapted; however, both the capital costs of change and the ongoing revenue costs and the opportunities to optimise income from the sale of materials needs to be taken into account.

Q&As

The Welsh Assembly Government is aware of a number of queries about the kerbside sort approach, and a Q&A section is provided at the end of this document.

**Welsh Assembly Government
10 March 2011**

THE BLUEPRINT

| Reduced residual waste container capacity – for example the use of 140 litre instead of 240 litre wheeled bins, or restriction on the number of bags that can be put out. | <p>Good evidence that this reduces the overall amount of waste put out by householders for collection and increases the amount separated out for recycling. Saves on collection and landfill costs.</p> <p>For authorities introducing new schemes, or those moving from bags to bins, container volume will be an important consideration. However, for authorities already operating bin collections, re-issue of new bins may be best on a replacement/request basis over time.</p> <p><u>Examples:</u> Denbighshire</p> | Potential for a variable approach for different house sizes or family circumstances. |
|---|---|--|
| Reduced residual waste collection frequency – once a fortnight is sufficient (when weekly food waste collection is provided). | <p>Good evidence that this reduces the overall amount of waste put out by householders for collection, and increases the amount separated out for recycling. Saves on collection and landfill costs.</p> <p><u>Examples:</u> Newport, Denbighshire, Bridgend.</p> | Potential for frequency to be varied according to season (including monthly collection in the winter). |
| No “side waste” collected for residual waste. | <p>This can help reduce the overall amount of waste put out by householders for collection and increases the amount separated out for recycling. It also reduces littering. Saves on collection and landfill costs.</p> <p><u>Examples:</u> Cardiff</p> | Flexibility in terms of enforcement. Supports the restriction on residual waste, however special arrangements may be needed for those unable to visit HWRC to cope with occasional peaks of waste. |

| SERVICE | | |
|--|--|---|
| Promotion of, and support for, home composting/ treatment for garden waste. | <p>This can help reduce the amount of garden waste which would otherwise be put out by householders for collection.</p> <p>Saves on collection, composting and landfill costs.</p> | |
| Apply charging for green waste collection (as allowed under the Controlled Waste Regulations 1994), and collecting it only once a fortnight. | <p>This can help reduce the amount of garden waste put out by householders for collection.</p> <p>Saves on collection and landfill costs.</p> <p><u>Examples:</u> Powys</p> | <p>Flexibility on whether to charge, and the scale of it (a “reasonable” charge is allowed under the Environmental Protection Act 1990).</p> <p>The promotion of home composting can help avoid more garden waste being placed in residual bins – and discourage householders from making extra journeys to HWRC.</p> |
| Separate weekly food waste collection (not co-mingled with green waste). | <p>This approach is most effective in diverting food waste from landfill. There is also some evidence that this helps reduce the amount of edible food wasted by householders, saving them money and reducing the amount of food waste put out by householders for collection and treatment, thus saving local authorities on the costs of collection and landfill.</p> <p><u>Examples:</u> Rhondda Cynon Taff, Swansea, Carmarthenshire, Anglesey</p> | |
| | | |
| Run the bulky waste collection service as a bulky reuse and recycling collection service. | <p>This can help reduce disposal costs, as well as bringing good SD benefits.</p> <p><u>Examples:</u> Pembrokeshire</p> | Service run by either a local social enterprise or in-house by the Council to improved service standards. |

| SERVICE | | |
|---|--|--|
| <p>Provision of at least one local centre (e.g. civic amenity site / household) waste recycling centre that can receive and safely store bulky items for reuse.</p> | <p>This can help reduce disposal costs, as well as bringing good SD benefits.</p> | <p>Share provision with closely neighbouring authorities, if appropriate and more convenient for householders.</p> |
| <p>Weekly collection of dry recyclables mixed together in a box, with two or more boxes provided per household. Recyclables separated at the kerbside. Termed a “kerbside sort” system.</p> | <p>Generally the cheapest and most affordable solution when looked at holistically, as evidenced by WRAP study and from the results of recent market tenders in England. Most likely to deliver high quality, high income recyclate and closed loop recycling – delivering financial, economic, environmental and social gains.</p> <p>Easier to track final destination and provide feedback to householders on where their recyclate ends up, and how it is used.</p> <p>Easy for the householder – they sort paper, plastics, metal cans, glass and cardboard into either three boxes or two boxes and a bag. This provides all the capacity a householder needs.</p> <p>Very flexible, and allows major scope for innovation (not constrained by limitations of a MRF). Creates more jobs.</p> | <p>Option to collect dry recyclables in multiple containers, however these often include sacks which preclude efficient kerbside sort. Example of multi-stream approach with high capture is Newcastle-Under-Lyme – see: http://www.resource.uk.com/article/Latest/It_takes_all_sorts</p> <p>Option to collect fortnightly, but this might result in storage problems for householders (unless a “stacker box” system used). However, fortnightly collection is likely to result in a reduced yield of recyclables.</p> <p>Option for either kerbside sort or very dense bring site system for some materials (eg. extensive provision of separate coloured glass bottle banks). Example: Bristol who have installed mini-recycling centres to service high density areas that provide bins</p> |

| SERVICE | | |
|---|--|--|
| | <p><u>Examples:</u> Bridgend, Anglesey, Wrexham</p> | <p>for glass, paper and cans, but significantly still maintain each material in its own stream, which is the key to minimising contamination.</p> <p>New box systems becoming available to allow convenient stacking and wheeling of boxes to the kerbside</p> |
| <p>Food waste collected separately once a week, preferably through the use of kitchen caddies (with provision of free compostable liners), and separate lockable kerbside collection containers. Allow inclusion of paper kitchen towels and tissues.</p> | <p>Processing cheaper overall than co-collecting with green waste (avoids treating green waste unnecessarily to Animal By-Product Regulation standards). Separate collection (from green waste) increases capture rates. Provision of free liners achieves higher capture (more convenient for householders).</p> <p><u>Examples:</u> RCT.</p> | <p>Use of liners recommended but not essential. Liner must meet composting certification standard – this could include paper liners.</p> |
| <p>Use of modern lightweight, multi-compartment vehicles (8 tonnes plus 4 tonne payload) for a single pass collection of dry recyclables and food waste. Ideally using renewable fuel.</p> | <p>Allows a single pass.</p> <p>Vehicles are a lot cheaper than traditional Refuse Collection Vehicles (RCVs).</p> <p>Vehicles are a lot cheaper to run than traditional RCVs.</p> <p>Vehicles are more fuel efficient and have lower CO2 emissions than RCVs.</p> <p><u>Examples:</u> Bridgend, Conwy</p> | <p>A number of different innovations in vehicle design are now available on the market.</p> |

| SERVICE | | |
|---|--|---|
| <p>The following recyclable materials to be collected as a minimum in the kerbside sort system (or perhaps via a dense bring site system): By 2012-13: Paper; cardboard; plastic bottles, pots, tubs and trays; metal cans and small scrap (e.g. kitchen utensils), foil; glass jars and bottles.</p> | <p>Consistent approach (avoids “Postcode lottery”.) Less confusion. More reliable feedstock for Welsh reprocessors.</p> | <p>Option for either kerbside sort or very dense bring site system for some materials (e.g. extensive provision of separate coloured glass bottle banks).</p> |
| <p>Full recording and reporting to the public of the end destination and use of recycle.</p> | <p>Transparency to the public. Better evaluation of ecological and carbon footprint outcomes. <u>Examples:</u> Somerset (http://www.recyclesomerset.info/pages/recycling_where.asp) Wrexham</p> | <p>Not applicable.</p> |
| <p>Achieve a level of at least 80% recycling at all civic amenity / household waste recycling centres.</p> | <p>Reduction in disposal costs. Helps to meet statutory recycling targets and deliver SD outcomes. <u>Examples:</u> Welshpool</p> | <p>Not applicable.</p> |
| <p>At least one CA/HWRC site to have facilities to receive and store</p> | <p>Reduction in disposal costs. Helps to meet statutory recycling targets and deliver SD</p> | <p>More than one site.</p> |

| SERVICE | | |
|--|--|---|
| separately: glass, metals, paper, cardboard, wood, green/garden, plastic, textiles, mineral oil, vegetable oil, glycerol, WEEE, fluorescent light bulbs/tubes, paints/ solvents/ other hazardous household waste, aggregate, soils, bonded asbestos, and items that can be re-used. This list is not exhaustive. | outcomes. | |
| CA site density to reflect the needs of local residents and be consistent with the Collections, Infrastructure and Markets Sector Plan. | Reduction in disposal costs. Helps to meet statutory recycling targets and deliver SD outcomes. | |
| Bring site density to reflect the needs of local residents and be consistent with the Collections, Infrastructure and Markets Sector Plan | Reduction in disposal costs. Helps to meet statutory recycling targets and deliver SD outcomes. | |
| Recycling collection service offered to businesses, for at least paper, plastic, metal, glass and food waste. | Required by 2015 to meet the Article 11 Waste Framework Directive (except food waste). | Recycling collections to be offered as part of an overall service which includes residual waste (with efforts to minimise residual waste produced). |
| Publication annually of service cost information. | Allows the public to gauge if they are getting value for money. | |

| SERVICE | | |
|--|---|-----------------|
| | | |
| Green waste sent to PAS100 and Quality Protocol compliant composting plants. | Complies with Article 3(17) Waste Framework definition of recycling. Hence it can then count towards statutory recycling targets. | Not applicable. |
| Food waste sent to PAS110 and Quality Protocol compliant anaerobic digestion plants. | Complies with Article 3(17) Waste Framework definition of recycling. Hence it can then count towards statutory recycling targets. | Not applicable. |
| <30% of all Local Authority Collected Municipal Waste to be residual waste sent to a high energy efficiency energy from waste (EfW) plant. | Energy recovery from non-recyclable wastes and the reduction of landfill to very small levels. | Not applicable. |
| Processed EfW bottom ash recycled to produce a product that meets a relevant Quality Protocol or End of Waste Criteria. | Complies with Article 3(17) Waste Framework definition of recycling. Hence it can then count towards statutory recycling targets. | Not applicable. |

Common Questions & Answers (Q&A)

| Questions/points | Answer |
|--|--|
| Can one system suit all types of local authority, and different types of housing and locality? | We advocate that the Blueprint can be used for every local authority and the vast majority of housing types and localities, because similar services to the Blueprint currently operate successfully both within and between different types of authority. Examples: Kerbside sort is operated in: Rural LAs: Isle of Anglesey; Gwynedd; Conwy; Vale of Glamorgan. Urban LAs: Wrexham; Flintshire; Newport . Valley LAs: Torfaen, Bridgend. |
| Why the drive for consistency? | If the Blueprint is widely adopted it will enable economies of scale savings, it will stop the unfairness of a “postcode lottery” service, it will reduce confusion, it will enable common educational material for householders, it will ensure more certainty on quantity and quality of feedstock for Wales reprocessors. |
| Aren't you taking away local choice? | No, this is only a Blueprint that will help local authorities reduce costs. Within it there is flexibility for local decisions to be made. A more consistent approach across Wales has many benefits, especially financial, but also reducing the level of confusion that currently exists. |
| Isn't co-mingled cheaper than kerbside sort? | No, the evidence from WRAP, from the results of recent tendering exercises in England and the Kerbside Collections Options: Wales report by Eunomia shows that kerbside sort is cheaper than co-mingled currently and under the 'enhanced scenario', where all options are modelled on the basis they achieve 70%. |
| Doesn't co-mingled achieve a higher recycling rate than kerbside sort? | No, kerbside sort systems following this Blueprint can, and do, yield the same level of capture as co-mingled systems, and in fact may outperform them given the lower level of contamination in kerbside sort. There are poorly performing kerbside systems that do not follow this Blueprint, and there are both high performing and poor performing co-mingled systems. |
| Isn't co-mingled easier for householders than kerbside sort? | The kerbside sort approach advocated in this Blueprint requires householders to put all their mixed dry recyclables into two boxes and a bag (or equivalent). There are usually high householder satisfaction ratings for well run kerbside collection systems, indicating that ease of use is not a problem for most people. The development of a new generation of stackable boxes may help make things even easier for the householder. |
| Doesn't kerbside sort cause litter when | No, not when lids or nets are provided for the boxes. Lids are provided for boxes in |

| | |
|---|--|
| paper blows out of the boxes on a windy day? | many kerbside sort systems. The development of a new generation of stackable boxes may help to prevent the escape of materials from boxes. |
| Doesn't kerbside sorting hold up the traffic in narrow terraced streets? | Not necessarily. Kerbside sort systems are commonly used across Wales and England in all types of housing areas, including those with a lot of traffic and with narrow streets. Any problems in a limited number of streets which are major traffic routes can be resolved through temporary additional manning and through careful timing to avoid rush hours. Other local authorities have found acceptable solutions to this issue. |
| Kerbside sort doesn't suit all types of authorities, there can be problems with particular housing types, in rural areas, in apartments etc, etc. | Kerbside sort approaches are utilised across the UK in all types of geographic and socio-demographic circumstances and housing types, often within the same authority. |
| Kerbside sort vehicles cannot be used in narrow country lanes. | Yes, they can. There are examples throughout Wales of smaller kerbside sort vehicles operating in narrow lanes. |
| Kerbside sort is too expensive in remote rural areas. | There is no evidence for this. Kerbside sort is used throughout rural areas in Wales and England. |
| Kerbside sort has health and safety issues associated with manual handling of the boxes. | Provision of more than one box per household helps reduce the weight of a single box. Studies and relevant advice from H&S professionals identify that manual handling risks can be significantly reduced to an acceptable level. The development of a new generation of stackable boxes may help to reduce further manual handling risks. |
| Isn't co-mingling is safer. | There are different types of risk associated with the use of bags or wheeled bins, and with the operation of the MRF. The severity of some of these risks are greater than those associated with the manual handling of boxes in a kerbside system. |