

NOTTINGHAMSHIRE COUNTY COUNCIL WASTE REDUCTION, RE-USE, RECYCLING AND COMPOSTING PLAN 2015/16

1. Introduction

- 1.1. The 2015/16 Nottinghamshire County Council Waste Reduction, Re-use, Recycling and Composting Plan sets out the Council's approach to increasing recycling rates towards the PFI contract target of 52% by 2020 alongside reducing overall tonnage. This target aligns with the EU Waste Framework Directive target of 50% by 2020.
- 1.2. Household Waste collected at the kerbside is the responsibility of the district and borough councils (Ashfield DC, Bassetlaw DC, Broxtowe BC, Gedling BC, Mansfield DC, Newark and Sherwood DC and Rushcliffe BC) who are Waste Collection Authorities (WCA). Nottinghamshire County Council is a Waste Disposal Authority (WDA) and as such pays for the disposal of all Household Waste collected by the WCA and waste deposited at the County's Recycling Centres.
- 1.3. The recycling rate for Nottinghamshire in 2014/15 period stood at 43% with individual district rates ranging between 21% and 51%.
- 1.4. The Waste Reduction, Re-use, Recycling and Composting Plan for 2015/16 will have actions grouped in accordance with the Waste Hierarchy as shown below.

The Waste Hierarchy Stages Includes Using less material in design and manufacture. Prevention Keeping products for longer; re-use. Using less hazardous material Checking, cleaning, repairing, refurbishing, repair, Preparing for re-use whole items or spare parts. Turning waste into a new substance or product Recycling including composting if it meets quality protocols. Including anaerobic digestion, incineration with Other energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and ecover Disposal Landfill and incineration without energy recovery

Figure 1 – Waste Hierarchy

- 1.5. Whilst this plan is primarily concerned with recycling and composting it is important to consider all stages of the waste hierarchy in order to look at how the recycling and composting elements fit within the whole of waste management. Each stage will be looked at in detail and will highlight what plans Nottinghamshire County Council have for each element.
- 1.6. The table below shows the overall tonnages for 2014/15. It should be noted that reported recycling and composting figures exclude trade waste collected by the WCA and inert materials collected at the recycling centres.

Figure 2 – 2014/15 Household Waste Tonnages

	Recycling/Disposal Method	2014/15
		Tonnage
Dry Recycling	Materials Recovery Facility (WCA)	51,857.73
	Bring Banks (WCA)	12,746.97
	Recycling Centres (RC)	25,168.40
	Other (including fridges, florescent tubes) (RC)	1,763.35
	Street Sweepings (WCA)	8,093.00
	TOTAL RECYCLING	100,029.20
Composting	Kerbside Collections (WCA)	33,244.48
	Recycling Centres (RC)	25,665.88
	TOTAL COMPOSTING	58,910.36
Energy Recovery	Eastcroft (WCA)	66,593.51
	Refuse Derived Fuel(WCA)	48,283.24
	Other (clinical) (WCA)	42.74
	TOTAL ENERGY RECOVERY	114,919.49
Landfill	Waste Collection Authority (WCA)	79,102.62
	Recycling Centres (RC)	12,952.99
	TOTAL LANDFILL	92,055.61
TOTAL TONNAGE FO	365,514.91	

1.7. The majority of this waste is managed through a long-term PFI contract with Veolia as amended by Veolia's Revised Project Plan (RPP) on 24th February 2015.



2. Current Status of Recycling in Nottinghamshire

- 2.1. All 7 WCA currently collect mixed dry recycling including paper, card, tins, cans and plastic bottles. These materials are taken directly to the PFI Contract Materials Recovery Facility (MRF) at Mansfield where they are sorted and separated through a variety of methods and baled in order to be sent for recycling.
- 2.2. Within the PFI contract there are a number of targets and Key Performance Indicators (KPI's) which includes a progressive increase in recycling and composting rates across the life of the contract. An ambitious target of achieving 52% of Household Waste being recycled by 2020 was set to align with the European Commission's Waste Framework Directive target of 50% by 2020.
- 2.3. In 2014/15 the County Council's recycling rate was 43% which falls below the level required to meet the 52% by 2020 target in the PFI contract. It is therefore imperative that a well formulated recycling and composting plan is developed to help achieve this ambitious target.
- 2.4. Recycling rates in Nottinghamshire have plateaued over recent years, as they have nationally during the recession, further emphasising the need for a well formulated strategy. The table below shows the overall recycling rate of household waste in Nottinghamshire over recent years.

Figure 3 - Household Waste Recycling Rate

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Achieved	41.6%	42.6%	43.4%	42.8%	42.7%	43.2%	43.4%

2.5. Each WCA has its own distinct demographic make-up and challenges with regards to achieving increased recycling rates. Figure 4 shows the levels of recycling within the seven WCA over the last four years which have remained static and in several cases have in fact fallen;

Figure 4 - Recycling Rates by WCA

	Ashfield	Bassetlaw	Broxtowe	Gedling	Mansfield	Newark &	Rushcliffe
	DC	DC	BC	BC	DC	Sherwood	BC
						DC	
2010/11	34%	23%	43%	37%	41%	26%	54%
2011/12	34%	23%	42%	37%	39%	26%	51%
2012/13	34%	22%	41%	36%	36%	24%	51%
2013/14	33%	21%	40%	37%	38%	26%	51%
2014/15	34%	21%	40%	37%	36%	28%	51%

2.6. Alongside the collection of recyclable materials as highlighted above, several WCA offer additional kerbside collection services, these are summarised in the table below;

Figure 5 – Additional Waste Collections by WCA

	Dry Recycling	Garden Waste	Kerbside Glass
	Collections	Collections	Collections
Ashfield DC			
Bassetlaw DC			
Broxtowe BC			
Gedling BC			
Mansfield DC			
Newark &			
Sherwood DC			
Rushcliffe BC			

Collected	
Not Currently Collected	

Note: Several areas of Newark & Sherwood have garden waste collections undertaken by neighbouring district/borough councils.

Note: Several WCA collect significant tonnages of glass through their network of 'Bring Sites.'

2.7. Within the County there are 12 recycling centres that accept household waste from Nottinghamshire residents. In 2014/15 approximately 86,000 tonnes of waste (including inert materials) was collected at the recycling centres and 79% of this waste was recycled. Despite a plateauing in the amount of Household Waste being recycled overall within the County, the recycling centres performance has seen steady progress and is significantly exceeding the contract target of recycling 59%. The table below shows recycling progress in recent years.

Figure 6 – Recycling Rate at Nottinghamshire Recycling Centres

	Percentage Sent for Recycling
2010/11	72%
2011/12	75%
2012/13	80%
2013/14	80%
2014/15	79%

- 2.8. The recycling centres accept a variety of materials for recycling as follows;
 - Glass
 - Paper & Cardboard
 - Plastic Bottles
 - Textiles
 - Metals
 - Electrical Goods

- Engine Oil
- Car Batteries
- Garden Waste
- Plasterboard (excluding Mansfield)
- 2.9. In addition to the above materials 4 of the sites (Beeston, Calverton, Newark and Warsop) accept paint which, where it is suitable for re-use, is made available free of charge to members of the public at specially organised paint nights, or by appointment to charities, community groups and other organisations throughout the year.
- 2.10. As part of the PFI Contract a public satisfaction survey is undertaken at each of the recycling centres annually to monitor service provision. Face to face interviews are conducted with a wide variety of questions being asked about the user's satisfaction of various aspects of the sites including which services they offer, the staff, the general up keep of the site and the sites layout. The table below shows the overall satisfaction rates at the recycling centres since 2007. As can be seen satisfaction rates remain consistently high with members of the public.

Figure 7 - Recycling Centres Satisfaction Rates

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Year	Overall Satisfaction Rate
2007	97%
2008	97%
2009	97%
2010	98%
2011	96%
2012	98%
2013	98%
2014	98%
2015	98%

3. Prevention (and Reuse)

3.1. These measures are taken before substance, material or product becomes waste ensuring there is less waste in the first instance.

Home Composting

- 3.2. Home Composting has been encouraged via the sale of composting bins at reduced prices since 2003, with over 20,000 home composting bins having been sold to Nottinghamshire residents helping to divert the costs of dealing with compostable waste and away from the WCA and WDA. In recent years the County has been part of a National Framework Agreement with Straight Ltd allowing for the 2015/16 costs to be reduced as follows;
 - 330 litre black composter is now £19.98 (£22.98 in 2014)
 - 220 litre black composter is now £17.98 (£19.98 in 2014)
 - These composters are also buy one, get one half price
- 3.3. In order to further encourage home composting it will continue to be promoted through parish council newsletters and taking opportunities to promote through the district councils. The home composting offer, along with associated advice will also be offered at events throughout the county including the County Show on the 9th and 10th May in Newark which is attended by around 50,000 people.
- 3.4. Estimated impact of interventions on recycling rate for 2015/16 Increase by <0.1%

 Recycling Centres
- 3.5. Veolia operate 12 recycling centres as part of the Nottinghamshire PFI contract, which play a pivotal role in not just recycling, but in preventing waste in the first place.
- 3.6. A significant amount of waste is brought to the County's recycling centres from people living outside of the county. Several of the recycling centres are located close to the borders of other local authorities and people use them in preference to their own. Proposals to help manage this cross border use were approved by Full Council in February 2014 although it is expected that any changes will have no overall impact upon the recycling rate.
- 3.7. In autumn 2015, Nottinghamshire County Council will introduce a charging structure for inert materials (i.e. soil and rubble) brought to its recycling centres. Currently this is accepted free of charge at recycling centres despite there being no legal obligation to do so. Approval has been given to introduce a pre-booked, charged service for waste being delivered to recycling centres in vehicles that currently require a van, trailer or pick up permit. Vehicles not defined as a van, pick up or a car with a trailer will be able to continue depositing these materials free of charge. Modifying the existing service in this way should help to reduce potential trade waste and will cover the cost of disposing of this waste. In

2014/15 around 18,000t of inert and 1,500t of gypsum were deposited at the recycling centres. It is estimated, conservatively, that the introduction of a charging scheme for these inert materials would reduce tonnages by 10%. It should be noted that inert materials are not included in the overall tonnage as these are not defined as household waste and are therefore not included in the overall recycling rate. It is however expected to offset around £150k per annum in waste disposal costs.

- 3.8. Estimated impact of interventions on recycling rate for 2015/16;
 - Proposals to manage cross border usage Negligible but with a significant financial saving on disposal costs.
 - Charging for inert materials Negligible but with a significant reduction in inert materials and a financial saving on disposal costs.

Love Food Hate Waste (LFHW)

- 3.9. Encouraging people to reduce the amount of food waste they throw away will be done through promotion of the LFHW campaign at county events in partnership with Veolia including sponsoring stands at the Nottinghamshire show and the Robin Hood Festival as well as having promotional materials such as LFHW recipe cards at district events. The LFHW sustainable cookery book has also been updated and will continue to be promoted and distributed, and alongside this, signposting to the LFHW website from the Council waste and recycling webpages will continue.
- 3.10. Nottinghamshire County Council and Veolia will also look to support the Bramley Apple Festival in October 2015 which has a focus on avoiding food wastage.
- 3.11. A number of other small scale projects and campaigns will be undertaken in relation to LFHW to achieve behavioural change such as a 'Cookery Club' trial. This will involve procuring an outside provider to engage with families who have children at local schools who will be given tips on how to reduce food waste through utilising new recipes and changing habits.
- 3.12. Estimated impact of interventions on recycling rate for 2015/16 Increase by 0.5% Real Nappies Campaign
- 3.13. It is estimated that a child only requires 50 real nappies compared to thousands of disposable versions for each child's life. Therefore, Nottinghamshire County Council will continue to promote the benefits of real nappies through the website as well as taking advantage of other communications channels including the promotion of Real Nappy Week through 'Email Me' (see below).
- 3.14. Estimated impact of interventions on recycling rate for 2015/16 Negligible

Mailing Preference Service

- 3.15. The County Council website will continue to promote and signpost the Mailing Preference Service in a bid to reduce the amount of junk mail delivered to Nottinghamshire residents. The service is free and allows people to have their names and addresses removed from mailing services used by the direct mail industry.
- 3.16. Estimated impact of interventions on recycling rate for 2015/16 **Negligible**Reducing Residual Waste Arisings
- 3.17. Nottinghamshire County Council will continue looking for opportunities to reduce waste arisings. Within the Council's Environmental Management System there are a range of targets including the overall residual tonnage of waste arisings. This is reviewed quarterly and focus is predominantly on residual waste which aligns well with this strategy which aims to increase the recycling rate to 52% by 2020. Investigative work will be undertaken during 2015/16 to look into further options around reducing overall residual tonnage.
- 3.18. Estimated impact of interventions on recycling rate for 2015/16 N/A Investigative work only in 2015/16.

'Email Me'

- 3.19. The Council runs a tailored email service allowing Nottinghamshire residents to select which areas of interest they would like monthly updates about. The waste and recycling email bulletin contains a range of information about upcoming events, information and tips in relation to waste and recycling. During 2015/16 'Email Me' will continue to be promoted through a variety of ways including signs at recycling centres, bus shelter adverts and lamp post banners. Since it started in April 2014 there have been monthly updates and it has seen a steady increase in subscribers which stands at 5,229 as of April 2015.
- 3.20. Estimated impact of interventions on recycling rate for 2015/16 Increase by <0.1%

4. Preparing for Reuse

4.1. These measures involve checking, cleaning or repairing components or products that have become waste so that they can be used without any other type of processing. Products and/or components salvaged in this way are thus removed from entering landfill or being disposed of in other ways.

Paint Reuse Scheme at Recycling Centres

- 4.2. There are 4 recycling centres in Nottinghamshire (Beeston, Calverton, Newark and Warsop) that offer a Community RePaint, paint reuse scheme whereby Nottinghamshire residents can deposit unused paint. The paint is then assessed for usability and sorted by type and colour with the paint being unsuitable for reuse being disposed of in the appropriate manner. The reusable paint is then made available to members of the public at specific public open days and to community groups and charities by appointment, free of charge.
- 4.3. In 2015 the Council is extending the hours of the public open days with a view to allowing more individuals to access the service. In conjunction there will be a new promotional leaflet that will be used at events and through partnership links. Both the public open days and the availability of the service to community groups and charities will continue to be promoted through the County Council's 'Email Me' service.
- 4.4. Follow up by Communications Officers will be done with community groups who have accessed the service to highlight how the free paint has made a difference and allow for case studies to be developed.
- 4.5. Estimated impact of interventions on recycling rate for 2015/16 Increase by <0.1%

 Furniture Reuse Scheme
- 4.6. The Furniture Reuse Network indicates that each year around 10 million items of furniture are thrown away and that 3 million of these could easily be reused. There are a number of furniture reuse schemes within the county and these will be promoted via the Council website as well as signposting to any relevant district council sites.
- 4.7. Estimated impact of interventions on recycling rate for 2015/16 Negligible

5. Recycling

5.1. This represents any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. Recycling and composting activities will compile the majority of this action plan in order to move towards the 52% target by 2020.

Materials Recovery Facility (MRF)

- 5.2. Dry recyclables collected by the WCA have been delivered to the PFI Contract MRF since 2009. The recyclables are sorted to ensure good quality materials are produced in order to be sent on for recycling.
- 5.3. In order to ensure the correct materials are finding their way into the dry recycling bins rather than entering the residual waste stream, Nottinghamshire County Council will undertake a push on the 'Are you Bin Smart' campaign in autumn 2015 in order to reduce contamination and increase capture rates of materials that could be recycled but otherwise end up in the residual waste stream. The 'Are you Bin Smart' campaign was first launched in 2008 so this work builds upon an already well-established campaign.
- 5.4. To raise awareness of the processes at the MRF, a new updated leaflet has been produced explaining how the MRF operates and what materials can be sorted there. The leaflet also explains what is meant by contamination, advertises tours of the facility and gives useful contacts such as district councils. This will be distributed to residents and used at events.
- 5.5. Sampling will be conducted of recyclable materials entering the MRF to allow compositional analysis to be undertaken. This will determine the breakdown of categories such as plastics and allow for more targeted engagement in relation to specific items. Compositional analysis will also be undertaken on materials in the residual waste stream through Worksop and Newark Waste Transfer Stations to highlight any recyclable materials, this will again allow for targeted campaigns in order to increase levels of recycling.
- 5.6. Consideration will also be given as to whether the MRF input specification could be extended to capture other plastic items that are not currently accepted. Certain materials, particularly some plastics find their way to the MRF despite not currently being accepted. These kind of materials represent an opportunity to widen the specification as they currently take up significant resources to remove them from the stream and a business case is far more likely to stack up to incorporate these materials over completely new materials. Further investigation will be done by looking at third party waste that also goes into the MRF (the Derbyshire districts of Amber Valley, Chesterfield and High Peak) to see if these areas are responsible for large amounts of materials that are not currently accepted.
- 5.7. A new post has been created by Veolia to assist the Communications Officer, who will operate out of the MRF. This role will carry out MRF tours and communication activities meaning a higher number of people can be engaged.

- 5.8. An additional residual waste collection over the post-Christmas period is being proposed by the Labour majority group at Gedling Borough Council. This would help to reduce contamination of the dry recycling collections which tend to be at their worst during this time period. This will however only have a minimal impact on the overall waste tonnages.
- 5.9. Estimated impact of interventions on recycling rate for 2015/16 Increase by 0.5%

Schools Waste Action Club (SWAC)

- 5.10. The SWAC education programme will continue to run in 2015 with a variety of activities and themes. Free educational visits to the MRF will be undertaken in partnership with Veolia.
- 5.11. Konflux Theatre Company has been funded by Veolia to provide an education through drama workshop on recycling during the week commencing 22nd June. The workshops will deliver the recycling message to approximately 1300 pupils.
- 5.12. Waste Management are looking to secure repurposed iPads for use as part of the MRF education visits.
- 5.13. The Education Room at the MRF will be undergoing a refurbishment during 2015/16 which will incorporate more interactive learning resources to help facilitate better engagement during MRF visits.
- 5.14. SWAC will continue to target schools that have had little or no involvement in the SWAC programme in order to grow the number of schools and pupils that have been engaged with. To date, approximately 258 (75%) of primary, secondary and special schools have participated in the programme.
- 5.15. Estimated impact of interventions on recycling rate for 2015/16 **Negligible but long term** benefits will accrue.

Kerbside Composting

- 5.16. Further work will be undertaken by WCA to expand existing garden waste collections to more residents through continued promotion. Newark and Sherwood District Council, in partnership with Rushcliffe Borough Council are expanding their garden waste collections to include the Farndon and Fernwood areas in 2015/16. In addition several WCA have expressed an interest in shared services and working together to utilise any spare capacity.
- 5.17. There is also the potential introduction of a garden waste collection in Bassetlaw, options around this will be looked at and the County Council will look to continue to offer incentive payments in order to encourage the setup of such a scheme. Based on the 2014/15 budget

proposal this would equate to an equal saving for both district and county councils from the green waste diverted from residual waste bins.

5.18. Estimated impact of interventions on recycling rate for 2015/16 – Increase by 0.5% but with ongoing increases predicted.

Kerbside Glass Collections

- 5.19. There are districts that currently don't undertake kerbside glass collections (Bassetlaw, Mansfield, Newark and Sherwood and Rushcliffe). Recent compositional analysis of residual waste entering the Eastcroft EfW facility indicated that recyclable glass still made up a significant element of the loads from Broxtowe, Gedling and Rushcliffe. Investigation will be undertaken into whether changes to current services (kerbside and/or bring banks) would help to divert more of this glass out of the residual waste stream.
- 5.20. A feasibility study is being undertaken by Ashfield District Council for using wheeled bins to collect glass rather than the existing boxes that are currently used. This may potentially lead to more people utilising the service, particularly where they might find it difficult to move/carry the glass box when full.
- 5.21. WCA have expressed concern around the potential loss of recycling credits for household glass from 2019. Solutions will need to be looked at with regards to how this could be mitigated alongside looking at the potential of a County-wide kerbside glass collection if there was a suitable business case.
- 5.22. Estimated impact of interventions on recycling rate for 2015/16 N/A Feasibility study only in 2015/16

District Specific Schemes

- 5.23. A number of other kerbside collections are being considered including Broxtowe's textile collection which was introduced as a trial in November 2014. This will be promoted further in 2015 and its success analysed.
- 5.24. Kerbside battery collections are currently undertaken by Rushcliffe and Gedling Borough Councils and Gedling are also trialling a kerbside collection of small WEEE items.
- 5.25. The expansion of materials being collected at bring sites is also being considered by several district councils including batteries and WEEE recycling banks.
- 5.26. Ashfield District Council have recently launched their 'Binfo app' which is a phone application that reminds residents of collection days as well as which materials can be placed in their recycling bin.

5.27. Estimated impact of interventions on recycling rate for 2015/16 - Increase by 0.1%

Recycling Centres

- 5.28. Continued consideration will be placed into exploring the separation of additional materials at recycling centres. Carpet collections are currently being trialled at 4 recycling centres with mattress separation also being considered.
- 5.29. Initial consideration will also be given to the possibility of creating fewer but larger recycling centres with a view to accepting a wider range of materials. Care would be needed here to ensure a suitable service is within reach of the whole County and to ensure that high satisfaction rates are maintained.
- 5.30. Estimated impact of interventions on recycling rate for 2015/16 Negligible

Food Waste

- 5.31. Currently it appears there are no viable facilities with capacity for recycling food waste from Nottinghamshire residents. Financial modelling will however be undertaken to see whether a viable business case for food waste can be developed as raw and processed food represents around 30% of the residual waste stream according to waste analysis undertaken in 2014.
- 5.32. Estimated impact of interventions on recycling rate for 2015/16 N/A

6. Other Recovery

6.1. Whilst the main focus of this strategy document is to increase the recycling rate, it is still important to consider how waste that isn't being reused or recycled can still be moved up the waste hierarchy.

Energy Recovery

- 6.2. New waste transfer stations (WTS) in Newark and Worksop are due to be operational from 1st June 2015. These will be used to transfer residual waste from Bassetlaw and Newark and Sherwood District Councils to the Sheffield Energy Recovery Facility (ERF). This ensures that around 50,000 tonnes in 2015/16 and 60,000 tonnes thereafter (full year) of waste per annum is diverted from landfill.
- 6.3. The Eastcroft Energy from Waste (EfW) facility in Nottingham will, subject to availability, in 2015/16, be able to accept 68,000 tonnes of residual waste from Broxtowe, Gedling and Rushcliffe Borough Councils.
- 6.4. Both the Eastcroft and Sheffield EfW facilities provide heat as part of district heating schemes directly to homes and businesses within their vicinities.

Refuse Derived Fuel (RDF)

- 6.5. The FCC Alfreton WTS will be used for Mansfield and Ashfield District Councils residual waste until 31st March 2017. FCC produce RDF through a shredding and sorting process.
- 6.6. Whilst having Mansfield and Ashfield's waste delivered to Alfreton WTS has provided a short-term solution that is more favourable than sending their residual waste to landfill, the Council continues to discuss options with Veolia around longer term options.

Bulky Waste

6.7. A trial is being undertaken at the Veolia Derby WTS for the recovery of bulky waste collections delivered via Freeth Street WTS for Broxtowe, Gedling and Rushcliffe Borough Councils. These bulky items would be stripped down and salvageable parts removed, therefore avoiding landfill.

7. Disposal

7.1. Whilst every effort is being made to ensure as much waste as possible is reused, recycled and recovered it is currently inevitable that a certain proportion will still be disposed of without any recovery. From the 1st June 2015 Staples landfill will be the only landfill site in Nottinghamshire being used for residual waste by the County Council. This will be predominantly used for a small amount of residual waste from the County's recycling centres and during periods of unavailability at Eastcroft EfW. Veolia will also use their own out of county landfill sites for residual waste from the Recycling Centres.



8. Delivery

- 8.1. Appropriate budget allocation for new schemes or significant promotion and communication of existing ones will be essential in order to achieve an increase in recycling and composting performance. Consideration will need to be given to invest to save projects such as new garden waste or glass collection services.
- 8.2. The County Council will need to work collaboratively with the district councils to secure improved performance. The County Council meets regularly with the district councils through the Joint Waste Management Committee (JWMC) and Joint Officer Board (JOB) meetings and these meetings will continue in order to ensure engagement with district councils. In addition to this, the Recycling Officers meet on an ad hoc basis to ensure better sharing of ideas and resources at an officer level and the delivery of communications campaigns.
- 8.3. Closer working with the districts and agreements around benefit sharing will be an important consideration. Currently Bassetlaw District Council does not undertake a garden waste collection, whilst only parts of Newark and Sherwood are served by such a service through an agreement with Rushcliffe Borough and Mansfield District Councils. In order to kick-start any garden waste collection scheme a significant amount of capital investment would be required but this can potentially be offset through disposal savings as garden waste is moved away from the residual waste stream and composted instead. Discussions would take place with WCA to ensure that any revenue sharing is beneficial to both parties.

9. Impact on Performance

9.1. The table below summarises the performance target for 2015/16. The impact of interventions is based on the expected diversion of tonnage from residual waste to recycling and composting. A diversion of 3,664 tonnes of residual waste represents a 1% increase in the overall recycling rate.

Figure 8 – 2015/16 Plan Summary

Year	Performance Target	Service Improvement Actions	Performance Improvement Target
2014/15 (Current)	43%	Baseline	
2015/16	44%	Prevention Home Composting Recycling Centres Love Food Hate Waste Real Nappy Campaign Mailing Preference Service Reducing Residual Waste Arisings 'Email Me' Preparing for Reuse Paint Reuse Scheme Furniture Reuse Schemes	+<0.1% Negligible +0.5% Negligible Negligible N/A +<0.1% +<0.1% Negligible
		Recycling MRF Activities SWAC Kerbside Composting Kerbside Glass Collections District Schemes Recycling Centre Schemes Food Waste	+0.5% Negligible +0.5% Negligible +0.1% Negligible N/A

9.2. The following table sets out targets for future years in order to achieve the recycling and composting target of 52% by 2020.

Figure 9 – Anticipated Annual Performance, 2015 - 2020

Year	Annual Performance
2015/16	44%
2016/17	47%
2017/18	49%
2018/19	51%
2019/20	52%

9.3. In order to achieve a recycling rate of 52% by 2020 it is important to look at how each WCA can contribute to the overall performance. The table below (Figure 10) highlights a suggested contribution to the recycling rate deemed feasible with appropriate partnership working and relevant support from Nottinghamshire County Council.



Figure 10 – District Council & Recycling Centres Suggested Performance Breakdown for 2020

District	2014/15 Tonnage	2014/15 Recycling Tonnage	2014/15 Residual Tonnage	2014/15 Recycling Rate	2020 Suggested Performance Level	Recycling Tonnage Required	Recycling Rate Shortfall	Shortfall Tonnage	Interventions for Improved Performance
Ashfield	45,602	15,674	29,928	34%	45%	20,521	11%	-4,847	Significant increase in kerbside glass and green waste collections. Improved MRF capture rates.
Bassetlaw	40,827	8,701	32,126	21%	40%	16,331	19%	-7,630	New kerbside green and glass collections. Improved MRF capture rates.
Broxtowe	39,320	15,732	23,588	40%	45%	17,694	5%	-1,962	Minor increase in kerbside green and glass collections. Improved MRF capture rates.
Gedling	43,474	16,107	27,367	37%	45%	19,563	8%	-3,456	Minor increase in kerbside green and glass collections. Improved MRF capture rates.
Mansfield	42,736	15,185	27,551	36%	45%	19,231	9%	-4,046	Minor increase in kerbside green and glass collections. Improved MRF capture rates.
Newark and Sherwood	43,199	12,239	30,960	28%	40%	17,280	12%	-5,041	Significant increase in kerbside glass and green waste collections. Improved MRF capture rates
Rushcliffe	43,761	22,306	21,455	51%	55%	24,069	4%	-1,763	Improved bring bank glass capture rates. Improved MRF capture rates.
All Recycling Centres	66,665	52,598	13,999	79%	80%	53,332	1%	-734	Manage cross border usage Charging for inert material
TOTAL	365,516	158,542	206,974	43%	52%	188,020	9%	29,478	

- 9.4. The table highlights the need for some significant increases in recycling and composting in several of the districts. There is however room to achieve this through the introduction of new and improved glass and garden waste schemes alongside a plethora of other interventions set out within this and future annual plans.
- 9.5. The 2014 compositional analysis undertaken on waste entering the Eastcroft EfW facility can help give an indication as to the potential of different interventions and new schemes. The analysis was undertaken on loads entering Eastcroft EfW from Broxtowe, Gedling and Rushcliffe Borough Councils, so assumptions have to be made for the remaining 4 districts. However, based on existing residual tonnage there is the potential to move the following amounts of dry recyclables from the residual waste into the recycling stream with the correct interventions;

Figure 11 – Potential Residual to Dry Recyclable Diversion

District	Current	Percentage of Dry	Potential Dry
	Residual	Recyclables Found in	Recyclables to be
	Tonnage	Compositional	Diverted from
		Analysis*	Residual Waste
Ashfield	29,928	7.94%	2,376
Bassetlaw	32,126	7.94%	2,551
Broxtowe	23,588	9.23%	2,177
Gedling	27,367	8.36%	2,288
Mansfield	27,551	7.94%	2,188
Newark and Sherwood	30,960	7.94%	2,458
Rushcliffe	21,455	6.24%	1,339

^{*}Where an authority has no compositional analysis undertaken (Ashfield, Bassetlaw, Mansfield and Newark & Sherwood) an average figure from the analysed districts has been used

- 9.6. Although assumptions have been made for the 4 districts that did not form part of this analysis it still highlights that there are significant amounts of dry recyclables within the residual waste stream. This further highlights the importance of campaigns such as 'Are You Bin Smart' that focus on engaging with the public to increase knowledge and change behaviour. In addition to this, the potential widening of the MRF specification could again increase the capture of dry recyclables.
- 9.7. Residual waste analysis of waste from Bassetlaw and Newark and Sherwood (the lowest performing districts) will be carried out by Veolia in 2015/16 through the two new WTS at Worksop and Newark and will be conducted on an ongoing basis.
- 9.8. The districts/boroughs of Bassetlaw, Mansfield, Newark & Sherwood and Rushcliffe do not currently have separate kerbside glass collections. By again using the compositional analysis we can see the potential impact of introducing a kerbside glass collection service in these districts or where this isn't feasible focus on encouraging even greater usage of the existing bring bank network.

Figure 12 – Potential Residual to Glass Recycling Diversion

51		5
District	Current Residual	Potential Glass to be
	Tonnage	Diverted from Residual
		Waste*
Ashfield	29,928	1,056
Bassetlaw	32,126	1,134
Broxtowe	23,588	833
Gedling	27,367	966
Mansfield	27,551	973
Newark and Sherwood	30,960	1,093
Rushcliffe	21,455	757

^{*}This is based on the average glass percentage that indicated 3.53% of residual waste was made up of collectable glass.

- 9.9. The above figures are optimistic because they assume 100% capture and do not factor in that Bassetlaw and parts of Newark and Sherwood do not have green waste collections, which would reduce the overall residual tonnage prior to applying this glass reduction calculation.
- 9.10. The well-established garden waste collection schemes of Ashfield, Broxtowe, Gedling, Mansfield and Rushcliffe collect between 4,000 and over 11,000 tonnes of garden waste per annum. Whilst it is unrealistic to think that Bassetlaw and Newark and Sherwood would collect the levels that Rushcliffe achieve they could realistically be expected to collect 4,000 tonnes plus through an affordable (for residents) collection scheme which would represent a significant chunk towards their individual district targets. There is potential to increase the usage of the other garden waste schemes, particularly Gedling's, which currently levies the highest subscription charge.

10. Challenges and Pressures

- 10.1. The challenge of achieving the ambitious recycling target of 52% by 2020 comes against a backdrop of various pressures and challenges on both a local and national level.
- 10.2. There are currently no statutory targets set by the central UK government for recycling rates and whilst there is the overarching EU Waste Framework Directive target, this lack of direct targets could be contributing to the slowing down or plateauing of recycling rates. It is therefore imperative that a suitable strategy and approach is determined in order to best encourage both individuals and district and borough councils as a whole to work towards encouraging an increase in recycling. At this stage central government is considering how to address this challenge. The County Council has expressed a preference to statutory targets for all local authorities and not just WDA because in a two-tier area such as Nottinghamshire, engagement with WCA is critical to success.
- 10.3. The economic downturn in recent years has meant that there has been a lack of financial help in order to help achieve an increase in recycling. This has meant that it has been difficult to implement schemes that require significant infrastructure or revenue streams. Whilst the economic picture has improved in the last couple of years it is unlikely that major new funding streams will be made available. Once again this means that innovative approaches need to be implemented alongside positive partnership working within the WCA.
- 10.4. National and local political changes have the potential to impact on the success of any reduce, re-use, recycle and composting plan through the setting or removal of statutory targets or increases and decreases in national and local budgets. National changes could also lead to landfill bans on certain waste types and/or an increase in Landfill Tax.
- 10.5. Population increases and movements will also impact on the success of this plan. Sizeable population increases will likely lead to an increase in overall tonnage and significant population movement into an area could lead to a fall in recycling rates as new residents in the area may not be familiar with the recycling services on offer.

11. Summary of Key Actions and Priority Areas

- 11.1. Recycling and composting performance at the WCA level needs to be equalised across the County in order to improve the overall performance at the County level. Currently Bassetlaw and Newark and Sherwood District Councils are lagging behind the others and offer the biggest potential for increases in recycling and composting.
- 11.2. The introduction of a garden waste collection in Bassetlaw and the expansion of these collections in the Newark and Sherwood District would likely have the biggest impact and looking at how these could be implemented/expanded will form one of the key priorities for 2015/16.
- 11.3. Currently only 3 of the 7 districts (Ashfield, Broxtowe and Gedling) undertake kerbside glass collections. The implementation of schemes at the remaining districts again offers significant potential to move waste out of the residual stream and into recycling (although significant is already captured through the recycling banks).
- 11.4. Expanding the specification of materials accepted at the MRF would have a significant impact on the overall recycling rate. Not only would this widen the scope of what materials can be placed in dry recycling bins but it will also help to remove some confusion around existing items and whether they can or cannot be placed in the kerbside recycling collections.

12. Review Process

- 12.1. Each year the actions set for the previous year will be reviewed, success will be judged as follows;
 - Increase in recycling rate
 - Decrease in waste arisings
 - Decrease in tonnages being sent to landfill
- 12.2. The following table summarises the actions for 2015/16;

Waste Hierarchy Element	Action	Impact
Reduce	Reduced Price Home Composting Bins	
	Recycling Centre schemes	
	LFHW Campaigns	
	Real Nappy Promotion	
	Mailing Preference Promotion	
	Investigative Work Around Reducing Waste Arisings	
	Promotion of 'Email Me'	
Preparing	Paint Re-use Scheme	
for Re-use	Furniture Re-use Scheme Promotion	
Recycle	'Are You Bin Smart' Campaign	
	MRF Promotional Materials	
	Compositional Analysis of Dry Recyclables and Residual Waste	
	MRF Materials Specification	
	Additional Residual Waste Collection in Gedling	
	Expansion of SWAC Programme and MRF Education Visits	
	Konflux Theatre Company School Engagement	
	New and Expanded Kerbside Garden Waste Collections	
	New Kerbside Glass Collections	
	District Specific Schemes	
	Carpet and Mattress Trials at Recycling Centres	
	Feasibility of Food Waste Schemes	
Recovery	New Waste Transfer Stations	
	Expanded Capacity at Eascroft EfW Facility	
	Bulky Waste Collections	