

Joint Waste Disposal Authorities (JWDAs) Group

Developing an evidence base for a circular economy

02th September 2015

This paper has been developed by the six Joint Waste Disposal Authorities, (JWDA) established by the Local Government Act 1985, namely, East London Waste Authority (ELWA), Greater Manchester Waste Disposal Authority (GMWDA), Merseyside Recycling and Waste Authority (MRWA), North London Waste Authority (NLWA), West London Waste Authority (WLWA) and Western Riverside Waste Authority (WRWA). The Authorities have 30 years' experience in delivering sustainable waste management; together the six JWDAs manage around 15% of the England's household waste. Therefore, the ability of England to meet its recycling and waste management ambitions, including statutory targets, depends on the successful delivery of aligned waste management strategies within these conurbations.

1. Purpose and objectives

- 1.1 The group has been established to investigate implications of emerging policy changes for waste disposal, and to provide a practitioners lobbying position to help shape final proposals.
- 1.2 This paper outlines how local authorities have reacted to current Government waste management objectives, and outlines potential changes to legislation that are emerging in Europe. The impact of those changes is likely to be significant in terms of technical delivery and financial consequences, yet there remains a knowledge vacuum within which these decisions are being made. A study to examine the potential consequence of the outlined European proposals would therefore greatly benefit the EU and UK Government policy makers, as well as those industry and local government that need to react to it.

2. Where we are today

- 2.1 The principal focus of the Waste Management Plan for England is to deliver the legal objectives required by Europe to reduce municipal biodegradable waste landfilled to 35% of 1995 levels, and reach 50% recycling of municipal waste by 2020. These are realistic ambitions that have been set in-train for several years, and are now firmly embedded within the waste management strategies of local authorities. The early pace set has seen recycling and composting rates double over the last ten years, now reaching around 44%, and Defra remain convinced that there is sufficient energy from waste capacity in the pipeline to meet EU diversion targets by 2020. Indeed the gap has closed significantly, though some caution should be exercised when interpreting the figures since the target is based upon compositional analysis of local authority collected waste that doesn't really apply to the additional commercial and industrial waste which are now included. Separately from the England waste plan the devolved national Governments (Northern Ireland, Scotland and Wales) have set their own agendas, which set more ambitious targets. There is no evidence of any English appetite to push forward its own plans.
- 2.2 That rosy outlook has been stymied in recent years, as recycling rates have begun to stagnate; having surpassed the 40% mark nearly five years ago they have slowly increased to around 44%, where they have stubbornly remained over the last two years, leading many industry commentators to raise doubts whether the 50% recycling target will be reached by 2020.
- 2.3 Examining evidence from WRAP to try and pin-point the exact reasons for this stagnation tells us that recycling rates are predominately determined by the number of different materials (particular those that weigh more) which are included in the recycling collected. In terms of dry recycling most local authorities already collect the maximum number of materials for which there are available outlets so it is difficult to

make any further gains. This has been compounded by a fall in the quantity of potentially recyclable material; particularly paper (but also light-weighting of other materials like glass) that has negated gains in participation resulting in the performance in many local authorities flat-lining. The development of markets for secondary raw materials is therefore imperative to further increasing recycling.

- 2.4 Clearly, the most significant area for potential gain is food waste, which represents around a fifth to a quarter of waste collected at the kerbside, or a third of the residual waste bin. Food waste collections however are more expensive for local authorities to implement, consequently many local authorities have not put a collection in place, or more ominously, some have taken the difficult decision to remove them due to budget constraints. Moreover, once implemented participation and capture levels fall well below those of other waste streams. The consequences of this for the national recycling targets can be observed in the published statistics which show that separately collected food accounts for only 2.9% of recycling (2013/14) when it could realistically be ten times that figure. The question that needs to be answered in order to meet the 50% recycling target is therefore not one of technical feasibility, but how are we going to pay for it?
- 2.5 There are now concerns that waste arisings may be starting to grow again. The most recent data shows that total household waste nationally increased by 3.5%, with the main component of that increase being residual waste, which increased by 2.5% (to December 2014). Those figures are reflected in the data held by the JWDA's, which show the upsurge is predominantly due to an increase in bulky wastes delivered to Household Waste Recycling Centres. This may, in part, be due to transfer of waste arising between District and HWRC streams locally, though at a national level it suggests that the improving economy is again leading to an increase in consumption, in turn leading to more wastes, which means waste management costs are likely to increase going into the future. This will be further compounded by a rising population that increasingly gravitates towards urban areas where high recycling rates are the hardest to deliver.
- 2.6 Local government funding, of which the JWDA's levys form part, is under unprecedented pressure. Since 2010 central government support in many JWDA areas has fallen by more than a third (with some more than 40%). Coupled with the increased cost of statutory services due to increased demand (particularly adult social care) pressure on waste disposal budgets has been intense. The current preparations for the autumn's Comprehensive Spending Review announcement (CSR 2015) are looking at the impact of a further 40% reduction in resources. Set against that background waste disposal's usual ground of "environmentally good" is not sustainable, and "cheap as possible" is the new watchword. Doing nothing is not an option, and there is a real danger that in the English policy vacuum short term financial expediency may win over longer term environmental benefits.
- 2.7 Set against that background the JWDA's want to act collectively, but this is area in which Government needs to take the lead, since the industry is underpinned by either regulation and fiscal incentives. That message is also mirrored by industry (the Environmental Services Association - ESA) and the professional body (Chartered Institute of Wastes Management - CIWM).

3. Resource efficiency: towards a circular economy

- 3.1 Whilst we grapple with meeting the 2020 targets, the European Commission is working on a new approach based upon resource efficiency, which has become known as The Circular Economy, with the long term objective of developing an economy based upon

the minimal uses of resources, where materials are kept circulating in the economy for as long as possible. At the forefront of that work stream is a revision to the existing waste targets, under the following Directives:

- a) Waste Framework Directive 2008;
- b) Landfill Directive 1999; and
- c) Packaging and Packaging Waste Directive 1994.

3.2 On the 9th July The European Parliament adopted a resolution (known as the Sirpa Pietikäinen Opinion) calling on the Commission to introduce new legislation by the end of 2015 to include the following waste related requirements:

- a) clear and unambiguous definitions;
- b) developing waste prevention measures;
- c) binding waste reduction targets for municipal, commercial and industrial waste to be achieved by 2025;
- d) setting clear minimum standards for extended producer responsibility requirements to ensure transparency and cost effectiveness of the extended producer responsibility schemes;
- e) applying the ‘pay-as-you-throw-principle’ for residual waste combined with mandatory separate collection schemes for paper, metal, plastic and glass in order to facilitate the high quality of recycling materials; introducing mandatory separate collection for biowaste by 2020;
- f) increasing recycling/preparation for reuse target to at least 70% of municipal solid waste and 80% recycling of packaging waste by 2030, based on a solid reporting method preventing the reporting of discarded waste (landfilled or incinerated) as recycled waste, using the same harmonised method for all Member States with externally verified statistics; an obligation for recyclers to report on the ‘input’ quantities of waste going into the sorting plant as well as the ‘output’ quantity of recyclates coming out of the recycling plants, preventing the reporting of discarded waste (landfilled or incinerated) as recycled waste;
- g) strictly limiting incineration with or without energy recovery, by 2020, to non-recyclable and non-biodegradable waste;
- h) a binding, gradual reduction of all landfilling, implemented in coherence with the requirements for recycling, in three stages (2020, 2025 and 2030), except for certain hazardous waste and residual waste for which landfilling is the most environmentally sound option; and
- g) introducing fees on landfilling and incineration.

3.3 Although there is a lot of uncertainty regarding the content of the new proposals, and what will make it through the various EU approval processes the above given us closest indication of what we might expect by the end of the year.

4. The level of ambition

4.1 The JWDAs Group has examined the European proposals and whilst the core concepts of resource security and efficient usage are certainly the right things to deliver, the speed

and timing need to be more carefully considered. If we take the proposed recycling targets and incineration limit, as an example then the Parliamentary motion suggests 70% recycling is delivered by 2030, but incineration of non-biodegradable and non-recyclable is banned by 2020. That leaves the question; what do we do with the significant quantity of material that isn't being recycled between 2020 and 2030? A better approach, therefore, would be to plan the appropriate level of energy from waste capacity required to treat the expected level of waste arising over the medium to long term as recycling rates increase.

- 4.2 The European Commission needs to take a much longer joined up strategic view that befits the complexity of what they are trying to achieve. Changing to a circular economy requires a wholesale shift in the way the whole economy works that goes beyond how products are manufactured to the way business operates, and how they access finance. Delivered in a structured way such reforms could not only benefit Government but deliver real economic advantage. Reform of the financial sector will be required to introduce new financing models, and develop tools to assess financial viability based on greater retention of assets, and much longer term cash flows as companies take responsibility for a product over a long term cycle. In that economy companies will need to adjust to revenues being generated from secondary raw materials, reuse and repair that will not manifest until much later in a products lifespan. The scale of change required for the whole economy to adopt a long term strategic approach based on resource value cannot be realistically delivered over a five or ten year timescale.

5. Understanding the impact of the circular economy on local authorities

- 5.1 At a time when financial pressures are falling disproportionately on local authority environmental services (that have not been afforded the protection given to other services like education and health) and has curtailed investment in the collection systems, it looks increasingly certain that recycling targets will be further increased. This will, of course, have implications for local authorities but also for UK recycling and waste management industries. Given there is very little practical evidence that a truly circular economy can be created, then there is a real danger that local authorities may face very high recycling targets, combined with more complex waste products but very little in the way of market development or adequate powers to enable delivery.

The JWDAs Group therefore see benefit in commissioning a study to examine the achievability of the outlined EU proposal, establishing the steps required to achieve the targets, and the financial implications of doing so.

5.2 Modelling the impact of a 70% high recycling target

- 5.2.1 The initial EU waste target review proposed a 70% recycling target for municipal waste, and despite it being later withdrawn support for this target has remained high within Europe suggesting it is still a likely outcome. In any case the EU has a legal obligation to review the current 50% recycling target, so it very likely that it will be increased to some extent. The JWDAs Group therefore view the 70% target as a central part of the study, and suggest the following should be included:

- a) establish the technical feasibility of increasing recycling levels to 70% in terms of what is potentially recyclable via existing recognised markets at current levels of participation and limits to accurate recognition of recyclables;

- b) establish what the current high performers are doing to achieve recycling rates between 60-65%;
- c) Identify what additional materials will need to be recycled to increase recycling from current levels to 70%, and therefore the actions required to close the gap between current recycling levels and the target e.g. designing PVC trays so that they can be recycled;
- d) examine the impact of Europe introducing a 'contamination limit' e.g. 2% on current recycling rates and determine how much that would increase the implementation gap to achieve a 70% recycling target;
- e) Determine the cost of delivering 70% recycling for local authority collected waste; and
- f) consider the measures required to improve participation and accuracy to achieve 70% recycling in a typically urban environment, where half of households are terraced or flatted properties, and there is (generally) a large transient population, often without English as their first language.
- g) determine the impact of changes to recycling calculations, in particular allowing incinerator bottom ash/aggregate to be included in the calculation;
- h) Evaluate the impact of the more recently introduced wider definition of municipal waste, and does this help or hinder the achievement of high targets; and
- i) Consider whether a different approach to targets e.g. material specific or carbon (rather than tonnage based) measures support achievement of a better environmental outcomes.

5.3 Modelling the impact of a binding waste reduction target

- 5.3.1 There has been little indication from Europe as to what level any target may be set at. The initially withdrawn legislation simply asked Member States to take appropriate measures, with the only target and a non-binding aim to reduce food waste by 30% across waste across all sectors including households by 2025.
- 5.3.2 Waste reduction is largely the responsibility of design and manufacturing at a national level, whilst the role of local authorities is more narrowly focused on engaging residents, and improving access to waste such as furniture and clothing to enable reuse and repair. The impact of waste reduction initiatives at a national level may be difficult to predict, light-weighting of packaging for example has been occurring over the past 30 or 40 years, and may now be reaching levels where further gains are unlikely so any modelling should therefore be based on fairly modest waste reduction assumptions, accepting that there it is unlikely that waste growth has been decoupled from economic growth.
- 5.3.3 Nevertheless, if waste volume is reduced, and its content changed, that could impact on the potential level of recycling. It is thus essential to understand if there are links between recycling and waste minimisation targets. Some of these issues were considered in a future trends study for the 2010 Merseyside JMWMS review - the report at the link below might be useful for the study
<http://www.merseysidewda.gov.uk/wp-content/uploads/2012/10/RESOURCES-Future-Trends-Spple-Report-D1.pdf>

5.4 Modelling the impact of the 80% packaging recycling target

- 5.4.1 Increasing the packaging recycling target to 80% would help to develop markets and support local authorities to deliver higher recycling targets. However, there are question marks regarding the feasibility of this target. In 2012 the government set the 2017 packaging recycling target at 72.9%. As part of that target the glass packaging industry were expected to achieve 81%, however, this resulted in very high costs for the glass packaging industry leading to a revision of the target in 2014, which was consequently reduced to 77% by 2017. Similarly the government are now consulting on whether it is feasible to reduce the plastic packaging target currently set at 47.1% in 2017.
- 5.4.2 The study should therefore consider the economic impact of an 80% recycling target on the packaging industry, and hence whether it is achievable in financial terms. Assuming it is technically achievable the study should then demonstrate what impact achieving 80% packaging recycling would have on increasing the range of materials that local authorities will be able to recycle and contribute to their 70% municipal waste recycling target.

5.5 Modelling the impact of residual waste charging

- 5.5.1 If introduced, residual waste charging is likely to have a significant impact on increasing participation rates. Experience in other countries would indicate that it is effective in increasing the quantity of recycling collected, though there has been significant variations both in the level of success (ranging from virtually no impact to a very high increase), which is in part due to different charging mechanism but also the cultural background. It is therefore worth considering which of these approaches may successfully fit into the UK, recognising that historical investment decisions and cultural acceptance may make some charging mechanism more likely to succeed than others. The introduction of the system should be considered in the real-world context, which includes issues such as reduced or exempt fees for low income households contamination, the potential diversion of waste via illegal routes, or attempts to avoid charges by using public litter bins, HWRCs or neighbour bins. Furthermore, the limits of charging mechanism should be considered. The insensitivity of on-board weighing equipment at the household level will make it very difficult to detect differences in voluminous wastes like plastics, so the responsiveness of the householder to an increase in the charge may be poor particularly at low waste levels, and a limit on what residual waste charging can achieve may be reached fairly quickly.
- 5.5.2 That said, it is likely to raise levels of participation in recycling schemes particularly those related to heavy materials like paper, card, glass, garden and food waste to very high levels, and have a significant impact in tonnage terms. Taking into account these factors the work should assess what impact residual waste charging would have on the recycling rate, but also the costs involved in providing the quality alternative recycling collection services that will make residual waste collection charging palatable.

5.6 Modelling the impact of mandatory separate collection

- 5.6.2 It is difficult to understand at this stage what the EU mean by mandatory separate collection, since this may be interpreted as either 'separate from residual waste' or 'separate from materials of a different type or nature.' The modelling should therefore examine the difference between those two outcomes

at a high level.

5.6.3 The recent requirements on collection authorities to examine the need for a range of separate collection arrangements (TEEP Regulations) has only recently been introduced. For the JWDAs the initial assessment has supported their existing systems of collection (a mixture of kerbside collection and commingled collections with mechanical sorting) by demonstrating that the cost (both capital and operational) of shifting to separate collection are very high, and the benefits of recycling are negated by additional transport emission . This cost and benefit analysis could be used by the study to establish the overall cost/benefits of a more aligned English collection system.

5.7 Modelling the impact of limiting incineration to non-biodegradable and non-recyclable waste

5.7.1 The text adopted by the European Parliament is very difficult to interpret at this stage, particularly with reference to what they mean by 'non-recyclable'. Non-biodegradable is a narrower definition although there are numerous different ways to define this (e.g. gas released loss on ignition test, waste composition). The national current biodegradable waste targets are based upon mass balance and make the assumption that 68% of municipal waste is biodegradable based upon waste composition. A material, however, may be inherently 'non-recyclable' or become 'non-recyclable' because it is contaminated or mixed with other wastes.

5.7.2 Without further clarification it is difficult to determine the starting point, or usefulness of any modelling exercise. However, removing biodegradable waste plus any commonly recycled materials is going to leave very little that is burnable other than some plastics. Therefore modelling could be undertaken under a very broad assumption that incineration will be reduced to around 10%.

5.8 Modelling the impact of limiting landfill

5.8.1 There is little indication from the adopted parliament text regarding the landfill limit. However, the previously adopted proposals had a staged approach, which suggested a ban on certain recyclables (plastic, metals, glass, paper and other biodegradable wastes) by 2025, alongside an overall 25% limit, then further reducing the overall limit to 5% by 2030. In the absence of any clearer indication then financial impact should be modelled on these assumptions.

6. Understanding the wider impacts

6.1 Clearly, delivery of new European targets is highly likely to cost more, but as set out in 2.6 it is more likely that less money will be available. A larger funding gap would inevitably lead to wider questions regarding the way local authorities and industry operates and whether there is better way of doing things. Local authorities are actively seeking new ways to deliver services but it is not always clear as to the extent that these changes deliver savings. A significant proportion of local authorities, for example, outsource waste collection services but this doesn't always lead to cost saving with some reverting back to in-house collections. Alternative models of delivery being discussed at various levels include those listed below. Some of these are directly in the control of local authorities, but other require active engagement of central government to bring about the relevant legislation changes that can help local authorities to reduce costs:

a) greater funding flexibility including changes in legislation to allow charging for services e.g. residual waste, schools, HWRCs;

- b) partnership working - merging management, back office or front-line services;
- c) use of technology and information - electronically tagging bins to deliver personalised communications, targeted enforcement, direct charging;
- d) stronger legislation framework;
- e) integration of services e.g. work with troubled families dealing with all aspects of council interaction;
- f) joint commissioning or procurement;
- g) national and regional harmonisation of waste collection and treatment systems
- h) national material exchange for recycled materials;
- i) out-sourcing, joint-ventures or local authority owned companies;
- j) revisions to the producer responsibility schemes (PRNs, WEEE compliance);
- k) moving from voluntary (Courtald commitment) to compulsory retail commitments to address supply chain issues; and
- l) including waste in the devolution model, including the link between JWDAs and Combined Authorities where they exist in the same geographical area;
- m) shared collection e.g. a joint food waste collection service;
- n) shared infrastructure e.g. sharing of depots between districts;
- o) share service provision e.g. specific roles, services, staff;
- p) designing services to reduce waste and cost e.g. three weekly collections, specific charging.

7. JWDA Recommendation

- 7.1 A policy position, expected to be formally agreed by the JWDAs in the near future, is provided at Appendix A. These views have been determined as a result of the JWDAs experience in delivering sustainable waste strategies, which have put England on the right path to meet waste recycling and diversion targets in 2020. However, there is a knowledge vacuum within which decisions are being taken regarding future waste management targets, which lack any real-world analysis of the technical and financially viability of achievement. A better understanding of the potential impact of forthcoming EU proposals is therefore required to support policy makers, and those that will need to react to them. Subject to formal approval by each JWDA the Group, will therefore commission a study based upon the broad assumptions in section five above regarding the forthcoming legislation changes.

Appendix A: JWDA's Recommended Policy Actions

ISSUE	POSITION
Waste prevention and reuse	<ul style="list-style-type: none"> • needs greater EU focus as represents the waste hierarchy priority • needs to be tackled predominantly at the design and production phase • pursuing recycling targets can work against waste prevention by encouraging waste generation • The role of local authorities is limited to education, community engagement and access to raw materials
Packaging	<ul style="list-style-type: none"> • Reduce excessive packaging • Better designed PRN system to only reward where the material has been recycled • Use product benchmarking to actively investigate and ban excessive packaging • Deter the use of packaging for marketing and product enhancement e.g. black plastics • Develop a standard declaration for recyclability linked to viable markets to encourage materials to be designed to be recycled, and greater level of clarity as to what local authorities should collect and how packaging can be labelled to reduce confusion
Product and service design	<ul style="list-style-type: none"> • Regulation to require design improvements to facilitate longevity, reuse, re-manufacture and recycling e.g. Standard Environmental Product Declaration, Eco-Directive focused material use • where single use / disposable products cannot be avoided they should be easier to recycle or designed to maximise their potential for energy recovery • Single use tax should be encouraged to reduce environmental damage e.g. successful example of plastic bags • new business models required which promote buying a service rather than owning a product • Support new business models by tax breaks, financing schemes for products that are accompanied by lifetime guarantees, design life product support, software led longevity, provision of specific parts e.g. replacement screen, service packages, design for disassembly, device/product service packages, targeted removal of resource intensive parts. • Develop a reuse/disassembly compliance scheme to overcome split incentives between those involved in design and repair • Promote access to information - requirement to disclose information on product disassembly and list of materials within products
Producer responsibility	<ul style="list-style-type: none"> • need extended Producer Responsibility (PR) to ensure that Producers provide a greater contribution to the cost of managing end of life products and recovering resources and are incentivised to design for longevity, reuse and recycling • local authorities (LAs) are currently subsidising inefficient UK plc resource use and can ill afford to

	<p>continue to do so</p> <ul style="list-style-type: none"> • PR schemes should cover the cover the cost of collection as an absolute minimum requirement. • greater transparency of investment from PR funds into waste management and resource recovery infrastructure is required • Ensure the cost of joining a producer responsibility scheme is based on the environmental damage (not sales volume) • Link the cost to the lifespan, reusability or recyclability of a product not just the sales volume • Tax virgin materials, and tax breaks or exemptions from PR compliance fees for recycled content
Procurement and supply chains	<ul style="list-style-type: none"> • sustainable public procurement can stimulate behavioural change in suppliers and act as ‘champion’ for greener procurement. • improved information flow through supply chains supports better awareness between designers, manufacturers, retailers, waste managers and reproprocessors e.g. the RSA ‘Great Recovery’ project which brings different parts of a product chain together to facilitate improvements in design to support reuse and recycling and development of the circular economy • product innovation tends to be quicker than waste management innovation. Measures to improve communication, awareness and joint working across the supply chain are encouraged • Make the provision of information by suppliers mandatory and require collation of data on the environmental impact of individual products not just company performance • LAs should engage more actively with the supply chain, especially with retailers due to their direct influence on consumers and pivotal role in the supply chain. • Increase the focus on retailers as the intermediate between consumers and the manufacturer by building on the Courtald Commitment to develop a stronger initiative and considering the potential for a compulsory scheme. • Support retailers to make better decision by requiring suppliers to provide product specific environmental information • Legislate good practice in supply chain management e.g. audits, benchmarking, flow of information, environmental scorecard, matrix, supply chain product mapping • Support WRAP’s continued work with retailers to address products and supply chain waste, but shift towards a mandatory scheme
Waste Definitions	<ul style="list-style-type: none"> • a consistent EU approach to calculation methods should be agreed so the current position is more fully understood before considering the future direction • Faster process for removing regulatory burdens rather than relying on case law

	<ul style="list-style-type: none"> • Set up grades for secondary raw materials to increase market confidence • Ensure consistency of definitions of waste across Member states • Improve provision of information between suppliers of waste and end-users • Do not de-regulate waste at the expense of environmental protection
Recycling targets	<ul style="list-style-type: none"> • recycling targets should not be increased without supportive cost:benefit and life cycle analyses and without identified funding to support increased collection and sorting activities. • the marginal carbon benefit of delivering higher recycling targets should be considered against investment in alternatives e.g. solar power • poorly designed recycling targets can impede waste prevention • material specific targets that take into account feasibility, carbon benefits, and resource scarcity are a better approach than increasing the municipal recycling rate above 50%, which is not supported in current market conditions. Such targets should support and contribute to the achievement of long term carbon reduction targets looking ahead to 2030 - 2050 • targets should be achievable, but what is achievable will vary across EU Member States due to different waste flows, again, product specific targets/capture rates would overcome this. • recycling targets should be based on material type rather than the source of material to encourage joint treatment of commercial, industrial and household waste. • accepting recycled Incinerator Bottom Ash Aggregate (IBAA) in the official recycling calculation would better represent the proportion of recovered material returning to economic use in line with the EU Waste Framework Directive definition of recycling • incorporating IBAA would allow LAs who have invested in landfill diversion through EfW to increase recycling performance at no additional cost. • there needs to be a sensible and flexible balance between recycling and energy recovery reflecting both affordability of treatment methods, market needs (resources v energy) and relative carbon benefits. The ‘bang for buck’ of every Euro invested into the circular economy needs to be maximised • there is little point collecting materials for which there are no markets, which simply lead to higher waste management costs and increased likelihood of contamination • recycling targets driven by incineration taxes, landfill taxes or bans create a market distortion since it leads local authorities and waste management companies to accept the widest range of material at lowest cost (thus avoiding landfill/incineration costs) thus focusing on volume over quality • Over-arching targets will not tackle barriers to recycling which stem from design and supply chain interaction
Participation	<ul style="list-style-type: none"> • increased participation could be supported by more comprehensive communication and engagement programmes funded by PR • shift to reduced residual waste collection frequency and relatively higher collection frequency for recycling. Recent WRAP research suggests an increase in weekly residual capacity from 120 to 240L

	<ul style="list-style-type: none"> reduces recycling rates by 7.9% Improved powers giving local authorities the flexibility to direct householders as to what material is place in which containers, and better enforce where appropriate Abolish the ‘public nuisance test’ under section 46 powers increased PR funded support for engagement with Housing Associations, landlords, businesses to ensure opportunities available for residents and customers to recycle Greater clarity of landlord responsibilities, and allow wider use of landlord licensing by removing areas specific constraints
Food waste - separate collection and diversion from landfill	<ul style="list-style-type: none"> diversion of food waste from landfill is supported but decisions on the most appropriate treatment, e.g. separate collection for AD or inclusion in residual waste for EfW, should be taken locally based on local considerations including cost, social and environmental impacts a managed withdrawal from landfill is supported by diversion of food waste and residual waste to alternative treatment technologies an approach utilising a mix of targets and incentives set over a medium - long term timescale can provide the signals the waste sector requires to adapt, change practices and develop new infrastructure to effectively drive material away from landfill without requiring bans, incurring sudden shocks or risking long term investments in infrastructure a specific requirement to separate food waste for recycling can only be accepted if the requirement is matched with the necessary funding to support collection and treatment infrastructure Revisit animal-by product regulation to reduce compliance costs for food waste treatment and encourage the use of animal feed.
Markets for Secondary Materials	<ul style="list-style-type: none"> It is imperative that markets for secondary materials are first developed before deciding how much material should be collected. Further incentives placed on waste rather than markets (whether these are bans, taxes or recycling targets) will simply lead to more material being collected for which there is no market. the right behaviour needs to be financially rewarded in clearly visible way e.g. tax on virgin materials, exemption for compliance fees for recycled content any new EU measures should complement, support and encourage action at appropriate geographic levels.
Energy from waste	<ul style="list-style-type: none"> Strongly oppose any ban, limit or tax on incineration. Support the careful design of EfW capacity requirement to meet expected demand. energy recovery is the best option for some waste e.g. clinical wastes, offensive waste, hazardous

	<p>wastes, difficult to recycle plastics or biodegradable wastes</p> <ul style="list-style-type: none"> • EfW can provide a supply of secure and low carbon energy • Local authorities should not be penalised for implementing waste policies which necessarily require investment over a long time frame • Investment should not be discouraged by making dramatic, short-term changes to waste policy • Specifically designing a material for energy recovery can have better environmental benefits than recycling in some circumstances where more energy is expended on several separation stages. • Carbon based life-cycle assessments often over-look the high degree of water usage involved in several cleaning or liquid-phase separation stages, which mean recycling is sometimes wrongly supported above energy recovery.
Better technology	<ul style="list-style-type: none"> • Support development and commercialisation of technologies to address specific bottlenecks e.g. PET tray recycling and plastic bags. • Narrowly focus EU grant funding towards projects with the greatest potential commercial benefit.
Illegal activity and better enforcement of waste shipments	<ul style="list-style-type: none"> • Illegal activity needs to be addressed prior to increasing recycling targets • Consistent controls are required across the EU to make sure material is only exported to certified facilities and only materials actually recycled are counted towards targets • Greater focus on closing down illegal operations before they have the opportunity to export by strengthening the link between exports and the permitting system through the use of end market specifications. • Greater focus on the export activity of poorly performing sites since these are more likely to seek illegal disposal routes
JWDAs regulation	<ul style="list-style-type: none"> • JWDAs lack the general power of competence of principal authorities. This is an issue that could potentially be addressed locally through the devolution agenda and in city regions through clarification of the relationship between JWDAs and Combined Authorities. • The Waste Minimisation Act 1998 supports action by relevant authorities, including JWDAs, to reduce all wastes, not just household or municipal