

Resource and Waste Management Strategy for Devon and Torbay

2020 - 2030

Draft for consultation



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Preface

The management of household waste in Devon and Torbay is undertaken by the 10 Local Authorities; Devon County Council, Torbay Council, East Devon District Council, Exeter City Council, Mid Devon District Council, North Devon Council, South Hams District Council, Teignbridge District Council, Torridge District Council and West Devon Borough Council.

The Local Authorities work together under the banner of the Devon Authorities Strategic Waste Committee. Over the last 28 years significant progress has been made since the early 90s when the recycling rate was 2% and recycling was carried out by the community sector.

Working together has never been more important than during the Covid Pandemic and it will continue to reap benefits that the individual councils could not achieve alone. Devon is consistently in the top 5 two tier authorities in the country in terms of recycling and the new metric of carbon impact is also showing Devon to be at the cutting edge of waste management practices. East Devon District Council has broken the 60% recycling rate barrier with 60.5% and they will share their best practices across the other already high achieving local councils. The authorities also work closely with residents to help them reduce and reuse waste, leading the way with their behavioural change and community engagement work.

Although the UK is leaving the EU at the end of 2020, European legislation will continue to influence waste policy through the Circular Economy Package. However, the Government's new Environment Bill will establish the future path for the country. With the Government's Resource and Waste Strategy for England published in 2018 and subsequent development through several consultations, there promises to be big and exciting changes in the way waste is managed.

This Strategy presents the way in which the Devon and Torbay Authorities will manage waste with and on behalf of the residents of Devon to protect the world class environment, contribute to a prosperous economy, support resilient, healthy and happy communities and reduce carbon impact with cost efficient resource management.

**Chairman, Devon Authorities Strategic Waste Committee
2020**

Summary of targets and policies

The Devon and Torbay local authorities will work together with partners and householders to:

1. Contribute to net zero carbon for Devon and Torbay by 2050 at the latest by focussing on:
 - a. Reducing, reusing and recycling more textiles, plastics, metals/Waste Electronic and Electrical Equipment, food and paper/card
 - b. Looking specifically at how to reduce the plastics in the residual waste stream
 - c. Considering options for utilising heat from the ERFs which will need to be commercially viable
 - d. Reviewing carbon capture technology as it develops further
2. Increase the use of carbon friendly fuelled vehicles for transporting waste e.g. electric, hydrogen, over the period of the Strategy
3. Develop opportunities for local reprocessing with stakeholders – by 2030
4. Follow the waste hierarchy - ongoing
5. Contribute to circular economy – ongoing
6. Reduce the waste collected per head to 416kg per year by 2030 through
 - a. Community engagement and
 - b. Operational service policies e.g. reducing residual waste collection capacity
7. Achieve a 20% reduction in food waste by 2025 from 2015 baseline
8. Increase the amount of waste reused to 2% by 2025 and 5% by 2030
9. Recycle at least 60% of household waste by 2025
10. Recycle 65% of household waste by 2035
11. All collection authorities to provide a weekly separate collection of food waste by 2022
12. Collect a consistent range of recyclable materials by 2023 in line with Government policy with the addition of a broader range by 2030
13. Continue to support increased recycling and reduced contamination with targeted communications at the local level –ongoing
14. Set up separate collections of textiles and hazardous waste from households in line with Government policy - 2025

15. Continue to support Don't let Devon go to waste/Recycle Devon - ongoing
16. Procure a residual waste analysis in 2022 and 2027
17. Continue to support the Clean Devon Partnership – ongoing
18. To work with the Government to deliver services compliant with Extended Producer Responsibility, Deposit Return Scheme and consistency legislation - 2023.

Resource and Waste Management Strategy for Devon and Torbay

1.0 Introduction

The Waste and Resources Management Strategy for Devon and Torbay was last published in May 2005 and reviewed in 2013. Since 2013, significant progress has been made in meeting the targets set in the Review.

The period of austerity from 2007 has had an impact on elements of the strategy, for example reduced budgets to achieve some objectives, reduced Central Government spending (and therefore grants) and limitations on staff resources which have had an impact on behavioural change and education work, vital in assisting the public to reduce their waste and to put the “right waste in the right place”. Covid 19 will also have had an impact on the waste management services across Devon and Torbay although the impacts will take time to manifest themselves in terms of tonnages of wastes arising and costs both in 2020 and in the future.

Nevertheless, working closely together and sharing resources both under the umbrella of the Devon Authorities Strategic Waste Committee and the Shared Savings Scheme, the Devon authorities by achieving a recycling rate of 56.6% in 2019/20 will have maintained their position near the top of the English two tier Waste Disposal Authorities' recycling league. Household waste growth is also being held at -0.3%. Torbay, a Unitary Authority, achieved a recycling rate of 40.4% with a growth rate of 0.8%.

The aim of this Strategy is to describe the way in which local authorities within Devon and Torbay will manage resources and waste (under their control) from 2020 – 2030 and to set both targets to reach and policies to manage waste.

2.0 Objectives

- To manage Devon's & Torbay's waste in a sustainable and cost efficient manner.
- To minimise the waste we create.

- To reduce the impact of resource and waste management in Devon and Torbay on climate change by implementing the waste hierarchy and tailoring operations to reduce the waste carbon footprint.
- To maximise the value of the resources we use and preserve the stock of material resources i.e. Preserve natural capital and practice resource efficiency



3.0 The Case for Action

3.1 Global

At a world level the UN Sustainable Goal 12 “Responsible consumption and production” sets the bar for a sustainable world. The Sustainable Development Goals are a call for action by all countries – poor, rich and middle-income – to promote prosperity while protecting the planet. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection. Goal 12 includes a number of targets related to resource and waste management, in particular:

12.2 By 2030, achieve the sustainable management and efficient use of natural resources

12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities

12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

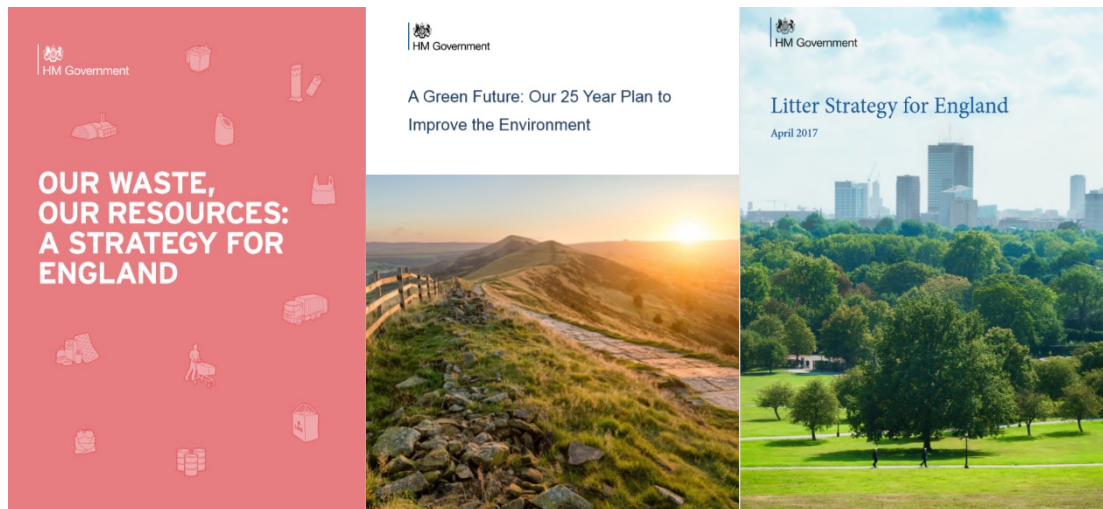
12.B Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products



3.2 National

Within the last 3 years, the UK Government has published a number of strategies which provide the basis for Resource and Waste Management across England for the next 25 years. These include:

- 25 year Environment Plan
- Government Resource and Waste Strategy for England (RWS) and consultations on Extended Producer Responsibility, Plastic tax, Consistency of recycling services, Deposit Return Scheme
- Clean Growth Strategy
- Litter Strategy
- Rural Crime Strategy
- EU Circular Economy package
- Climate Emergency Declarations



The Government RWS (<https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>) was published in November 2018, its key areas of focus are:

- 1) *Sustainable Production – i.e. Extended Producer Responsibility*
- 2) *Helping consumers take more considered actions – i.e. sustainable purchasing*
- 3) *Resource recovery and waste management – i.e. recycling consistency, food, partnerships, efficient Energy Recovery Facilities*
- 4) *Tackling waste crime*
- 5) *Cutting down on food waste*
- 6) *Global Britain: international leadership*
- 7) *Research and innovation*
- 8) *Measuring progress: data, monitoring and evaluation*

The key high level UK targets emanating from these include:

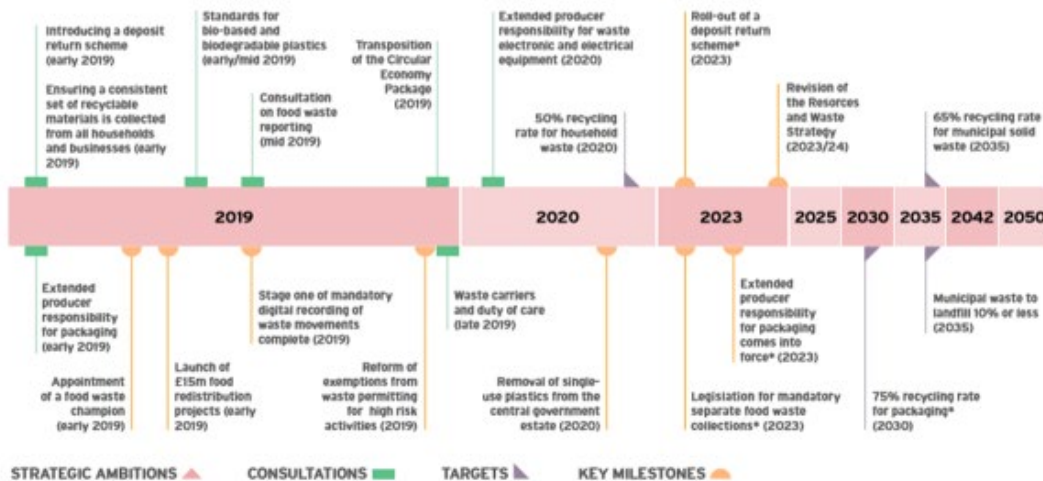
- Eliminate avoidable waste of all kinds by 2050
- 65% recycling rate by 2035
- No food waste to landfill from 2030
- To work towards all plastic packaging to be recyclable, reusable or compostable by 2025
- Eliminate avoidable plastic waste over the lifetime of the 25 year plan
- Double resource productivity by 2050
- Eliminate all biodegradable waste to landfill by 2030

The Government timetable for implementation of the Strategy is detailed below.

Our Waste, Our Resources: A Strategy for England

Key Milestones

- Double resource productivity by 2050
- Eliminate avoidable waste of all kinds by 2050
- Eliminate avoidable plastic waste over the lifetime of the plan
- Work towards eliminating food waste to landfill by 2030
- Work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025



Devon Authorities Strategic Waste Committee

Following on from the publication of the Strategy, a number of consultations were held in 2019 on:

- Extended Producer Responsibility (EPR)
- Deposit Return Scheme (DRS)
- Consistency of recycling services
- Tax on the use of plastic with less than 30% recycled plastic content

The Devon Authorities contributed to the consultations. The responses have been summarised and the Government will be consulting further on these areas in 2021. The Environment Bill which paves the way for these changes has received its second reading. The more detailed legislation will come into force in 2023. The main proposed changes which have been incorporated into the Environment Bill are:

- A consistent set of recyclable household and household-like waste including paper and card, plastic, metal, glass, food and garden waste (households only) is to be collected separately from all households, relevant non-domestic premises and businesses.
- Recyclable household and household-like waste must be collected for recycling or composting.
- Relevant non-domestic premises and businesses must present recycling and food waste separately from residual waste for collection.
- Food waste from households must be collected weekly.

- Recyclable household and household-like waste in each recyclable waste stream must be collected separately unless it is not technically or economically practicable or has no significant environmental benefit.
- If two or more recyclable household or household-like waste streams are to be collected comingled, the collector must prepare a written assessment of why it is not technically or economically practicable or has no significant environmental benefit to collect them separately.

The position of the Devon Authorities in relation to these proposals follows:-

Government Proposals under consideration	Devon Position
Weekly separate collection of food waste	This is being implemented in Devon
Free garden waste collection	There is concern about inequality (free service for those with a garden), increase in collection and processing costs, and loss of income
Statutory Guidance	Whilst noting the value of guidance, it is important to allow local decision making on waste services.
Consistency in recycling collections including a core set of dry recyclables – glass, metal, plastic, paper, card	This is being implemented in Devon. The Authorities agree it should be extended to commercial waste collections.
Frequency of residual waste collection	It is important to allow councils to determine frequency of collections
Deposit Return Scheme (DTS) – this will introduce a deposit charge for all beverage containers which will be refunded when the container is returned	There are concerns about the implications on collection authorities and whether the cost of the proposed scheme is justified. The initiative could reduce the Devon recycling rate by 0.7%.
Extended Producer Responsibility (EPR). This extends the range of materials for which producers are to be responsible for funding full net costs of treatment.	Producer responsibility is to be welcomed but the distribution of funding and assessment of costs needs to be fair.
Plastic Tax on products with <30% recycled plastic content	This is acknowledged as a useful contribution to the circular economy and should stimulate markets for plastics within the UK.

The Government is also looking at potential resource efficiency and residual waste targets and they are in early discussions with stakeholders with a view to bringing them into legislation in October 2022.

3.3 Devon and Torbay

Many of the policies and targets set in the 2013 Review have been met. Progress against these is summarised in Appendices 1 and 2.

Devon and Torbay have over 900,000 residents whose waste they are responsible for. In total Devon authorities spend circa £56 million on waste management, with Torbay spending £13 million. The Devon and Torbay Authorities need to strive for continuous improvement to assist the UK in meeting its EU targets, i.e. 50% recycling by 2020, and 65% by 2035; to comply with the waste hierarchy; and to protect the precious natural capital of Devon and Torbay on which so much relies – tourism, agricultural production, prosperity. They also need to look for efficiencies to keep within ongoing cost constraints. Strategies to reduce the amount of waste arising, increase reuse and recycling will assist in managing waste within available budgets.

Climate Emergency declarations

Devon County Council (DCC) declared a Climate Emergency in May 2019. Torbay declared theirs in June 2019. The Devon declaration is detailed here <https://www.devon.gov.uk/energyandclimatechange/devon-climate-emergency/devon-climate-declaration>. The Torbay declaration is noted here <https://www.torbay.gov.uk/council/policies/environmental/climate-change/>.

The Devon districts have also declared climate emergencies and have employed climate emergency officers. Various actions are already being implemented such as use of electric vehicles, allocation of budgets for carbon reduction activities, assessment of carbon footprints, cabinet members assigned, items added to committee meeting agendas, Photo Voltaic (PV) panels erected and target dates for net zero carbon have been set ranging from 2025 to 2040.

The way in which waste is dealt with can have a significant impact on greenhouse gas emissions with UK waste and wastewater practices contributing around 4% to the overall carbon emissions (3% of which is due to landfilling). The strategy, therefore, as well as looking at reducing tonnes of waste will also look at reducing the carbon impact of waste management to contribute to Devon and Torbay's aim of net zero carbon by 2050. One of the key achievements in Devon and Torbay in this arena is that no* kerbside collected waste goes to landfill. Landfill traditionally has the greatest negative impact on climate change due to the anaerobic biodegradation of organic waste producing carbon dioxide and methane (a greenhouse gas at least 25 times more potent than carbon dioxide). These gases can be collected for energy production as they are in more modern landfills, but the process is not particularly efficient. The strategy will seek to set a path towards carbon neutrality by 2050.

* except when the Exeter plant is closed for planned or unplanned maintenance.

4.0 Key achievements since 2013

The key achievement that the local authorities have managed in the last 6 years has been the much closer alignment of collection services. The so called “aligned” option evolved from work aimed at forming a formal waste partnership which highlighted the benefits of collecting the same materials at the same frequency across Devon and Torbay both in terms of simplicity for the

householders but also financially. Figure 1 below shows where the authorities were in 2013. In 2016 the councils collaboratively developed a proposal, the “Shared Savings Scheme” (SSS), whereby if a district authority significantly changed their collection service which had a consequential reduction in treatment costs for Devon County Council, the county council would share the savings 50:50. Five of the authorities have signed up to this arrangement. South Hams and Exeter are proposing changes in 2021/22 that will make them eligible for the SSS which will ostensibly bring all districts into line leaving only Mid Devon with a fortnightly collection of recycling. Figure 2 shows where each authority is currently.

Progress toward the ‘Aligned Option’					Version: 2013 (WRMS)
					
	Food Waste (Weekly)	Garden Waste (£/fortnightly)	Dry Recycling (Weekly)	Residue (fortnightly)	
East Devon ✓	✓	(£/O)	✓	✓	
Exeter	(X)	✓	(f)	✓	
Mid Devon	(m/f)	(m/f)	(f)	✓	
North Devon	(m/f)	(m/f)	✓	✓	
South Hams	(m/f)	(m/f)	(f)	✓	
Teignbridge	(m/f)	(m/f)	(f)	✓	
Torridge	(m/f)	(m/f)	✓	(w)	
West Devon	✓	(m/f)	✓	✓	
Torbay	✓	(X)	✓	✓	

YELLOW = aligned option / £ = charged service / m = mixed collection / f = fortnightly / w = wkly / X = N/A / O = Other

Devon Authorities Strategic Waste Committee

Figure 1: Aligned Option position 2013

Progress toward the ‘Aligned Option’					Version: September 2019
					
	Food Waste (Weekly)	Garden Waste (£/fortnightly)	Dry Recycling (Weekly)	Residue (fortnightly)	
East Devon ✓	✓	✓	✓	✓ (3)	
Exeter	(X)	✓	(f)	✓	
Mid Devon	✓	✓	(f)	✓	
North Devon ✓	✓	✓	✓	✓	
South Hams	(m/f)	(m/f)	(f)	✓	
Teignbridge ✓	✓	✓	✓	✓	
Torridge ✓	✓	✓	✓	✓	
West Devon ✓	✓	✓	✓	✓	
Torbay ✓	✓	(£/O)	✓	✓	

YELLOW = aligned option / £ = charged service / m = mixed collection / f = fortnightly / 3 = 3wkly / X = N/A / O = Other

Devon Authorities Strategic Waste Committee

Figure 2: Aligned Option position 2020

Further achievements over this period can be seen at Appendix 3. These achievements have led to:

- Reduced waste for disposal
- Increased recycling rates
- Reduced waste arisings
- Reduced costs of treatment and disposal

The graphs below describe these achievements.

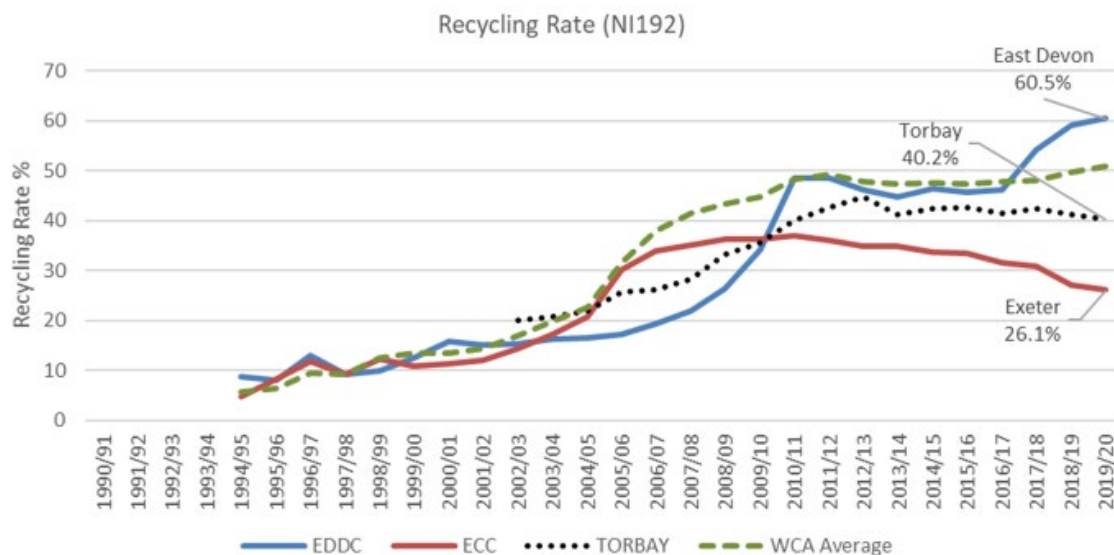


Figure 3: Highest, lowest and average WCA (district) recycling rates for Devon and Torbay 2019/20

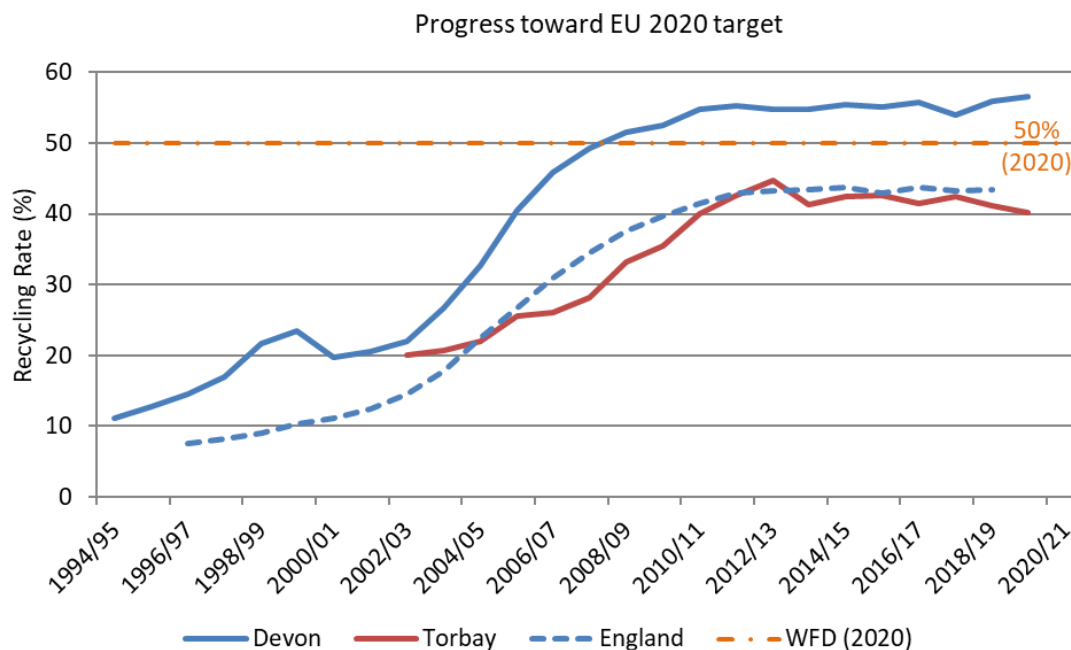


Figure 4: Progress towards EU 2020 recycling target

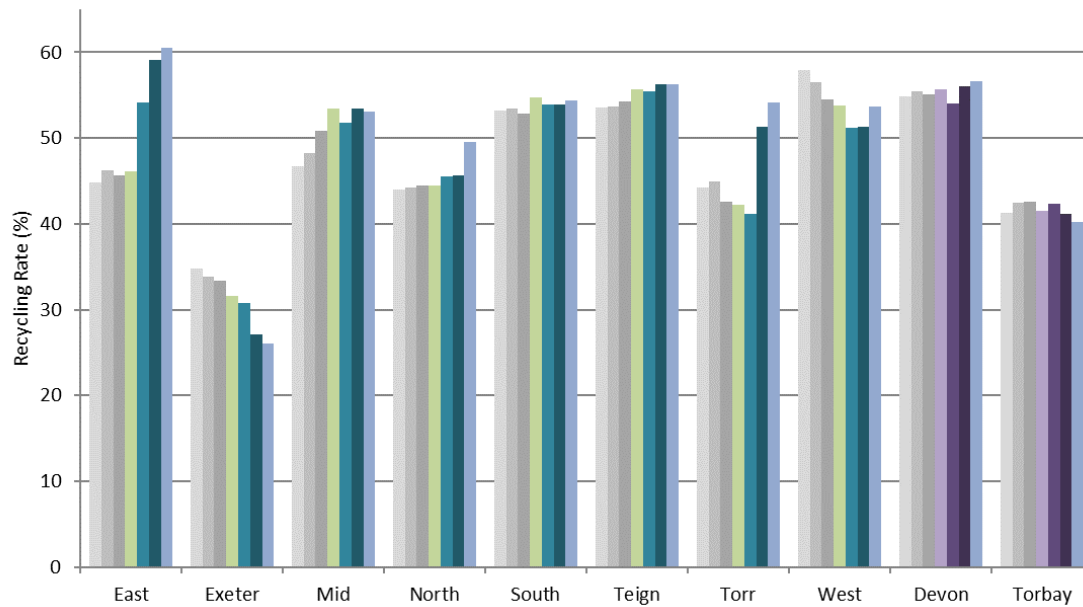


Figure 5: Authority recycling rates from 2013/14 – 2019/20

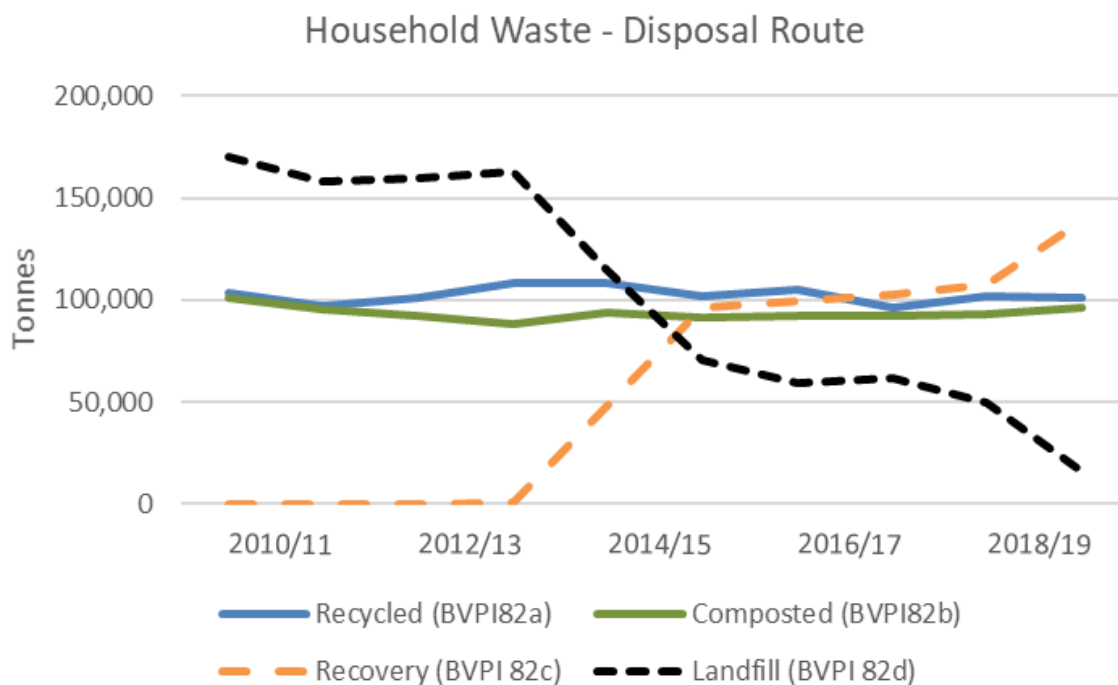


Figure 6a: Changing waste treatment methods in Devon since 2010/11

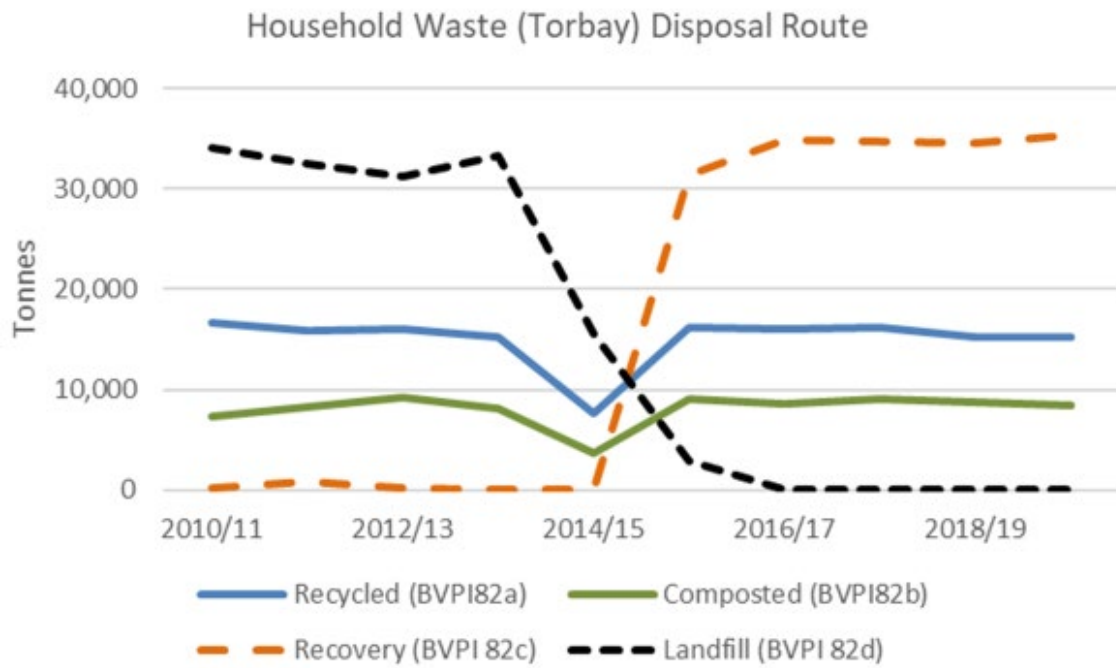


Figure 6b: Changing waste treatment methods in Torbay since 2010/11

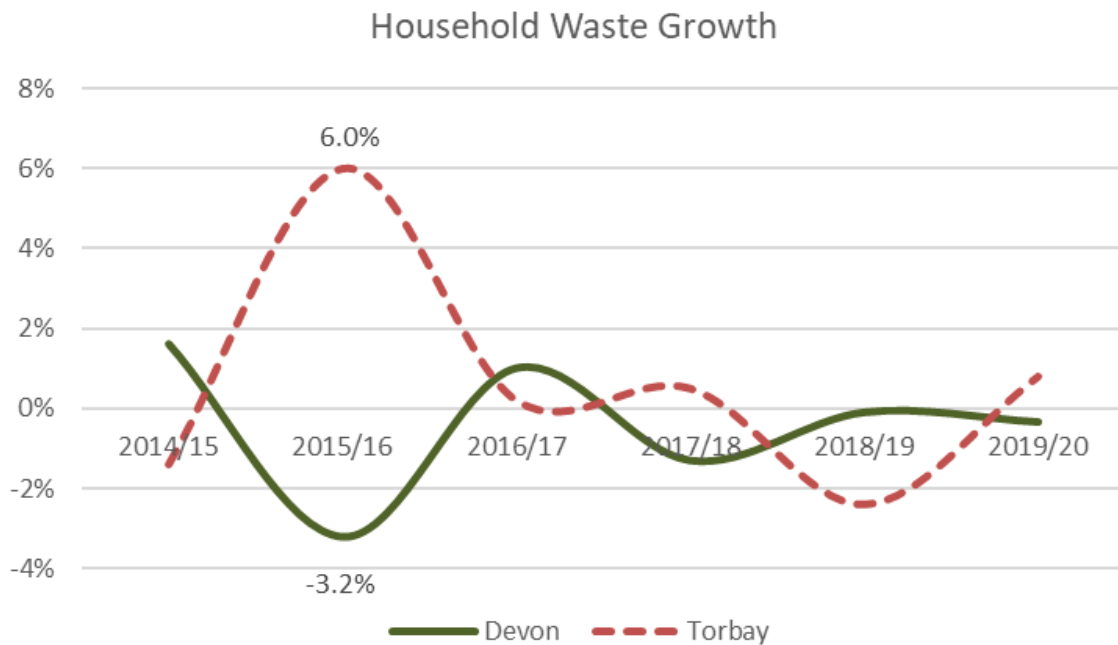


Figure 7: Waste Growth to 2019/20 (Devon and Torbay)

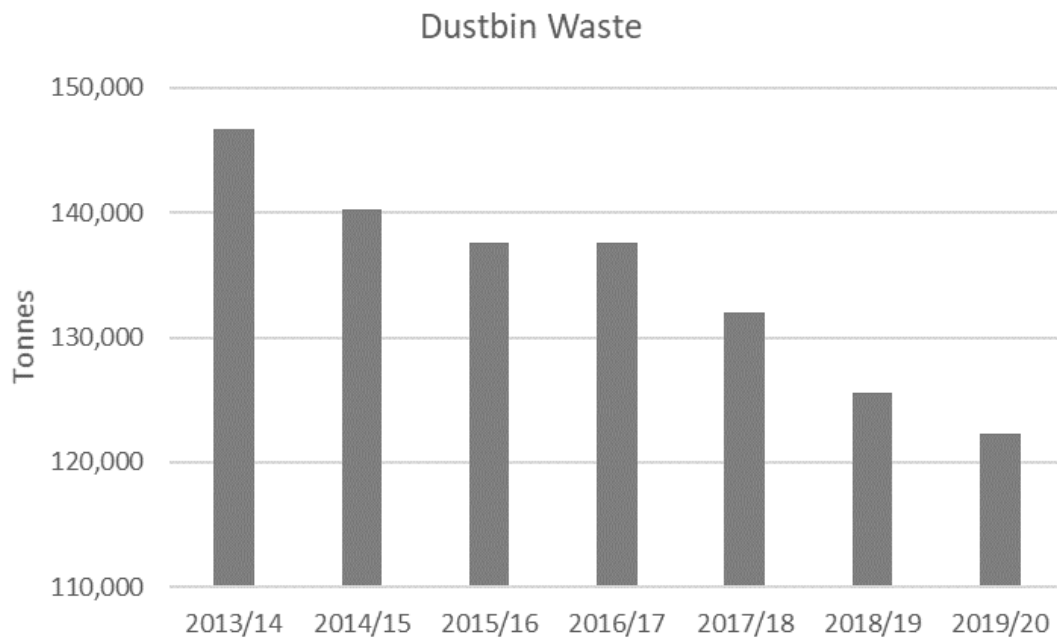


Figure 8a: Devon districts' dustbin waste to 2019/20

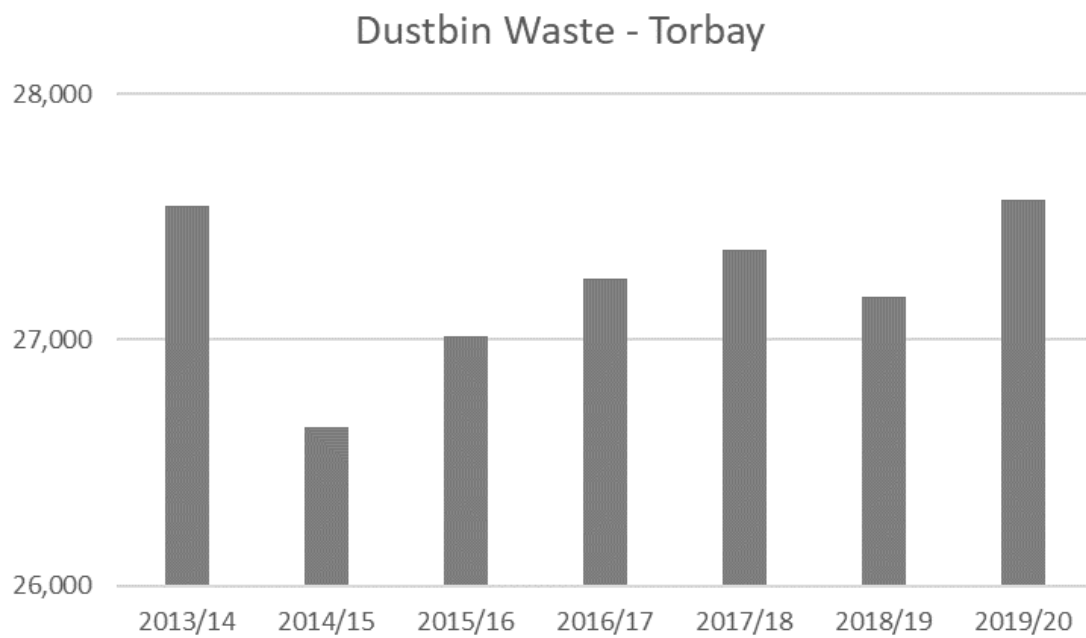


Figure 8b: Torbay dustbin waste to 2019/20

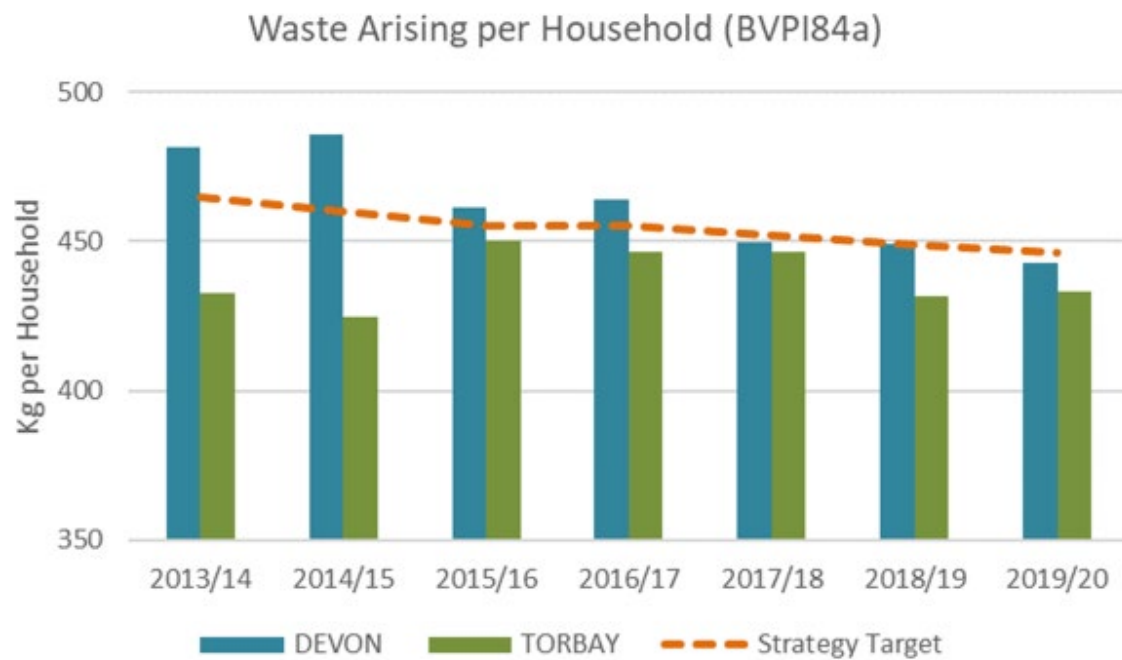


Figure 9: Waste arising per household to 2019/20, Devon and Torbay

The figures below show the percentage of Devon and Torbay's waste treated by different methods in 2019/20

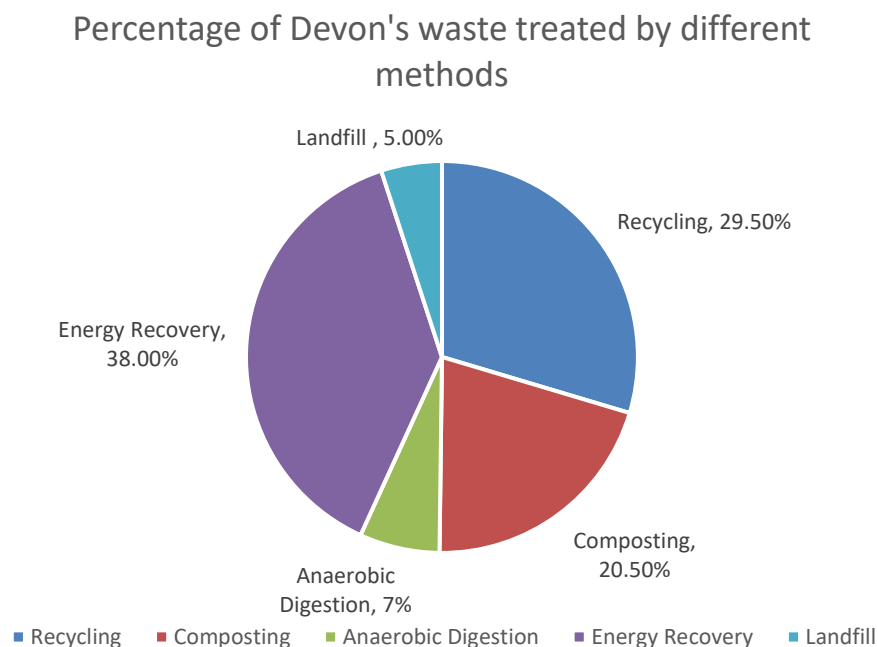


Figure 10a: The percentage of Devon's waste treated by different methods

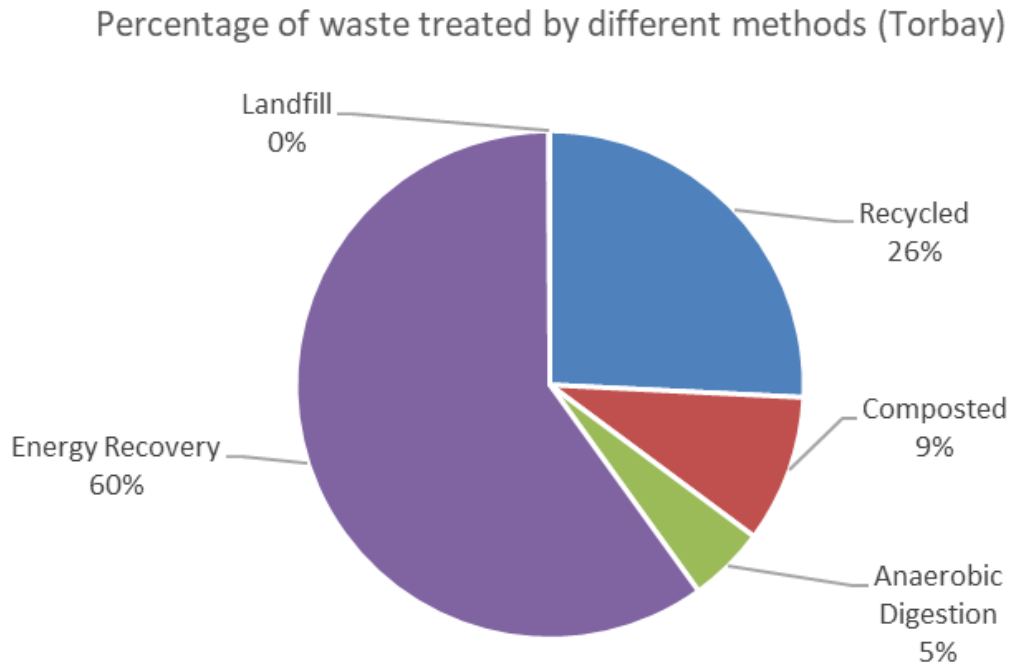


Figure 10b: The percentage of Torbay's waste treated by different methods

5. The way forward (notwithstanding the awaited outcomes of government policies)

To determine the way forward for resource and waste management in Devon and Torbay over the next 10 years there are 5 areas which need to be considered to provide a sustainable plan. These are:

- Climate Change and carbon impact
- The Circular Economy
- The Waste Hierarchy
- Resource Efficiency
- Natural Capital

5.1 Climate Change and carbon impact

The Net-zero technical report by the Committee on Climate Change (CCC) published in May 2019 (<https://www.theccc.org.uk/publication/net-zero-technical-report/>) laid out how the UK might meet zero net greenhouse gas (GHG) emissions through decarbonising the economy by 2050. It sets “core” options which will enable at least 80% reduction in GHG emissions by 2050, then “further ambition” options which will be more challenging and expensive and finally

“speculative” options which are potentially high cost, not technology ready and may be unpopular with the public.

Whilst waste management contributes less than 4% to the UK’s GHG emissions, 3% of which is landfill related, the Committee proposes a number of ways to manage waste to reduce emissions from this source and more generally:

- i) 20% reduction in avoidable food waste by 2025 (from a 2015 baseline) and potentially 50% reduction by 2050. The 2025 target is as per the Courtauld agreement (*A voluntary agreement, supported by the Devon Authorities Strategy Waste Committee, bringing together organisations across the food system to make food & drink production and consumption more sustainable. At its heart is a ten-year commitment to identify priorities, develop solutions and implement changes to cut the carbon, water and waste associated with food & drink by at least one-fifth in the 10 years*). In addition to resulting in less energy use, less food waste would reduce land requirements and therefore free up land for afforestation and energy crops
- ii) Food waste, wood waste, card, textiles and garden waste to be diverted from landfill by 2030
- iii) A recycling rate of 65% by 2035
- iv) More proactive promotion of waste avoidance
- v) Anaerobic Digestion for food waste after prevention and redistribution
- vi) Methane capture/biogas combustion/flaring/natural oxidation at landfill sites
- vii) Raising consumer awareness of the need to reduce food waste and increase recycling.

In Devon, significant inroads have already been made into reducing the GHG emissions from waste management practices. The fact that since February 2019 no kerbside collected residual waste goes to landfill is a major achievement. The residual waste now goes to energy recovery facilities. The Plymouth plant is a combined heat and power plant which gives it a good efficiency rating. The Exeter plant is less efficient, producing electricity but not making use of the heat, although options for this are being investigated.

Environmental consultants, Eunomia Research and Consulting Ltd, have produced a yearly carbon index that shows which authorities are delivering the greatest carbon benefits. Local authorities that collect more of the materials with a higher embodied carbon for recycling will show greater benefits. Account is also taken of the emissions impact of source separated and comingled collections. Devon’s index of 102 is in the top 10% of authorities, with Torbay in the good performers’ category. (See Appendix 4 for more information).

In 2019/2020 Eunomia were commissioned to look at the Devon authorities’ waste management services and analyse their carbon impact in detail and to make recommendations on how to reach carbon neutral by 2050 or sooner as well as meeting recycling targets. Details of their analysis are at Appendix 4. Their recommendations are as follows:

- A primary focus on reducing the amount of plastics in the residual waste

- To capture more carbon intensive materials – i.e. textiles, metals, plastic
- To encourage/enable greater commercial waste recycling
- To explore carbon capture

To reduce the carbon impact but also increase the recycling rate their recommendations are:

- To reduce residual waste arisings
 - By offering less frequent collections (this option depends on evolving government strategy and cost benefit considerations)
 - Smaller residual waste bins
 - No side waste (this option is only possible for those with wheeled bins, not sacks)
- To aim for higher capture rates of key materials
- To expand the range of materials collected (depending on their carbon impact/tonnage contribution)
- To carry out a site by site review of Household Waste Recycling Centres (HWRCs) to include a residual waste analysis, greater focus on textiles and confirm best practices
- To deliver consistent communications including the information on websites

The key to improving the carbon saved is to follow the waste hierarchy; putting waste prevention and reuse first, and when recycling, to improve the capture rates of the higher impact materials such as textiles, metals and plastics; and when recovering energy to minimise the amount of plastic in the residual waste.

Exeter University's Centre for Energy and the Environment was also asked to look at ways that the Energy Recovery Facilities (ERFs) could reduce their carbon impact. The conclusions from this work were:

- To reduce the amount of plastic in the residual waste
- To increase the efficiency of the plants by increasing the use of heat
- To explore carbon capture

All the scenarios above have their limitations, for example, reducing the plastic in the residual waste depends on manufacturers, public participation, pre-treatment technologies and markets; increasing the plant efficiencies depends on suitable off takers, and carbon capture is currently prohibitively expensive but may become less so in the future.

In relation to carbon impact reduction the Authorities will therefore:

- Look at how to reduce the plastics in the residual waste stream
- Consider options for utilising heat from the ERFs which will need to be commercially viable
- Review carbon capture technology as it develops further

5.2 Circular economy

The management of waste has traditionally followed a linear model. However, going forward, the key to how to manage waste is to think of waste as a resource which needs to be kept in use for as long as possible, to value products differently and to create a more robust economy in the process, reducing dependence on the import of raw materials. By assessing how we design, make, sell, re-use and recycle products we can determine how to get the maximum value from them, both in use and at the end of their life.

Under the EU Circular Economy Package (CEP) legislation member states will be expected to reach a recycling rate of 55% by 2025, 60% by 2030 and 65% by 2035. See: https://ec.europa.eu/environment/circular-economy/index_en.htm

The UK government has ratified the new proposals and will work towards the targets set. Beyond the headline recycling targets, the CEP also includes specific targets for packaging and separate requirements for bio-waste and landfill. EU member states will be expected to achieve stated recycling rates by 2030 for all packaging (70 per cent), plastic (55 per cent), wood (30 per cent), ferrous metals (80 per cent), aluminium (60 per cent), glass (75 per cent) and paper and cardboard (85 per cent).

In addition to this, member states will have until 1 January 2025 to set up separate collections of textiles waste and hazardous waste from households (kerbside batteries, WEEE, liquids), while they must ensure that bio-waste is either collected separately or recycled at source through home composting, for example, by 31 December 2023.

With regard to landfill, member states will be expected to ensure that all waste suitable for recycling or recovery shall not be sent to landfill by 2030, except for waste for which landfill is the best environmental outcome. On top of that, member states will have to ensure that by 2035, less than 10 per cent of the total amount of municipal waste generated is sent to landfill.

The CEP states that 'extended producer responsibility schemes form an essential part of efficient waste management', but that these should not impinge on the 'smooth functioning of the internal market'.

It continues: 'The general minimum requirements should reduce costs and boost performance, as well as ensure a level playing field, including for small and medium-sized enterprises and e-commerce enterprises... They should also contribute to the incorporation of end-of-life costs into product prices and provide incentives for producers, when designing their products, to take better into account recyclability, reusability, reparability and the presence of hazardous substances. Overall, those requirements should improve the governance and transparency of extended producer responsibility schemes.'

Though a lot of emphasis has been put on recycling, the package is cognisant of the need for member states to move up the waste hierarchy and recognises that

‘waste prevention is the most efficient way to improve resource efficiency and to reduce the environmental impact of waste.’

As such, the text of the package encourages reuse and new business models that reduce waste generation, stating: ‘Member states should facilitate innovative production, business and consumption models that reduce the presence of hazardous substances in materials and products, that encourage the increase of the lifespan of products and that promote reuse including through the establishment and support of re-use and repair networks, such as those run by social economy enterprises, deposit-refund and return-refill schemes and by incentivising remanufacturing, refurbishment and, where appropriate, repurposing of products as well as sharing platforms.’

A circular economy depends on product design and manufacture being undertaken with longevity as a priority. It is difficult for local authorities to influence this, but the Government is ensuring that this is becoming more mainstream. For example, under the EU Ecodesign Directive the "Right to Repair" legislation, which will be introduced in 2021, household brands will have to make their items longer-lasting and supply spare parts for up to 10 years. It means all televisions, monitors, fridges, freezers, washing machines, washer-dryers, dishwashers and lighting products sold across the EU will have to meet minimum repairability requirements aimed at extending their lifetime. Manufacturers will have to ensure that all appliances can be easily disassembled with commonly available tools. Spare parts and repair information will also have to be made available to professional repairers for a minimum number of years.

Nevertheless, local authorities can try to ensure items are reused and recycled both operationally and when trying to influence householders’ behaviour and these will be a priority for the Devon authorities.

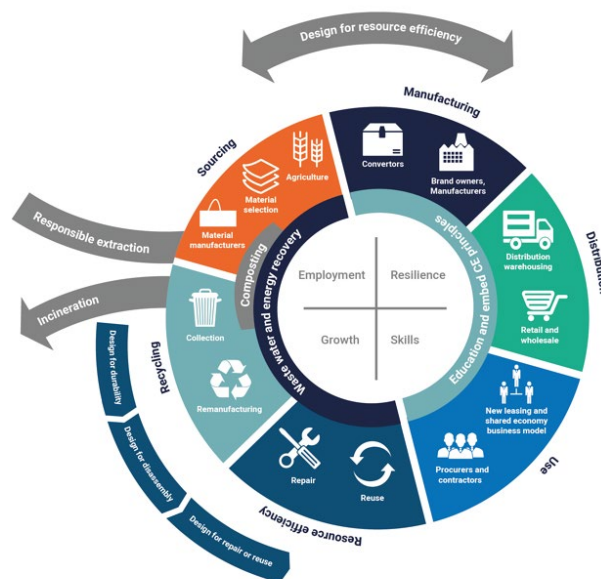


Figure 11: The Circular Economy

5.3 Waste hierarchy

In parallel with the Circular Economy is the waste hierarchy which identifies generically the best options in priority order for dealing with waste. The Devon and Torbay Local Authorities will continue to apply the waste hierarchy to the management of waste within their control going forward.



Figure 12 – The Waste Hierarchy

Defra has acknowledged the value of materials through the supply chain and the benefits from resource efficiency and a circular economy which aims to maximise use of resources through re-use, repair, remanufacture, refurbishment and re-selling of goods. There are benefits for producers through becoming more efficient and paying less for resources; the environment through reduced landfill and carbon emissions further up the supply chain; taxpayers and local authorities (LAs) through lower costs of waste collection and disposal; and society in general through protection of natural resources.

Opportunities for waste prevention occur throughout a product life-cycle. Actions include minimising waste through process design, improved product design to expand lifespans, and the encouragement of resource efficiency through e.g. producer responsibility.

After waste prevention and reuse come recycling and composting – as above, the EU Circular Economy package sets a 65% recycling rate target for 2035. Composting releases CO₂ into the atmosphere but when compost is spread to land it off sets the emissions that would have been produced had fertilizer been used. Anaerobic digestion of food waste, as a method of dealing with food waste if it has not been eaten by humans or livestock, has the least negative impact on CO₂.

5.4 Resource efficiency

Resource efficiency means using the Earth's limited resources in a sustainable manner while minimising impacts on the environment. It allows us to create more with less and to deliver greater value with less input. The aim is to use fewer resources when we produce and consume goods and create business and job opportunities from activities such as recycling, better product design, materials substitution and eco-engineering. Local authorities will influence this through practising sustainable procurement, and offering fresh incentives to assist consumers towards more resource-efficient products i.e. by promoting sustainable consumption.

5.5 Natural Capital

Natural capital refers to the environmental assets which all businesses and organisations require to operate successfully, e.g. water, soils, minerals, woodland and wildlife provide essential benefits and services such as energy, flood and climate control, health, and wellbeing, food, timber and pollination.

Devon and Torbay are blessed with an incredibly valuable natural capital on which business, tourism, agriculture and civil society depend. It is therefore important that steps are taken to ensure that waste management has minimal negative impact and even a positive impact on the environment in this context. A good example of this is food waste (notwithstanding that is a problem in itself) being anaerobically digested at Langage Farm in South Hams, with the resulting fertiliser used on the land to grow the pastureland which feeds the cows, which produce the milk for the ice cream, with slurry and any food waste going back into the system, enhancing the natural capital of the soil.

The Local Authorities will aim to preserve natural capital by practicing sustainable waste management. In particular, minimising food waste would potentially have the most significant positive impact on natural capital, this is addressed at 7.2.1.

6.0 Waste Analysis

In order to help with informing priorities for communications and operational service changes, a waste analysis of 1800 residual household bins across Devon and Torbay was carried out in October 2017. Figure 13 shows the percentages of each of the materials remaining in the residual waste. See Appendix 5 for detailed analysis of each district and Torbay. It will be important to target the reduction, reuse and recycling of materials which both reduce carbon impact and improve recycling which will have dual benefits of saving waste from being incinerated and reducing costs.

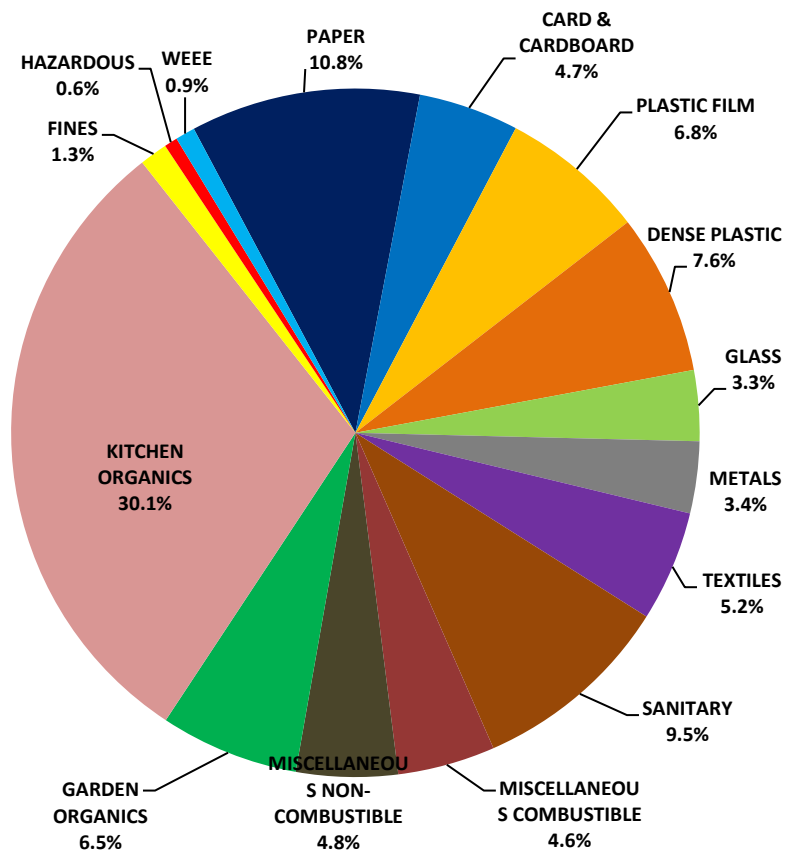


Figure 13: Average content of residual bins October 2017 (Devon)

Figure 14 below shows how much waste is already recyclable under 2017 service provision and Figure 15 shows how much is recyclable if all authorities adopted the aligned option.

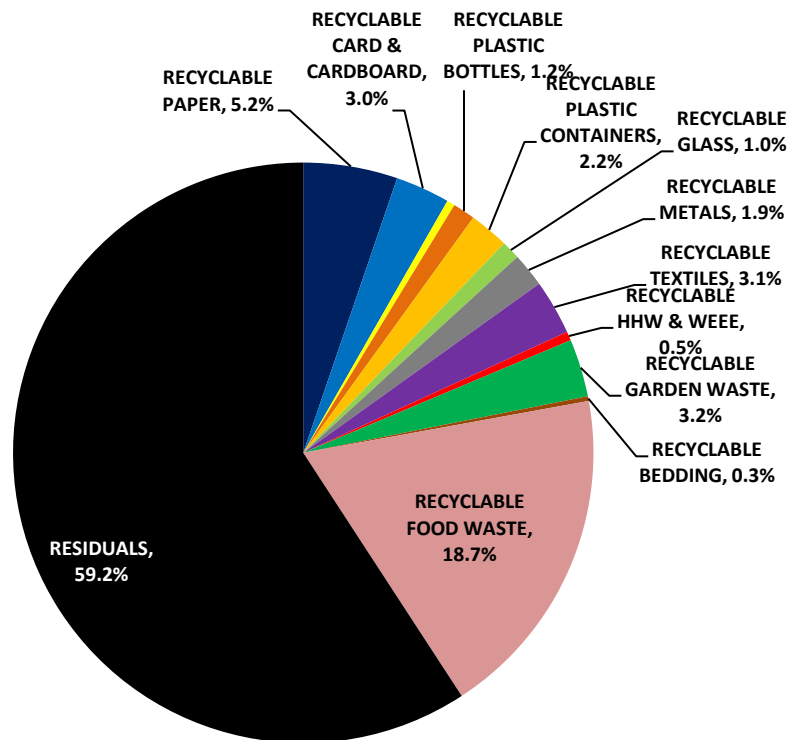


Figure 14: Percentage of residual bin contents that are potentially recyclable with current collection services (Devon)

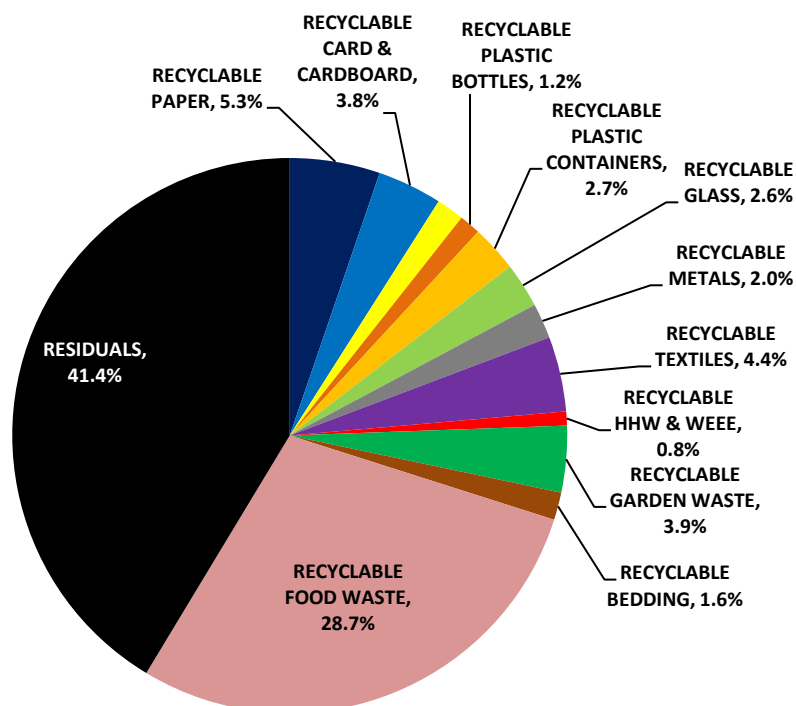


Figure 15: Percentage of residual bin contents that are potentially recyclable if all districts adopted a full range of recycling (Devon)

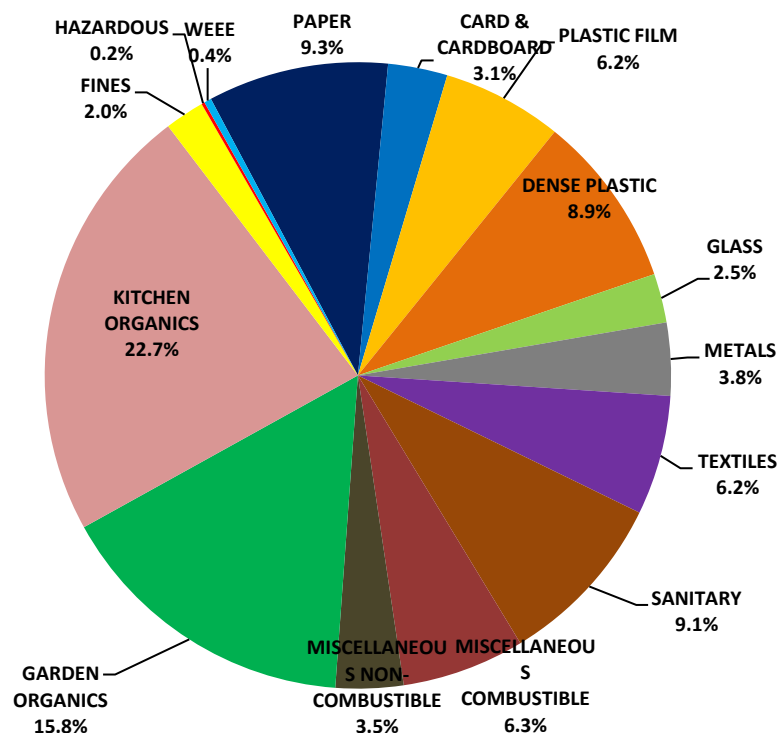


Figure 16: Average content of residual bins October 2017 (Torbay)

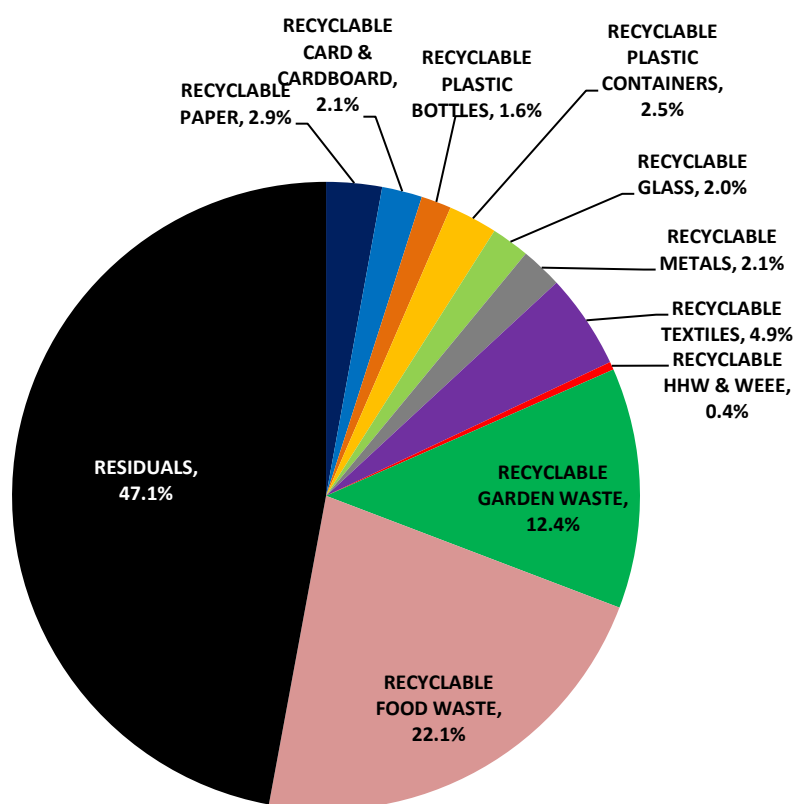


Figure 17: Percentage of residual bin contents that are potentially recyclable with current collection services (Torbay)

The above charts show:

For Devon:

Using the 2018/19 tonnage of waste in the dustbins – 125,600 tonnes, that;

- a) 40.8% more could be recycled with current collection services (51,245 tonnes)
- b) 58.6% more could be recycled with a district wide aligned option (73,600 tonnes)

The net costs of this missed recycling are approximately £3 million and £4.4 million respectively, plus the loss of income of £1 – 1.5 million. If all residents put the right waste in the right bin in the above scenarios, the recycling rates would increase to 70.4% and 76.7% respectively. Encouraging waste prevention, reuse and recycling will help to get closer to these figures, and this is where behavioural change campaigns will need to focus.

For Torbay:

Using the 2018/19 tonnage of waste in the dustbins – 27,173 tonnes, that 52.9 % more could be recycled with current collection services (14,375 tonnes)

The net costs of this missed recycling are approximately £840,000, plus the loss of income of £280,500. If all residents put the right waste in the right bin in the above scenario, the recycling rate would increase to 66%.

7.0 Waste prevention

7.1 General

Waste prevention is at the top of the waste hierarchy and is therefore the priority for this strategy. Preventing waste reduces consumption, carbon impact, overall environmental impact and costs. There are two main methods of achieving this, either by operational methods, such as reducing residual bin collection frequencies or by using behavioural change techniques or, most effectively, a combination of both.

The Authorities are currently contributing the Government's review of its own Waste Prevention Plan - <https://www.gov.uk/government/publications/waste-prevention-programme-for-england>.

The current Waste Prevention and Reuse Strategy for Devon and Torbay 2017-2022 will be updated to complement this document (<https://devoncc.sharepoint.com/sites/PublicDocs/Environment/Recycling/Forms/undefined>).

Behavioural change is achieved through a number of initiatives in Devon and Torbay, listed below.

- Implementing the yearly Waste Prevention and Reuse Strategy Action Plan
- Don't let Devon go to waste – campaigns and ongoing advice via the Recycle Devon brand
- Waste and Recycling Advisors contract providing a team of door-steppers
- Schools waste education
- Working with Communities – Community Action Groups (CAG) Devon
- Devon Reuse Project – see page 40

7.1.1 Don't let Devon go to waste

The Waste Prevention and Reuse Strategy provides the overarching plan for the local authorities in relation to the top end of the waste hierarchy. It identifies how the local authorities will achieve behavioural change in the population, both operationally and via communications implemented under the broad banner of Don't let Devon go to waste and more specifically the established brand of Recycle Devon.



There is a separate waste communications strategy which sets out the approach, methodology and rationale being used to engage and communicate with residents. The waste communications strategy is being reviewed to underpin and support the Resource and Waste Management Strategy for Devon 2020 – 2030 and achieve the objectives of the Waste Prevention and Reuse Strategy. It covers all forms of targeted marketing and communications, including public relations, publications, campaigns and one-to-one engagement (See Appendix 7 for key areas of focus).

An annual action plan is created which details current and future planned communications to evoke and inspire behavioural change for waste prevention, reuse, composting and to increase recycling rates. This details various campaigns and initiatives with subject matter and target audiences agreed between authorities e.g. helping 18-24 year olds take action on plastic packaging. To assist with this the demographics of the local population is taken into consideration and Waste Resources Action Plan (WRAP) guidance used to determine how to communicate the message to the particular audience. The waste analysis data and carbon impact work help identify which materials to focus on.

Recycle Devon achievements 2019 – 2020

The campaign work is achieved through multi media PR campaigns, working with specialist companies. Much of the communication is carried out via social media, and the www.recycledevon.org website. Results for 2019/20 are shown below:

- 12.4% increase in visitors to Recycledevon.org (120,000 for the year)

- 8.9% increase in Facebook likes (12,800 for the year)
- 8.5% increase in Twitter followers (2,600 for the year)
- 17,722 Mailing Preference Service registrations to date to prevent junk mail
- 12 events across the county
- 3,700 pledges to Reduce, Reuse or Recycle
- 1,300 face to face interviews held to gain feedback and understanding from residents

2030 Vision for Waste Communications

Recycle Devon's vision is to become the most trusted source of information and inspiration on waste prevention, reuse, composting and recycling in Devon and beyond.

This will be achieved by the following:

- Nurture a culture of like-minded people, organisations and businesses who are proud to consider waste as a resource.
- Ensure that current and future Recycle Devon communications are accessible by all beyond that of legislative requirements.
- Adapt and accomplish communication needs for unforeseen circumstances such as Covid-19 and cultural changes.
- Eliminate confusion of choosing sustainable products and what can and cannot be recycled in each area.
- Increase one-to-one engagement by continuing the Waste & Recycling Advisor work, holding events and facilitating visits to waste sites
- Raise awareness of and engagement with Recycle Devon digital channels:
 - Increase visitors to Recycledevon.org to 200,000
 - Increase Facebook followers to 20,000
 - Increase Twitter followers 5,000
- Increase recognition of the Recycle Devon brand to 70%
- Expand the Recycle Devon brand to include Reduce, Reuse, Re-purpose and Donate.

It is proposed that the Devon Authorities will to continue to support the Don't let Devon go to waste/Recycle Devon campaign and wider communications work.



7.1.2 Waste and Recycling Advisors contract

The Devon Authorities Strategic Waste Committee have funded the Waste and Recycling Advisors contract since 2017.

The project objectives are to:

- Increase awareness around contamination
- Increased levels of home composting and reduction of food waste
- Increased capture of recyclable and compostable materials (Inc. food waste)
- Increase recycling in poor performing areas
- Decrease residual waste from households

A team of three experienced advisors work in three local authority areas each mainly making face-to-face calls to residents to assist them with waste prevention, recycling and composting activities. .

A plan of work is developed and approved each year taking into account specific local authority needs. This work has proved extremely valuable in raising residents' understanding of their recycling collections as well as improving the authorities' understanding of their residents' needs.

The infographic shows the key achievements for 2019/20. Working in partnership for this kind of work achieves economies of scale and sharing of expertise across all authorities.

It is proposed that this work should be continued, funded by the Devon Authorities Strategic Waste Committee where budgets allow.

7.1.3 Devon and Torbay Schools waste education

Educating children remains an essential part of Devon and Torbay's long-term Resource and Waste Management Strategy. The local authorities recognise that habits and attitudes towards waste are learnt at an early age and in the home. Working with schools not only educates the children but, through school community events, 'take-home' activities and "pester power", we can engage with the wider family.

The current Resource and Waste Education Strategy for Devon Schools was published in 2017 and runs to 2022 and will be reviewed in 2021/22. The strategy seeks to provide valuable support to schools and families to help equip our children for a more sustainable future. See <https://zone.recycledevon.org/our-strategy/>

A significant proportion of the Waste Education Strategy and Action Plan is delivered via a contracted Waste Education Team providing curriculum linked workshops and assemblies in school. There has been significant growth in demand over the past 3 years, particularly with the significant impact of "The Attenborough effect" and a growing awareness of issues such as plastics and Climate Change.

In a typical academic year up to 1,500 adults and more than 12,000 children are engaged in workshops, assemblies, audits, trips and training. In addition to the programme offered in school, the Waste Education Team also provide the following:

“The Zone” Website - <https://zone.recycledevon.org/> provides teachers, parents and youth groups with a wide range of online resources to help teach children how to Reduce, Reuse, Recycle and Compost more of their waste every day.

Visits to Waste Management Facilities – School visits are offered to the Energy Recovery Facilities at Exeter and Plymouth and the Exeter Recycling Centre. These have proven very popular with schools with between 20 - 25 visits been run each year.

The Sustainability Bulletin - A half termly schools sustainability bulletin is published providing information and opportunities relating to school gardening, composting, funding, and a wide range of environmental topics including waste and resources.



Looking forward

It is recognised that under increasing budget constraints, supporting schools to meet the requirements of the National Curriculum is key to encouraging them to integrate the topic of sustainable waste and resource management into their school curriculum. Workshops and resources must be of a high quality and provide schools and their pupils with a wide range of environmental education that goes beyond the traditional ‘3Rs’. A growing number of schools and parents recognise the need to equip their children with the skills and resources to adapt to an uncertain future dealing with the many and varied impacts of Climate Change. Learning to manage our limited resources and minimising waste has a clear role to play in our children’s futures. Of increased importance is learning outdoors and it is vitally important that children connect with the natural world in order to value it and develop the innate need to protect it.

The local authorities will:

- Implement and review the Resource and Waste Strategy and Action Plan for Devon schools
- Support the work of the Devon Climate Emergency Project, helping to create a resilient, net-zero carbon Devon
- Work with partners such as Eco-Schools, the Growing Devon Schools Partnership (GDSP), the Sustainable and Outdoor Learning in Devon group (SOLID) and the Local Nature Partnership (LNP) to ensure we offer a joined up approach to environmental education in Devon.
- Continue to provide curriculum linked workshops and assemblies in school to support pupils and teachers understanding of sustainable resources and waste management.
- Seek funding to increase the number of waste educators available to go into schools, providing workshops and practical support in more schools.
- Provide a wide range of resources through the “The Zone” Website
- Offer visits to Waste Management Facilities
- Update schools via the sustainability bulletin and social media
- Provide training and networking opportunities for teaching staff
- Develop work with youth groups - The Recycle Devon Scouts badge was launched in 2019 and this will be followed in 2020/21 with the launch of a Girl Guiding Recycle Devon badge. Work with the Devon Youth Parliament is also underway and will be developed further in the coming years.
- Work with local universities to measure longer term impact of the education and community engagement work
- Support schools in developing closer links with home & the wider community e.g. by supporting community events
- Work with school Senior Management Teams, staff and their contractors to reduce waste generated in the schools and to encourage reuse and recycling facilities in schools.
- The Waste Collection Authorities in Devon will provide a recycling collections service to schools in Devon and Torbay

7.1.4 Community Engagement

Devon and Torbay have a diverse and vibrant grassroots community sector and the local authorities have a long history of working in partnership and supporting community based projects

In 2016 the Community Action Groups Devon (CAG Devon) Project was established with an aim to provide a more direct form of community engagement within targeted communities and identify new and innovative ways of working to reduce waste, increase reuse, recycling and composting and, in the longer term, reduce demand for waste management services.

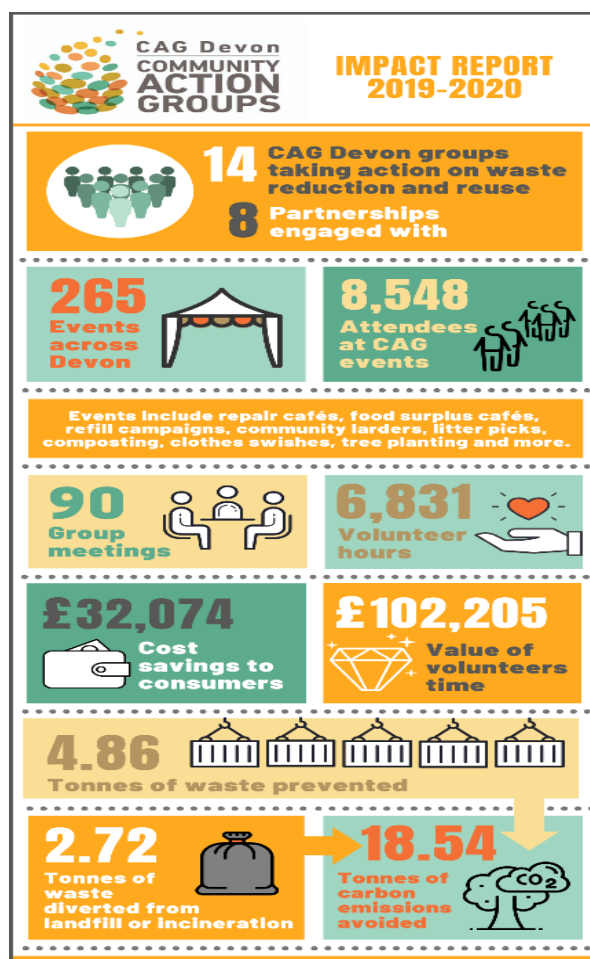


The CAG Devon Project initially only worked in Tiverton and the surrounding area to provide support to community groups, schools and individuals to organise community projects and events. The CAG Devon project enabled groups to achieve more by providing them support with fundraising, insurance, media & publicity, training & skill sharing, seed funding for new groups, monitoring tools, networking, case studies and inspiration. Due to the geographical focus of the early stages of the project, CAG Devon worked extensively with Sustainable Villages (a Transition Town Project) to expand their work into the main town of Tiverton and support new projects such as the ReRooted Food Surplus Café. With the ongoing support of the CAG Devon project, the group has developed a significant number of sub groups and broadened the number of activities that it takes action on including; give or take events, repair cafés, sewing sessions, the Refill Devon initiative, composting workshops, clothes swaps, a regular food surplus café and a community fridge. CAG Devon project has now expanded to cover all of Mid Devon and Teignbridge and is providing support to 14 groups and 7 sub groups.

Monitoring and evaluation

One of the biggest challenges that we face in working with community groups is gathering data and measuring their impact. Many groups are very keen to take action on a local level but are less interested in recording and reporting. For this reason, a key part of the CAG Devon Project is to encourage groups to monitor and measure the impact of their work. An online tool (Resource CIT) helps groups:

- Calculate and visualise the environmental and economic impacts of projects
- Indicate social value of activities through measuring volunteer time and consumer cost savings
- Provide monitoring data and 'return on investment' calculations for reports and funding applications



- Help establish a regular and consistent monitoring and evaluation process for funded projects and activities

The information gathered via Resource CIT for the Devon project has been used to create an Infographic above showing that the project is making good progress working with the local communities of Mid Devon and Teignbridge. The benefits of the CAG Devon project go beyond a reduction in waste and can support communities to become more resilient and self sufficient .

To develop community engagement across Devon and Torbay the local authorities will endeavour to:

- **Expand across Devon:** The CAG Devon project is actively looking for funding to expand to the rest of Devon to support further actions by existing groups and help stimulate new groups to form.
- **Develop a strong and resilient network:** Individuals and groups benefit greatly from feeling part of and support by a network of like-minded people. The CAG Devon Project is developing 'Collaborate Groups' enabling groups to learn more from each other and form stronger community connections across Devon.
- **Measure impact and help to address wider community issues:** It is clear that group activities often identify and address community issues and priorities such as improving community cohesion, resilience, poverty, access to food and improving wellbeing and mental health. The CAG Devon Project will work with groups and partners to find ways to capture the wider benefits of the project.
- **Address the Climate Emergency:** Many of the CAG groups take action on a wide range of environmental issues and are not limited to the issues of waste and resources. They are keen to address Climate Change and find ways to help their communities adapt to an uncertain future. The Waste & Resources team will work with the Climate Emergency Team and Communities Team to ensure a joined up approach and make best use of available resources.

7.2. Specific materials

The focus will be on food waste, plastics, textiles, paper/card and metals due both to their carbon impact and their volume/weight in the residual bin.

7.2.1 Food waste

The Government stated in their 2018 25 year Environment Plan, their aim to “cut by one fifth the greenhouse gas intensity of food and drink consumed in the UK, and also per capita UK food waste by 2025.” This is in line with the EU Circular Economy package goals to be “recycling 65% of municipal waste by 2035” and the UN Sustainable Development Goal 12.3, which sets countries the goal to, “By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses”.

The Government Resource and Waste Strategy published in Dec 2018 had a considerable focus on food waste. Its aims after food waste prevention include

more effective food redistribution before it can go to waste and the appointment of a National Food Waste champion, who is in post.

The Devon waste analysis shows that the material of which there is most in the residual bins is food waste (30.1%). In Torbay this figure is 22.1%. For Devon there are 21,500 tonnes collected for anaerobic digestion (AD) and 38,000 tonnes remaining in the residual waste and for Torbay 2943 tonnes collected for AD and 6005 tonnes remaining in the residual. Given the impact that wasting food has in terms of carbon impact (including energy use and transport), land use, household budgeting and local authority costs, the local authorities will continue to target this area. The food and drink hierarchy below indicates that food waste should be prevented but after that eaten by humans or animals.

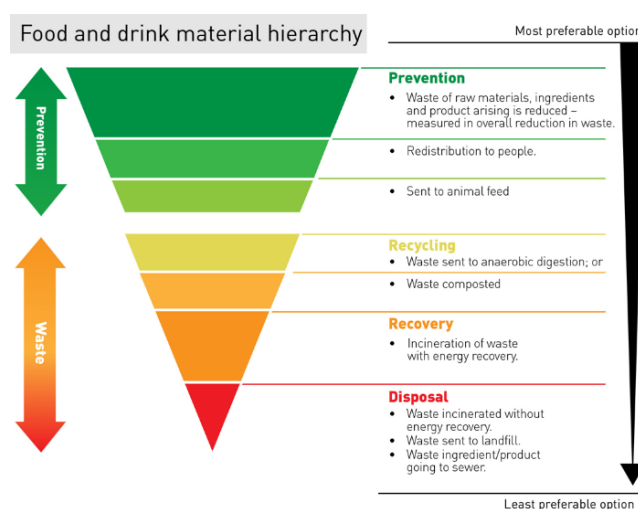


Figure 18: Food and drink hierarchy

The amounts of food wasted down the supply chain are shown in the diagram below.

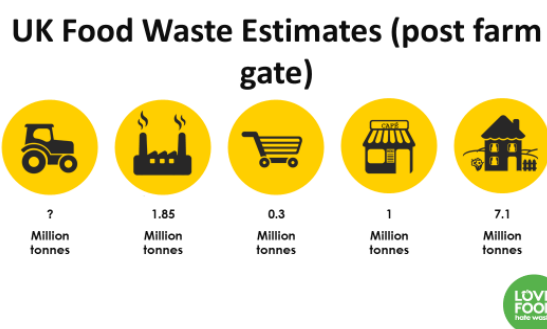


Figure 19: UK Food waste estimates

DCC has been a partner in a European project called Ecowaste4food (2017-2020) (<https://www.interregeurope.eu/ecowaste4food/>) which sought to discover innovative ways of reducing food waste in the supply chain. This has enabled research into a range of innovations both in Devon, the UK and abroad. As a consequence, a number of initiatives were proposed:

- Cooking classes across the county to help people develop cooking skills to enable them to cook food from scratch and also reduce food waste as they cook at home. These took place in Winter of 2019/20
- A proposal to provide 15 Community Fridge/Larders is the subject of a National Lottery (Community Fridges are food storage areas located in a public space. It enables food to be shared within a community, anyone can put food in, and anyone can take food out. The main aim of Community Fridges is to reduce food waste. They can also enable people facing hardship to potentially have access to fresh, nutritious food, but are open to all).
- Promotion of the Olio app (an app which allows people to pick up excess food from restaurants, shops or neighbours)
- Participation in gleaning events (collecting/picking excess produce at farms for onward distribution)

Over the period of the Strategy Devon local authorities will:

- Assist householders to reduce their food waste by 20% by 2025 from a 2015 baseline by;
 - Providing regular and consistent information to householders on how to reduce their food waste
 - Implementing campaigns via Don't let Devon go to waste
 - Working with Community Action Groups
 - Implementing the Community Fridge Project if the funding bid is successful
- Continue to participate in the Courtauld 2025 project (a WRAP/Defra led voluntary agreement for companies and others to reduce food waste in the supply chain) <https://www.wrap.org.uk/content/what-is-courtauld>

7.2.2 Plastics

The public interest in reducing the use of (single use) plastic has exploded in recent years. The local authorities have always encouraged householders to reduce their plastic use e.g. use a reusable bag instead of a single use plastic bag and will continue to do so.

Plastic is a very useful material but making single use plastic items can be a waste of valuable resources, and some plastic, often light and voluminous can end up as litter, polluting our streets, waterways and oceans. In fact 80% of marine litter originates on the land.

The Devon waste analysis shows there are 18,000 tonnes of plastic waste in the residual bins, and 8,400 tonnes were collected for recycling in 2018/19. For Torbay there are 4103 tonnes in the residual bins and 1109 tonnes collected for recycling.

From 2021 all the local authorities will collect plastic bottles, pots, tubs and trays. Plastic film is difficult to process due to contamination issues (with food for example) and lack of suitable markets. The local authorities will keep up to date

with research and technological developments in relation to plastic film and consider their future options if the situation changes.

In order to support the reduction of single use plastic the local authorities will:

- Promote Refill Devon <https://www.recycledevon.org/RefillDevon>
- Promote alternatives to single use plastic where appropriate
- Work with partners e.g. Environment Agency, North Devon Plastic Free, in plastic partnerships
- Implement internal plastic strategies

The Government is proposing to introduce a plastic tax of £200/tonne on plastic packaging manufactured or imported into the UK which contains <30% recycled plastic. This should encourage packaging companies to both reduce their use of plastic and increase their use of recycled plastic, as well as generating UK markets. They are also to increase the plastic bag charge from 5p to 10p and extend the obligation to small retailers.

7.2.3 Textiles

Textiles have a very high carbon impact in their manufacture and as such it is important that their use is reduced, and they are reused and recycled. In Devon, in 2018/19, 2100 tonnes were collected for reuse (and recycling) and around 6500 tonnes remained in the residual bins. For Torbay there are 240 tonnes collected for reuse and recycling and 1685 tonnes in the residual. The fashion industry puts an unstoppable pressure on the public for seasonal buying and cheap “fast” fashion resulting in a continual stream of clothes, often poor quality ones, being thrown away. It is estimated that 30kg/household are thrown away each year of which 15% are recycled or donated.

There are a variety of means by which textiles can be reused and recycled which may add to the confusion as to which method is best. See Table 1 below.

Method	% of donations
Charity	48%
Banks	37%
Door to door	9%
Others	4%
Instore	1%
Kerbside	1%

Table 1 – Percentage of textiles donated in different ways

The end destinations for textiles are approximately; 60% exported (to Ghana, Poland, Pakistan, Ukraine); 31% to charity shops for reuse and 5% waste. The market for textiles fluctuates widely depending on world import policies. This can make contracts difficult and they need to remain flexible.

A hierarchy of options needs to be highlighted to residents to assist them to make the right choice for their clothing.

The local authorities who see the end result will aim to influence consumerism by:

- Implementing awareness campaigns to reduce the consumption of clothes
- Promoting the love your clothes advice on Recycle Devon
<https://www.recycledevon.org/love-your-clothes>
- Supporting/promoting swishing clothes swap events
- Develop a hierarchy of options to help householders choose the best option for their clothing

7.2.4 Paper and card

Paper and card have been recycled by householders for more than 20 years and yet the waste analysis shows that there is still a very large quantity of paper and card in the residual waste (15.5% for Devon and 12.4% for Torbay). This indicates that there is still a significant amount of paper and card in use and confusion over what can be recycled.

The local authorities will

- Continue to promote the Mailing Preference Service to reduce junk mail.
- Advise on alternatives to wrapping paper
- Promote and use electronic alternatives to printed matter

7.2.5 Metal and Waste Electrical and Electronic Equipment (WEEE)

As much as 42% of the metal produced by Devon's householders at the kerbside is recycled with the remaining 4000 tonnes found in the residual waste. For Torbay the figures are 30% and 1032 tonnes. Although the metal in the residual waste is retrieved in the ERF plants for recycling it is an inefficient use of the processing capacity. The carbon impact of producing and using metals is second only to textiles and recycling metal is very efficient in offsetting carbon.

There is a significant amount of metal in electrical waste is one of the fastest growing waste streams in the world . Research has identified that:

- A total of 1.65 million tonnes of electricals are sold in the UK every year
- Of that 206,000 tonnes are new electricals, not replacing old items
- We are producing 1.45 million tonnes of electrical waste every year in the UK alone
- At least 500,000 tonnes of waste electricals were lost through being thrown away, hoarded, stolen, or illegally exported

It is also estimated that UK householders are hoarding 527 million small electrical items, the equivalent of nearly 20 items per household. The research also found that 2.8 million tonnes of CO2 emission could be saved, equivalent to taking 1.3 million cars off the road if all our old small electricals that are being thrown away

or hoarded were recycled.

Companies are progressing repair options, e.g. Apple are offering an out of warranty repair programme for iPhones which might encourage consumers not to buy new.

It is therefore important that the authorities encourage householders to reduce their demand for metal and electronic items by only buying what they need, buying durable items and having items repaired where possible.

Batteries are associated with many electrical items and they have a significant impact on the environment so the local authorities will encourage recharging options and safe disposal.

7.3 Waste Prevention Summary

To ensure an incremental decrease in waste arisings, the local authorities will continue to:

- Implement the Waste Prevention and Reuse Strategy and regularly update the Action Plan
- Aim to maintain waste growth per household at zero or below.
- Work together with the community sector, householders, business and industry to strive towards producing the minimum amount of waste with a regular review of the reduction in waste growth target.
- Work together to initiate, promote and support high profile waste minimisation behavioural change and education campaigns and work in partnership with other organisations, agencies, businesses and the community sector to achieve a lasting reduction in household waste.
- Implement the Resource and Waste Education Strategy for Devon schools
- Work with CAG Devon to encourage communities to reduce, reuse, recycle
- Ensure the Waste Collection Services, Household Waste Recycling Centres Strategy and Organic Waste Strategy complement the Waste Prevention and Reuse Strategy
- Work with partners to encourage, promote and support the re-use of goods, items and materials.

The Don't let Devon go to waste campaign work will remain flexible to customer demands but will aim to focus on:

- Providing advice and information on waste prevention
- Advising on ways to reduce food waste
- Reducing consumer demand for textiles
- Discouraging the use of single use plastic
- Offering advice on how to sign up to the Mailing Preference Service
- Encourage residents to reduce their demand for metal and electronic products
- Promoting home composting
- Encouraging reuse

In addition, the Devon Authorities intend to continue to encourage householders to reduce their waste by:

- Offering a fortnightly or less frequent collection of residual waste across the county (Government policy allowing)
- Offering smaller/optimum sized bins for residual waste
- Not allowing side waste (extra waste next to standard bin) for those with wheeled bins
- Charging for garden waste (Government policy allowing)

Behavioural change and waste prevention in particular is difficult to measure. However, the infographics above show that there are non traditional methods of measurement such as volunteer hours and website/social media statistics that could be used to indicate progress. Nevertheless, the former BVPI84a (kg of waste collected per person) is a useful measure and this will continue to be used as a target. The waste arising targets will be as follows:

	BVPI84a (kg of waste collected per head) Devon	BVPI84a (kg of waste collected per head) Torbay	BVPI84a (kg of waste collected per head) Devon and Torbay
	Actual	Actual	Target
2013/14	481.5	432.7	465
2014/15	485.9	424.7	460
2015/16	461.4	450	455
2016/17	464	446.3	455 adjusted in WP&RS 2017
2017/18	449.7	446.5	452
2018/19	448.9	431.4	449
2019/20	442.9	433.4	446
↓			...
2029/30			416

Table 2 – Waste arising/collected per head in Devon – actual and targets

The average district BVPI84a is 349kg/head excluding Exeter and varying from East Devon's 307kg/head to North Devon's 389kg/head. South Hams, North Devon, Teignbridge and Torridge are all above the average. The local authorities will continue to compare and contrast their services with best practice examples from within the county and further afield to lower the average amount of waste collected.

8. Reuse

Reusing an item rather than throwing it away can prolong its useful life, reduce the need for finite valuable resources and offer employment opportunities in repair and maintenance. It is a critical part of the circular economy and can lead to a reduction in carbon impact. There are many examples of reuse practice in the community, for example:

- eBay
- Freecycle
- Recyclethis
- Car boot sales
- Second hand and repair shops
- Charity shops
- Furniture reuse shops
- Antique shops
- Give and take and swishing (clothes swaps) events
- Repair cafes

Reuse has gained a higher profile since the review of the Strategy in 2013 and the local authorities in Devon and Torbay have encouraged, promoted and supported the reuse of goods, items and materials, and will continue to do so, by:

- Enhancing the opportunity for reuse at Household Waste Recycling Centres (HWRCs)
- Channelling Bulky Household Waste through HWRCs and/or Social Enterprises
- Providing website suggestions and advice
- Promoting reusable nappies
- Signposting residents to hire, repair, loan and reuse opportunities via a reuse directory online
- Holding and/or supporting reuse and repair workshops
- Loaning give and take or swishing kits to community groups
- Supporting repair cafes
- Specifying an element of reuse in textile, WEEE and HWRC contracts
- Holding events such as The Big Fix, Reuse Week and Upcycling Day

Barriers to greater participation in reuse include:

- Perceptions of low quality or being only suitable for those who cannot afford to buy new, sometimes perpetuated by the “look” of reuse shops
- High rents for shops, prohibitive collection costs and high overheads
- White goods going back to retailers under the producer responsibility regulations which reduces their availability to reuse groups



Nevertheless, in difficult times reuse entrepreneurial activities come into their own.

The County Council employs a Reuse Project Officer. This allows a greater number of initiatives to be achieved in the field of reuse. The officer will continue to maximise opportunities for community engagement with reuse and repair activities within each district.

In 2019/20 the Devon Authorities facilitated the reuse of 677 tonnes of waste in the community sector and 1045 tonnes of waste was reused at the HWRCs. Many reuse events are being held across Devon each year but measuring their success can be difficult. However, at The Big Fix 2019 event a number of measurements were recorded. 268 items were repaired in one day with a 73% fix rate. The event involved 6 Repair Cafes and 40 menders. The equivalent of 6,419 kg CO₂ savings were made.

In the next 10 years, the authorities will aim to increase the tonnage of reuse from 0.5% to 5% by the following means:

Promote

- Promote reuse of high carbon impact materials; i.e. textiles, metals, WEEE, wood, plastic
- Promote WEEE reuse through the HWRC contract
- Promote Refill Devon

Communicate

- Support and promote the opportunity, value and benefit of the reuse sector via Recycle Devon campaigns, website Reuse IT pages, and social media
- Consider appropriate target audiences e.g. Over 55s, 25-55 with families, 18-24s, early adapters
- Hold The Big Fix, upcycling and reuse days, attend roadshows and WIs for example

Support

- Continue to support the Community Sector's delivery of reuse / repair events and initiatives such as Give & Take events, Clothes Swaps and Repair Cafés
- Support the establishment of facilities to enable goods and materials to be reused repaired and exchanged

Collaborate

- Develop/facilitate partnerships that encourage and enable increased reuse/repair activity in local areas such as working with housing associations, community, voluntary and charity sectors and training providers

- Promote cross working of local authority departments to optimise reuse e.g. procurement, social care, bulky household waste collections
- Enable peer to peer learning – e.g. older people teaching younger people, to pass on skills, highlight the social benefits of such activities and bridge the generation divide.
- Encourage skills shares which are community led to pass on skills and provide the social benefits associated with such activities. This would bring together organisations such as men’s shed, repair cafes and library of things and particularly target the younger generation.
- Investigate the potential for Community hubs to provide a space for groups to carry out all these activities e.g. an old shop, potentially run by a coordinator to link the organisations, bring in groups and people, promote, and create resources.
- “Community teams” to work with the hard to reach parts of the population to help educate and inform them on all matters of waste.

Improve

- Increase Bulky Household Waste (BHW) reuse through the BHW Project and implement a hierarchy of reuse when advising the public through Customer Service Centres and websites
- Increase reuse at Devon’s HWRCs by
 - PAT testing a range of electrical goods and offering them for sale
 - Installing Donation stations/drop off points
 - Increasing the contract % reuse target
 - Working with the contractor to improve the quantity/quality of reuse
 - Assisting contractor’s staff to recognise sellable goods
 - Provide larger shops
 - Increase WEEE sales at all shops
 - Allow items to be taken away for repair and onward sale
 - Consider Online sales
- Torbay will consider ways in which reuse can be promoted and established at its HWRC.

Explore

- Explore the reuse theme cross cutting opportunities e.g. Schools/communities to have school uniform swapping service/day potentially run by a community organisation, supported by the local authorities, involving repair of items before they can be passed on; reuse potential in gardens by building compost bins from waste wood pallets.

Research

- Carry out market research on capacity/value of central and satellite re-use centres
- Research opportunities for textile reuse – clothing banks, pop up shops, clothing collective to pass on skills, repurpose items and provide employment and volunteer opportunities

9. Recycling

9.1 Waste Collection and Unitary Authority collections

The recycling rate for Devon in 2019/20 was 56.6%. It has recently increased after approximately 6 years at 55%. In Torbay a recycling rate of 40.2% was recorded for 2019/20. The recycling rate is affected by light-weighting of packaging, changes to Waste Collection Authorities (WCA) and Unitary Authority (UA) collections, householder education and information, technology, costs and seasonality of garden waste, to name but a few.

Super aligned collection services

Given the progress on the aligned option, with Exeter and South Hams proposing to achieve this in 2021/22 the Devon Authorities have agreed to the aspiration of further aligning on policies such as side waste, collection frequency, and bin sizes. Proposals are as follows:

- A 3 or 4 weekly frequency of residual waste collections (depending on evolving government policy)
- Optimise size of residual bin
- No side waste to be allowed where wheeled bins are in place
- Consistent collections – in addition to the 6 materials proposed by the Government from 2023 (paper, card, food, metal, glass, plastic) which will be achieved in Devon by 2021/22 the Devon authorities will seek to provide recycling collections of a greater range of materials. Foil and aerosols are already collected by all, and others, subject to costs and capacity will be considered.
- Provide clear, consistent and regular information to householders e.g. “Tops on” bottles; food waste liners; biodegradable/compostable packaging; acceptable paper.
- Continue to expand face to face advice to householders on how to improve their recycling habits and recommend how to reduce and reuse.
- Continually look at ways to improve and rationalise collection services including joint procurement
- Seek to improve the quality of recycle (particularly textiles) through messaging residents regarding presentation and modifying kerbside operations
- Research opportunities for duvet and pillow reuse/recycling
- Lobby for and increase local reprocessing capacity (which may be stimulated by the implementation of the EPR) including working with the Local Enterprise Partnership
- Seek to increase yields and decrease contamination
- All to have A-Z on websites???
- Ensure collection service regimes reduce the possibility of litter e.g. lids on recycling boxes and vehicles and contractors’ vehicles are sheeted effectively
- Work with industry partners such as Alupro to increase material recycling

- Work with Exeter University Exemplar Project researching options for dealing with plastics in the Devon and Cornwall peninsula.
- Explore routes to be directly involved in secondary commodity circular or closed loop approaches for plastics following Exeter's best practice:
 - Rigid bulky plastics: Ocean Recovery Project (Partnership of ECC & Keep Britain Tidy, supported by South West Water) includes bins, luggage, agricultural posts, stages, boards
 - Rigid bulky plastics and fishing nets: Odyssey Innovations (Partnership of ECC & Odyssey Innovations supported by Seafish and Morrisons): Kayaks (world's only 100% recycled marine kayak) other sporting goods, bins, fishing fleet containers
 - Carrier bags and other plastic films: J&A Young (Leicester) closed loop producing refuse sacks used again and again.
- Find a common regional approach to handling all Devon local authority plastics sales that minimises contractor involvement (financially), maximises income amongst authorities and finds UK based innovative solutions for product development.
- Work with new partners to turn pots, tubs and trays into UK based closed loop industrial products starting here in the South West.

Government Policy Drivers

The main recycling target to be met is the EU Circular Economy Package target of 65% by 2035 (and 60% by 2030). This includes household like waste – i.e. Local Authority Collected Waste and commercial waste. Legally, this is for the UK to achieve, not for individual authorities.

The Extended Producer Responsibility (EPR) and the Deposit Return Scheme (DRS) legislation will have a significant impact on plastic, metal and glass beverage container recycling. Overall, the aim of the legislation is to increase recycling.

EPR is an environmental policy approach through which a producer's responsibility for a product is extended to the post-use stage. This incentivises producers to design their products to make it easier for them to be re-used, dismantled and/ or recycled at end of life. The Government considers EPR to be a crucial tool in moving waste up the hierarchy and stimulating growth in the secondary materials markets. There are currently UK-wide producer responsibility schemes in place for:

- Packaging waste;
- End-of-life vehicles (ELVs);
- Batteries and accumulators;
- Waste Electrical and Electronic Equipment (WEEE)

The Government is reviewing and consulting on EPR and product standards for five new waste streams by 2025, two of which are planned to be completed by the end of 2022.

These are:

- Textiles (including all clothing, as well as other household and commercial textiles, such as bedlinens);
- Bulky waste (including mattresses, furniture, and carpets);
- Certain materials in the construction and demolition sector;
- Vehicle tyres (including tyres from cars, motorcycles, commercial and goods vehicles, and heavy machinery); and
- Fishing gear.

The EPR extends the range of materials for which producers are to be responsible for funding full net costs of treatment.

The DRS will introduce a deposit charge for all beverage containers which will be refunded when the container is returned. This will be achieved by district recycling but also via Reverse Vending Machines and at retailers. The Scottish Government estimates that the scheme will result in 6% less packaging in the residual waste and a 10% reduction in the district recycling collection tonnage.

This combined impact of the EPR and DRS could potentially reduce Devon's recycling rate by 0.7%. The EPR should though result in more recycling overall with the net costs (of recycling, residual waste and litter) paid for by the packaging industry. However, it is impossible to tell at present how this will impact on district recycling rates. Further consultation by the Government will be held in 2021.

Nevertheless, the following targets are proposed:

Year	Recycling rate target
2019/20	56.6% (actual)
2020/21	57%
2025/26	60%
2030/31	63%
2035/36	65%

Table 3 – Recycling targets

For Devon to reach the 2035 65% target for municipal waste (including business waste) an extra 38,000 or so tonnes more recycling will be required at 0% growth. 204,000 tonnes are currently recycled. For Torbay an extra 17,000 tonnes would be required with 27,000 tonnes currently recycled.

9.2 Household Waste Recycling Centres (HWRCs)

The recycling rate includes both districts' collected waste and the HWRC waste. The county council manages 19 HWRC sites via contractor Suez, with one site provided and managed by Devon Waste Management. The average recycling rate at these sites is 74% which rises to 86% when including recovery. A full range of items are recycled and some put aside for reuse in the on site shops. The contract has performance targets and a shared profit/loss scheme. Carpets and mattresses

are not currently recycled due to technological, scale and cost issues, but this may be possible in the future.

There is a separate Devon County Council HWRC strategy, the vision for which is to provide a network of modern, safe, attractive sites which are convenient to use and designed to maximise the recycling and recovery of the material brought in.

Previous improvement strategies have seen several new HWRCs being developed, including the award-winning Ivybridge and Pinhoe (Exeter) facilities and others at Sidmouth and Bideford.

However, there are still several older HWRC sites across Devon that are no longer fit for purpose and not suited to modern demands, leading to health and safety concerns and increasingly higher levels of customer dissatisfaction. The main factors being: -

- Sites having to temporarily close (either in whole or part) to allow the accumulated waste to be safely loaded and transported off site, leading to long and inconvenient delays for the Public.
- Vehicles regularly queuing (particularly in a dangerous manner on the Public Highway) to access sites either during peak times or when a container is being replaced.
- Small sites leading to restricted layouts, which makes recycling inconvenient (and/or limits the amount of materials that can be recycled).
- Access issues – particularly Health & Safety (H&S) concerns with sites in which steps have to be climbed to deposit waste into containers by an ageing and/or vulnerable public
- Pedestrian conflict with vehicles leading to H&S concerns.
- Increased public demand, due to population and housing growth; leading to significant site congestion especially at peak times.

To address these issues a programme of site replacements is proposed which will take 10-20 years to deliver. This programme will be subject to the necessary funding being in place. All new sites would need to be 'split-level' in which the public deposit waste from a higher level into containers placed in a dedicated lower level service yard. This enables waste to be removed from sites without having to close the facility temporarily; significantly improves safety; eliminates the need for the public to climb steps and makes recycling far easier/more convenient/more accessible for the public.

New sites are proposed for the following areas but they will be subject to funding being available:

- Tiverton/Cullompton/Willand
- Tavistock
- Honiton
- Kingsbridge/Totnes/Dartmouth
- Newton Abbot
- Barnstaple

In addition, in order to improve recycling and reuse rates at HWRCs the county council will:

- Regularly review its policies including new materials that could potentially be recycled
- Improve the reuse facilities and offers including re-use of Waste Electrical and Electronic Equipment (WEEE).



Figure 20: Household Waste Recycling Centres in Devon and Torbay

19 of the 20 sites have reuse shops on site. Improvements to increase reuse at HWRCs are covered under Reuse (page 37).

Torbay has one HWRC, in Paignton. The recycling rate for the site in 2019/20 was 69.4%. Torbay Council will continue to explore ways to increase the amount of waste brought to the site, that is recycled or reused.

In response to the Covid 19 pandemic, a booking system has been introduced at the site, allowing greater control of who visits the site and the waste that they bring. This has helped to reduce congestion at the site, making the household collection service (which also uses the same site for waste transfer) more resilient.

To align with the DCC sites, charges for non-household items including asbestos and some types of DIY waste will be introduced during 2020 and HWRC policy will be refreshed to compliment any service changes that are made to the kerbside collections of recycling and residual waste.

10. Organic waste

Organic waste comprises garden waste, food waste and leaf sweepings. The figure below shows where/how the organic waste in Devon was treated in 2019/20.

- Separately collected food waste went to Anaerobic Digestion (20%)
- Separately collected garden waste from HWRCs and kerbside collections went to open windrow composting (44%)
- Mixed garden and food waste went to In Vessel Composting (28%)
- Leaf sweepings were composted (7%)
- Community composting was composted on site (1%)

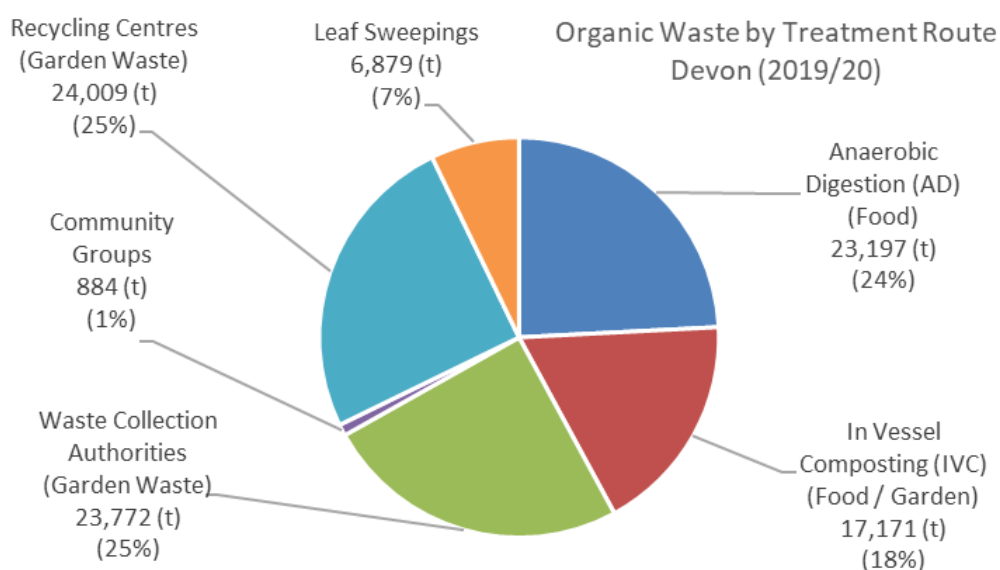


Figure 21a: Organic waste treatment for Devon

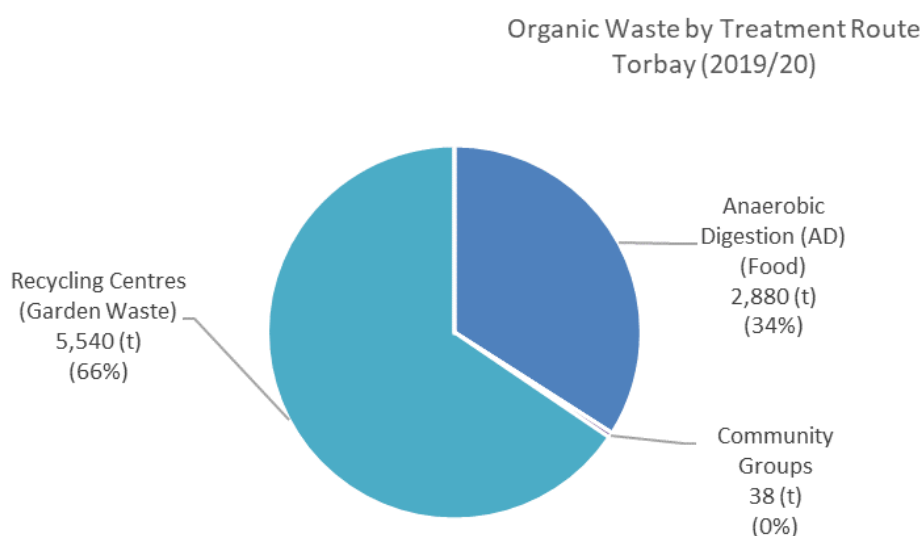


Figure 21b: Organic waste treatment for Torbay

10.1 Food waste

Once as much food waste as possible has been prevented or redistributed the remainder will be collected for Anaerobic Digestion.

From 2022 all districts will collect food waste separately and weekly for processing at Anaerobic Digestion (AD) plants. The County Council has two contracts for food waste, one with Andigestion at Holsworthy, Cannington and Langage and one with Willand Biogas. . For food waste generated in Torbay there is a contract with Andigestion at Holsworthy.

Anaerobic Digestion (AD) is the process by which organic matter such as food waste is broken down to produce biogas and biofertiliser. This process happens in the absence of oxygen in a sealed tank called an anaerobic digester.

AD is recognised as the best method for treating food waste. The biogas naturally created in the sealed tanks can be directed to the gas grid or used as a fuel in a CHP (combined heat and power) unit to generate renewable energy i.e. electricity and heat. What's left from the process is a nutrient rich biofertiliser which is pasteurised to kill any pathogens and then stored in large covered tanks ready to be applied on farmland in place of fossil fuel derived fertilisers. Every tonne of food waste recycled by anaerobic digestion as an alternative to landfill prevents between 0.5 and 1.0 tonne of CO₂ entering the atmosphere, one of the many benefits of anaerobic digestion. The process and output meet the Publicly Available Specification (PAS) 110.

Notwithstanding the aim to prevent as much food waste as possible, it is important that as much unavoidable food waste as possible is collected in the food waste collections, rather than it being put in the residual bin for energy recovery. Collection quantities in each district range from 1.25kg/hh/wk to 1.87kg/hh/wk. See Table 4 below. If Exeter and South Hams can yield 1.5kg/hh/week (the average of the 2 weekly residual authorities below) an additional 8-9000 tonnes could be collected, potentially increasing the recycling rate by 2 percentage points.

Authority	Kg/hh/wk
East Devon	1.87
Mid Devon	1.60
North Devon	1.25
Teignbridge	1.80
Torridge	1.59
West Devon	1.38
Torbay	0.82

Table 4: Yields of food waste in Devon and Torbay (2019/20)

There are a number of barriers to maximising the yields which need to be addressed, as follows:

- People's aversion to collect food waste separately due to the "yuk" factor
- A lack of understanding at what can be put in the food waste bin
- The issue of liners – whether to provide them, and what type to recommend

The local authorities are working to rationalise the advice on liners to say “any bag”. This will enable people to reuse plastic bread bags for example and also enables them to not have to buy bags especially. “No food waste” stickers have been provided in a number of districts to put on the residual bins to remind householders to use their food waste collection caddies. The authorities will continue to work with householders to maximise the correct use of food waste caddies after waste prevention.

10.2 Garden waste

Garden waste is collected by all districts separately from other materials, except for South Hams where until 2021 the garden waste is collected mixed with food waste. Torbay offers an ad-hoc separate collection of garden waste with an opt-in chargeable, scheduled garden waste collection proposed as a future service improvement. All districts charge for the service except for South Hams. The garden waste is composted in open windrows and used by local farmers.

The districts will continue to charge unless and until they are required to offer free collections due to the introduction of legislation. The Government is still considering this.

Garden waste is also collected at Household Waste Recycling Centres in Devon and Torbay and treated in open windrows as above.

10.3 Home composting

Home composting is promoted by all the Devon and Torbay authorities. This is the most sustainable way of dealing with organic waste because the waste does not have to travel anywhere and provides a useful soil conditioner for the householder. It means that the districts and Torbay do not have to collect the waste and the Devon and Torbay do not have to treat the waste. Home composting is not possible at all properties but encouragement is given to those with gardens to buy a subsidised bin under the following scheme:

<https://getcomposting.com/>

10.4 Community composting

Devon County Council and Torbay Council pay discretionary recycling credits to community groups who compost locally collected garden waste. Credits are paid in line with the contracts for dealing with garden waste. Community composting is undertaken by local groups of residents whereby volunteers receive garden waste from local residents, compost it on a local site and make it available to those who want it. It is a valuable initiative but can be difficult to set up given the permitting requirements of the Environment Agency in some circumstances and also planning requirements of the County Council and Torbay Council.

11.0 Residual waste

11.1 Energy Recovery

The majority of Devon and Torbay's residual waste goes to Energy Recovery Facilities (ERF) in Exeter, Plymouth, Avonmouth and Cornwall. No kerbside collected residual waste goes to landfill unless the plants are on maintenance shut downs. The waste that does continue to be sent to landfill is from HWRCs in the east of the county and includes items which are not accepted at the ERF plants.

The Exeter plant processes around 60,000 tonnes of waste per annum from Exeter and the surrounding area and generates electricity for around 5000 homes.

The Plymouth plant has a capacity of 245,000 tonnes of which 180,000 tonnes are allocated for Torbay, Plymouth, West Devon, South Hams and Teignbridge with the remaining capacity for commercial waste. It produces 26MW of electricity, 23MW net and 18MW for export when running as a Combined Heat and Power plant. This gives it an efficiency rating of 48.4% - one of the best plants in the country. The heat and electricity are exported to HM Naval Base, Devonport.

40,000 tonnes of residual waste from North Devon and Torridge is contracted to Suez for treatment in their Avonmouth or Cornwall Plants.

The contracts for the ERFs are 30 years from 2014 (Exeter) and 25 years from 2015 (Plymouth) respectively. Hence for the period of this strategy these contracts will continue. Given the lead in time for large waste management facilities, towards the end of the strategy period consideration will need to be given as to what to do with the residual waste from 2040. Technologies will have moved on by then and there will be less residual waste to deal with so these factors will influence future choices.

11.2 New Technology

Over the coming years with the advent of Climate Emergencies being declared, there is likely to be an escalation of break throughs in research looking at different ways to deal with waste. For example, the production of hydrogen fuel from non recyclable plastic. The local authorities will consider opportunities which may arise for more sustainable use of once "waste" materials.



Figure 22: Locations of residual waste facilities in Devon



Figure 23: Exeter Energy Recovery Facility



Figure 24: Plymouth Energy Recovery Facility

11.3 Landfill (active)

Small quantities of waste unsuitable for ERF are currently landfilled at sites in Torridge and Teignbridge. In addition, residual waste that is normally treated at the Exeter ERF is currently sent to landfill when the plant is down for maintenance. These landfill sites are managed by private companies, Devon

Waste Management Ltd, and Viridor respectively. They are both likely to be closing within the period covered by this strategy and hence there may be a need to send waste out of county for landfill unless further void capacity is developed within Devon.

11.4 Landfill (redundant)

Devon has an historic legacy of sending residual waste to landfill and has some degree of responsibility for 58 closed sites across the county. A small number of these are still permitted and are regulated by the Environment Agency. Environmental monitoring and maintenance are undertaken at a number of sites to minimise their impact on the local environment. Most of the closed sites have been restored to agricultural, amenity or wildlife habitats. Torbay's Claylands Cross landfill site is currently being redeveloped into commercial units. Torbay also has another 4 redundant sites that are regularly monitored.

12. Commercial waste services

The Government wants to increase the amount of household like material collected from businesses and other organisations in the municipal waste sector so that the UK can increase recycling of waste overall and achieve the challenging target to recycle 65% of municipal waste by 2035. They estimate that the commercial sector recycling rates are between 34 and 40%. This is relatively low, and so as part of the consultations on their Resource and Waste Management Strategy for England they proposed to require businesses and other organisations to segregate dry recyclable waste and food waste from other waste so that it can be collected for recycling. This was strongly supported so they have put forward duties for separate collection of recyclable waste from households, non-domestic premises and commercial and industrial premises in the Environment Bill. They will give further consideration to measures to reduce the costs of collection for small and micro firms, taking into account comments and evidence provided from the consultation.

Across Devon commercial waste services are offered by North Devon, South Hams, Mid Devon, Exeter and Torbay. Approximately 13,000 tonnes of commercial waste are collected per annum by these authorities. Commercial waste tonnage information is difficult to come by but on a pro rata basis using government figures it is estimated that there whereas there are 413,000 tonnes of household waste in Devon and Torbay there would be approximately 560,000 tonnes of commercial waste of which 186,000 tonnes would be household like waste, most of which is dealt with by private waste disposal companies.

Local authorities that run commercial waste services will work to develop the commercial waste and recycling customer base. As above, the government strategy also places emphasis on consistency of commercial waste collections and is expected to introduce a range of materials that businesses should have access to recycling services for. The same financial and legal incentives to manage waste further up the hierarchy exists for commercial waste, although to make recycling services more desirable to commercial customers, it is essential to share some of the savings with the customer.

Waste Collection Authorities ultimately take responsibility for the collection of commercial waste from businesses which are unable to find any other collection contractor. All authorities will review commercial waste collection charges in these circumstances to ensure that the true cost of collection and disposal is recovered from the charges made.

Torbay Council will also consider the range of materials that are accepted for recycling from commercial customers at the Tor Park Road site, with a view to reducing the commercial waste disposal cost as far as possible and diverting as much commercial waste as possible for recycling, without creating a burden at the weighbridge.

Investment in and development of technology for commercial waste and recycling services will provide local authorities with more intelligent data to inform service developments and to help manage customer expectations.

Across Devon, where there is a strong tourism sector, local authorities will work to identify properties used as self-catering holiday accommodation and ensure that they are using a private waste contractor for their commercial waste and that charges are made where local authority collections are used by these businesses.

There will be further Government consultations to determine the extent that businesses will have to recycle and the role that local authorities might play.

13. Litter and fly tipping

Litter

The Government's Litter Strategy for England <https://www.gov.uk/government/publications/litter-strategy-for-england> sets out their aim to clean up the country and deliver a substantial reduction in litter and littering within a generation. The Litter Strategy brings together communities, businesses, charities and schools to bring about real change by focusing on three key themes: education and awareness; improving enforcement; and better cleaning and access to bins. The Resources and Waste Strategy includes measures that will help to change attitudes about resources and help to reduce litter along the way. Such measures include ensuring producers pay the full costs for disposal or recycling of packaging they place on the market, by extending producer responsibility – including items that can be harder or costly to recycle. Another measure is a deposit return scheme to increase the recycling of single-use drinks containers.

There is a comprehensive range of legislative measures in place to combat litter and littering in England. Section 87 of the Environmental Protection Act 1990, as amended, makes it a criminal offence to “throw down, drop or otherwise deposit any item, and leave it”. The offence applies to all land in England that is open to the air, including private land and land covered by water. The key measures are listed at Appendix 6.

It is estimated that waste collection authorities in Devon spend more than £7million per year on street cleansing activities and £2million is spent in Torbay.

In the face of unprecedented levels of litter being deposited during the Covid pandemic the councils can also use the Anti-social Behaviour, Crime and Policing Act 2014 which provides local agencies (councils, local police forces and registered social housing providers) with a range of flexible powers to tackle various anti-social and nuisance behaviours. For example, Community Protection Notices (CPN) may be used to deal with particular, ongoing problems or nuisances which negatively affect the community's quality of life, by targeting those responsible. Also, Public Space Protection Orders (PSPOs) provide similar protection from nuisances in public spaces by imposing conditions on the use of that area. For example, a PSPO may be used to require dog owners to pick up their dog's faeces.

Fly Tipping

Fly-tipping is the illegal dumping of waste. It can be liquid or solid in nature and can vary in scale significantly from a single bin bag of waste to large quantities of waste dumped from trucks. Fly-tipping differs from littering in that it invariably involves the removal of waste from premises where it was produced with the deliberate aim of disposing of it unlawfully, or as a result of legitimate outlets not being available.

Local Authorities are responsible for clearing the waste from Public land only. The Local Authority may investigate incidents on private land but they have no obligation to clear the waste from private land.

The Environment Agency investigates major illegal fly-tipping incidents if they occur on public or private land. These include:

- BIG: Large illegal waste sites (greater than 20 tonnes)
- BAD: Evidence of organised tipping or criminal business practice
- NASTY: Drummed hazardous waste

The Environment Agency only clears up waste where there is an immediate risk to the environment and human health. They are not funded to clean up all illegally dumped waste on private or public land.

Across Devon and Torbay the number of fly tipping incidents is approximately 5300 a year.

The Devon authorities are acutely aware of the negative impact of litter and fly tipping on citizens, businesses, tourism and agriculture. Each council has their own responsibility under the law for dealing with litter and fly tipping, however, in the last year the benefits of having an umbrella group (the Clean Devon Partnership) collaborating to combat litter and fly tipping has been realised. There are 15 partners in addition to all the councils and these range from the Police, to the National Parks to the Federation of Small Businesses. See <https://cleandevon.org/>

Clean Devon Partnership

Clean Devon is a partnership of organisations working together to tackle litter and fly tipping across Devon. The group will share expertise and intelligence and work with local and national businesses, local and parish councils and the Devon public to reduce litter and fly tipping.

Litter and fly tipping are putting a major and growing financial burden on society. This environmental vandalism blights communities and has serious public health consequences. With the key roles that the world class environment, agriculture and tourism play in Devon and Torbay's prosperous economies it is critical that litter and fly tipping which impact seriously on these areas are tackled with an innovative, enterprising and collaborative approach.

The purpose of Clean Devon is as follows: To significantly improve our environment for wildlife, residents, businesses and visitors through a coordinated partnership to prevent, detect and deter fly tipping and litter in Devon, leading to a reduction in costs, crime, and environmental, social and economic impacts.

Objectives:

- 1) To establish a baseline position to identify and map sources of waste and litter using smart technology and digital techniques including social media
- 2) To collate and share intelligence and information
- 3) To collaborate to align and improve protocols and procedures including to develop a standard reporting method
- 4) To develop a plan to carry out a clean-up of fly tipping or litter hotspots across the county by partner agencies including the development of better ways of working and a more coordinated multi agency approach
- 5) To lead a high profile, multi-faceted series of public awareness raising campaigns
- 6) To engage with businesses
- 7) Effective enforcement and monitoring by Clean Devon partners
- 8) To lobby relevant parties to further the reach and impact of Clean Devon

In 2020 a logo has been designed, a website launched <https://cleandevelop.org/> and a Duty of Care campaign implemented. A Strategy and Business Plan are also being developed. The Devon Authorities Strategic Waste Committee has contributed funds to the partnership since 2018/19 and will continue to do so, as the budget allows, in addition to their individual streetscene budgets and disposal costs. However, in order to achieve the aims and objectives in a timely manner the Partnership needs further resources which is being addressed, in the meantime the partners will contribute in kind.



The Devon Authorities will continue to support the Clean Devon Partnership which will assist them in achieving their own responsibilities as "duty bodies".

14. Transport and proximity

The Committee on Climate Change (CCC) considers the impact of transport separately from waste treatment. The Greenhouse Gas (GHG) contribution of road transport is 23%. There are many exciting initiatives developing to reduce GHG emissions from transport including low-carbon hydrogen and battery electric technologies for HGVs, renewable biomethane sourced from manure and a gas clean-up system which transforms landfill gas into transport fuels in a process which also allows for successful capture of CO₂.

The district authorities and Torbay currently use vehicles with Euro 6 engines. Electric Refuse Collection Vehicles and kerbsiders are not yet economically viable but the authorities will consider the low carbon options on the market when their vehicle fleets need replacing. This is dependent on technologies being developed by vehicle manufacturers. It will also be incumbent on all to ensure that when services are procured from external contractors that their vehicle choices take into consideration low carbon options.

Dry recyclables from Devon are sent to other parts of the UK for recycling. For example:

- metals go to Cardiff/Cheshire
- paper and card go to Kent/Norfolk,
- plastic goes to Wales, Yorkshire, Lincolnshire, (and very occasionally to Turkey),
- glass, cartons and batteries go to Yorkshire

All materials recycling is carried out through tendered contracts hence the distances are a consequence of a global/UK market and no local reprocessing facilities in Devon. If reprocessors could be attracted to the South West transport costs and carbon impacts would be significantly reduced.

15. Data and performance

The local authorities are legally obliged to record their waste data statistics in WasteDataFlow and the data is reconciled by the County Council. Currently the data measures tonnage as the key performance indicator.

The Government is developing targets for England, currently understood to be one for resource efficiency, e.g. GDP/raw material consumption and residual waste include one for residual waste per capita. The key performance measures for Devon will continue to be:

- household waste recycling rate
- kg of collected waste per head
- kg residual waste per household
- % Local Authority Collected Waste landfilled

However, as the Devon and Torbay authorities' Climate Emergency Plans develop carbon may well become an important measure of the impact of waste management services. Related metrics could also include:

- avoided energy, generated energy, or energy consumed,
- avoided CO2 or a carbon index measurement,
- a resource efficiency measurement,
- a natural capital measurement

In addition, the impact of behavioural change interventions has traditionally been very hard to measure. Nevertheless, measures such as those below can also be evidence of effective activity and will continue to be measured where possible as community engagement work progresses.

- compliments, complaints, enquiries
- social media likes, shares, impressions
- public surveys
- feedback forms
- number of users
- volunteers and volunteer hours
- training hours
- skills shares,
- reduction in social isolation

16. Partnership – DASWC

The Devon local authorities and Torbay Council have been working in partnership together for almost 30 years. Together they procure joint contracts for materials processing, e.g. textiles, paper, glass and bulk haulage and they also look at opportunities to coordinate roles such as IT e.g. East Devon, Exeter and Teignbridge under the Strata banner and procure vehicles together. Exeter also acts as a broker for some recycle.

The work is overseen by a joint committee – the Devon Authorities Strategic Waste Committee, which has a Member representing each of the 8 district councils, the county council and Torbay Council. Some counties have Waste Partnerships which are separate entities and take a more formal approach. A considerable amount of work was undertaken several years ago to determine whether this type of approach would benefit the Devon Authorities. Whilst the approach gained support from a cluster of authorities it was not taken forward at the time. The authorities will potentially revisit this opportunity in the future to consider what benefits it may bring.

Progress against 2013 Strategy Review policies

Policy Statement	Comments/RAG status
WSPS1 This Strategy will form the framework for the management of municipal waste within the administrative area of Devon over the period to the year 2035.	With continuous change and a new Government Strategy a new Strategy will be produced for 2020-2030
WSPS2 This Strategy will be reviewed and updated at least every five years to incorporate changes in waste management legislation, best practice policy and guidance, as well as reviewing waste generation forecasts and monitoring performance against targets. The Action Plan will be reviewed annually. The Local Authorities will consider the need to support research projects locally into particular aspects of waste management.	The 2005 Strategy was reviewed in 2013. Ongoing
WSPS3 Decisions about waste management will, in broad terms, be based on the waste management hierarchy. The overall aim is to increase the proportion of waste which is managed by options towards the top of the hierarchy. However, there may be a different order of options for particular wastes streams depending on environmental, economic or other factors involved.	This has been achieved and remains a constant aim.
WSPS4 The objectives of this Strategy are:- <ol style="list-style-type: none"> 1. The reduction of growth of municipal waste that is generated and to set a target for reducing the growth rate in household waste. <ul style="list-style-type: none"> • To provide a framework to ensure the development of facilities for the collection, treatment and disposal of waste in Devon which would enable it to become as self sufficient as possible and in line with the South West Regional Waste Strategy. This would not prohibit the 	Waste growth has varied but is currently at -0.1% Residual waste is processed in Devon and Avonmouth Garden waste is processed in Devon Food waste is processed in Devon and Somerset and Oxfordshire Recycling is processed mainly in the UK

transport of waste between Devon	
<p>WSPS4 – Cont:</p> <p>and the adjacent Authorities and further afield where this would be mutually economically and environmentally beneficial.</p> <ul style="list-style-type: none"> The beneficial use of as much household waste as possible through (in order of priority) materials recycling, composting and maximising the recovery of resources and energy, i.e. follow the waste management hierarchy wherever possible. <p>4. The recycling/composting of at least 60% by 2014/15, and 65% by 2025/26.</p> <p>5. The recovery of value (including recycling and composting) from 90% of LACW by 2015 and 95% by 2020</p> <p>6. To comply with the requirements of the EU Landfill Directive, including the meeting of targets to divert biodegradable municipal waste away from landfill.</p> <ul style="list-style-type: none"> By 2013 to reduce the amount of biodegradable municipal waste landfilled to 50% of that produced in 1995. By 2020 to reduce the amount of biodegradable municipal waste landfilled to 35% of that produced in 1995. <p>7. To choose an integrated mix of waste management methods with regard to managing waste as close to its source of generation (the Proximity Principle) which represents the optimum balance of environmental and economic costs and benefits, and minimise the risks of immediate and future environmental pollution and harm to human health.</p>	<p>This is followed.</p> <p>The recycling rate in 2019/20 was 56.6%. Reasons for not meeting the target include: reduced funding for behavioural change, reduced paper due to electronic advances, reduced packaging.</p> <p>The 2015/16 recovery rate was 79%. The recovery rate is now 95% by 2020</p> <p>Achieved.</p> <p>No kerbside biodegradable waste is now landfilled.</p> <p>Achieved where possible in line with procurement regulations</p>

<p>WSPS5</p> <p>Waste collection and disposal authorities and the community sector will maximise the potential to work together in order to:-</p> <ul style="list-style-type: none"> • Increase the efficiency of the waste collection service. • Increase cost effectiveness. • Maximise the re-use or recycling of bulky household waste collected directly from the householders. • Tailor local services to local needs. <p>This will include the consideration of joint collection contracts, shared use of facilities and cross traditional boundary operations where mutual benefits would accrue. Harmonisation of collected materials and methods of collection will be researched and implemented if environmentally and economically beneficial to LAs and their customers. This process will require fully committed buy in from all authorities to ensure successful delivery.</p>	<p>The districts work hard to increase efficiencies e.g. round reviews, Incab technology As above</p> <p>A working group has been established to look into this</p> <p>Achieved.</p> <p>Joint contracts are in place for textiles, glass, paper and bulk haulage. East Devon, Exeter and Teignbridge work closely together under Strava. West Devon and South Hams have the same collection contractor. Mid Devon work with Exeter MRF. Harmonisation is progressing well.</p>
<p>WSPS6</p> <p>The Local Authorities and the Environment Agency will continue to seek partnerships with appropriate sectors of the community and waste industry in order to promote waste reduction, reuse, recycling and composting and recovery of materials and energy across Devon.</p> <p>The Local Authorities will look to the future and work more closely with the waste management industry and re-processors to secure long term partnerships and to develop local reprocessors where possible.</p>	<p>Partnerships include: SWDWP Clean Devon South West Plastic Free Communities Plastic Free North Devon DASWC</p> <p>Discussions are being held with the HotSW LEP</p>
<p>WSPS7</p> <p>A reduction in waste growth is the core of this strategy. The aim is to maintain growth per household at zero or below. Local authorities will work together with the community sector, householders, business and industry to strive towards producing the minimum amount of waste</p>	<p>Waste growth measured in kilogrammes of household waste collected per person per year has reduced from 481.5kg in 2013/14 to 444kg in 2019/20. Household waste growth is currently at -0.3%</p>

with a regular review of the reduction in waste growth target.	
WSPS7 – Cont: The Local Authorities will work together to initiate, promote and support high profile waste minimisation and education campaigns. They will work in partnership with other organisations, agencies and the community sector to achieve a lasting reduction in household waste.	The LAs have worked together under the Recycle Devon banner. They implement the various actions within the Waste education Strategy for schools and the Comms strategy and the WP&R strategy also CAG and WRA
WSPS8 Local Authorities will work together to encourage, promote and support the re-use of goods, items and materials. In conjunction with stakeholders and the community sector, a re-use strategy will be developed to:- <ul style="list-style-type: none"> • Maximise opportunities for re-use and repair. • Stimulate markets for re-use and seek new markets. • Pump prime reuse initiatives through selective discretionary payment and re-use credits. • Develop reuse indicators. • Look at ways of increasing the range of reusable items and materials including in kerbside recycling collections. • Help facilitate reuse partnerships between LAs, the community, voluntary and charity sectors. • Encourage businesses to donate their unwanted working WEEE to charity as part of driving down waste produced in Devon. LAs will support the establishment of facilities to enable goods and materials to be re-used, repaired and exchanged.	A waste prevention and reuse strategy was published in 2017. A Reuse officer has been employed since 2016. Working with the HWRC contractor Suez, sale of reuseable items is increasing Reuse credits will be terminated in 2022 having achieved their objective. The HWRC contract has a target for reuse of 0.75% A reuse target is being proposed A working group has been established and WEEE repair events have increased range of reuse items Repair cafes have been supported and events such as the Big Fix have been held and skill sharing events This has not been promoted Reuse credits have contributed in this period to the expansion of Refurnish shops
WSPS9	

<p>Each household will have access to a comprehensive network of recycling facilities including the County Council Recycling Centres and a kerbside collection of dry recyclables.</p> <p>Householders will be encouraged by education campaigns to separate their waste for recycling. The Local Authorities (who do not already) will also consider limiting the residue dustbin collection either by the size of receptacle provided or frequency of collection or</p>	<p>Achieved</p> <p>Regular campaigns are implemented under the banner of Recycle Devon</p>
<p>WSPS9 – Cont:</p> <p>both, thereby encouraging the householder to minimise the waste that they produce and maximise the amount of material that they sort out for recycling.</p> <p>The Local Authorities will strive to meet the statutory recycling and composting targets set for the following years:-</p> <ul style="list-style-type: none"> • Recycling and composting of 60% of municipal waste by 20014/15. • Recycling and composting of 60% of municipal waste by 2019/20. • Recycling and composting of 65% of municipal waste by 2025/26. <p>Achievement of these targets will depend on the best balance from the following list of considerations:-</p> <ul style="list-style-type: none"> • The existence of a sustainable market for the collected materials and the development of local markets for recycled materials and hence employment. • The likely participation in recycling schemes and the level of contribution. • The environmental impacts of the process. • The cost compared to other methods of waste management. 	<p>Districts are offering appropriate size bins. East Devon is providing a 3 weekly residual waste collection. North Devon is running a 3 weekly trial as is West Devon.</p> <p>55.4% was achieved</p> <p>56.6% was achieved. The recycling rate has stagnated due to a variety of factors</p> <p>Target to be adjusted to EU target of 65% by 2035</p>

<p>The Local Authority Planning Services will seek to ensure by means of planning guidance and conditions that new developments including highway infrastructure will incorporate appropriate space to facilitate recycling both in terms of house and garden space and highway access for waste collection vehicles.</p> <p>The Local Authorities will implement a communication strategy to ensure householders are kept informed of how, where, when and why to recycle and about other aspects of waste management.</p> <p>The LAs will lobby central government by appropriate means to guide, support and fund waste management waste prevention, reuse and education to an appropriate level.</p>	<p>Achieved</p> <p>A communications strategy was published in 2016 and the LAs meet regular to implement the yearly action plan.</p> <p>Following the publication of the Government's waste strategy some sources of funding have become available</p>
<p>WSPS10</p> <p>The Local Authorities will seek to optimise potential for appropriately sized composting facilities including AD within the controls of current legislation and policy.</p> <p>They will work with other organisations to find composting methods which produce a useful and marketable product from household, commercial and industrial wastes.</p>	<p>The AD contracts achieve this.</p> <p>The AD plants comply with PAS110 and the composting plants comply with PAS100 and the waste is co composted with commercial and industrial waste</p>
<p>WSPS11</p> <p>The Local Authorities will support increased participation in home composting by a variety of means including bin sales, promotion and development of a network of "Compost Ambassadors".</p> <p>The target will be to increase the waste composted at home to 10% of the available organic waste by 2025.</p>	<p>Home composting campaigns are regularly featured under the banner of Recycle Devon. HWRCs offer the opportunity to purchase reduced priced bins. CAG Devon promotes home composting</p> <p>Progress being made</p>
<p>WSPS12</p> <p>The Local Authorities will support the proactive development of community composting and schools composting by increasing resources to assist setting up new schemes and provide support for existing schemes.</p>	<p>DCCN support removed due to lack of accountability but community composting credits paid at contract rate from 2020. Limited support now offered on request.</p>
<p>WSPS13</p>	<p>The AD contracts achieve this.</p>

<p>The Local Authorities will seek opportunities to co-compost municipal waste with commercial and industrial waste. E.g. merchant AD plants.</p>	
<p>WSPS14</p> <p>Recovery of value from all practicable waste including energy recovery facilities will play an important role in the long term management of municipal waste in Devon.</p> <p>Appropriately sized facilities taking into account the potential reduction of residual waste from well resourced education and communication strategies which follow the proximity principle will be preferred if economically viable and sustainable.</p> <p>The Local Authorities will maintain an overview of the technologies available to determine an appropriate balance which may be appropriate for Devon.</p>	<p>Devon now has two ERF facilities in Exeter and Plymouth processing the residual waste from all districts, Torbay and Plymouth except for North Devon's and Torridge's waste which goes to Avonmouth and Cornwall.</p> <p>The Exeter plant is small and takes 60,000 tonnes. The Plymouth plant is larger taking up to 245,000 tonnes but takes waste from a wider geographical area and has capacity for commercial waste.</p> <p>This is ongoing.</p>
<p>WSPS15</p> <p>Landfill will continue to be a method of managing a small percentage of Devon's waste from 2014.</p> <p>In some parts of the County, the existing landfill capacity will be insufficient for the quantity of waste likely to be generated over the period and extensions to existing landfill sites or new capacity will be required to meet that need.</p> <p>In the long term landfill will, as part of this Strategy, be used only for those wastes which cannot be recycled, composted or recovered and the residues/rejects from these processes. The aim will be to drive down the waste arising that requires this method of disposal.</p>	<p>14.5% of Devon's waste was landfilled in 2018/19. This has reduced to 5% in 2019/20.</p> <p>Active landfill sites are privately owned. There have been a variety of applications to open and close landfill sites in Devon. Currently Heathfield operated by Viridor and Deep Moor operated by DWM are open.</p> <p>Only 5% of Devon's waste is landfilled in 2020.</p>
<p>WSPS16</p> <p>The Local Authorities will work together to contribute to the UK's obligations under the landfill directive i.e. to achieve the targets set out for the reduction of biodegradable municipal waste being sent to landfill in 2013 and 2020. This will be achieved by promoting waste reduction, meeting or exceeding the Strategy recycling and composting targets, and some form energy and materials recovery.</p>	<p>Achieved.</p>

WSPS17 The Local Authorities will work together to discourage the abandonment of vehicles and to ensure that vehicles once abandoned are treated in full compliance with the end of life vehicles regulations whilst still providing best value.	Achieved
WSPS18 The Local Authorities will work together to implement the requirements of the WEEE Directive. They will request that the Government ensures no extra cost burden will fall to local authorities as a result of any changes to the WEEE regulations.	Achieved Requested
WSPS19 The Devon LAS will seek to support the Producer responsibility schemes which evolve from the EU Directives as appropriate. The LAS will comply with the revised Waste Framework Directive through the Government Transposition (The Waste Regulations 2011)	Achieved
WSPS20 The Local Authorities will work with the Environment Agency to reduce the amount of fly tipped waste by the publicising of the environmental damage and subsequent costs of clearance of fly tipped waste, as well as improved enforcement and subsequent numbers of prosecutions.	The Clean Devon Partnership has been established which is aiming to reduce fly tipping and litter across the county.
WSPS21 The Local Authorities will work together with the waste management industry to investigate alternative forms of transporting waste both within and outside of the County, taking account of both the environmental and economic factors.	Road transport is used to transport waste. Methods of making this less impactful on climate change are being investigated.
WSPS22 The Local Authorities will take steps to ensure that waste produced by their own organisations is kept to a minimum and recycling opportunities are maximised. A level of service equal to that provided for householders should be made available. Similarly they will seek to apply sustainable procurement strategies.	DCC has a sustainable procurement strategy, an Environmental Board which oversees internal policies and a Plastics Strategy. Whilst under resourced great progress has been made.

Progress against 2013 Strategy Review Future Plans

Government Strategy

The review of Devon's Strategy will take on board these government ambitions where appropriate and the authorities will work with the Government to develop them further.

Achieved

Legislation

The Devon Authorities will comply with any relevant legislation and contribute, where appropriate, to meeting European and UK waste related targets.

Complied with

Growth, performance, targets

The Devon Authorities will aim to keep waste growth to a minimum where it is within their influence.

The Devon Authorities together will aim to meet household waste recycling rates of 60% by 2014/15 and 65% by 2025/26*

* achievement of these rates will be dependent on the impact of impending European legislation, in particular the End of Waste criteria (see Chapter 5)

2014/15 target not achieved. 2025/26 target to be adjusted to 2035 as per government strategy

Waste Prevention

The 'Don't let Devon go to waste' campaign will continue to focus on:

- Providing advice and information on waste prevention
- Advising on ways to reduce food waste
- Encouraging reuse
- Offering advice on how to sign up to the Mailing Preference Service
- Encouraging choosing goods with no or reduced packaging
- Discouraging the use of one-use plastic bags
- Promoting the use of Reusable Nappies
- Promoting home composting
- Promoting the use of rechargeable batteries

In addition, the Devon Authorities intend to continue to encourage householders to reduce their waste and, whilst tailoring proposals to local circumstances, have already considered, or will consider options such as:

- Fortnightly collection of residual waste across the county
- Offering smaller bins for residual waste
- Not allowing side waste (extra waste next to standard bin)
- Charging for garden waste

The following waste reduction targets will be set :

Kilogrammes of household waste collected per person per year:

- 2011/12 473
- 2012/13 470
- 2013/14 465
- 2014/15 460
- 2015/16 455
- 2016/17 450

All the initiatives above have been carried out on an ongoing basis. All but one district now charges for garden waste. East Devon offer a 3 weekly residual waste collection with North Devon and West Devon trialling. Appropriate sized bins are offered.

The kg of household waste collected per person per year have reduced to 444kg in 2019/20.

Reuse and community sector activities

- The Devon Local Authorities will continue to support the activities of the Community Sector
- Supporting give and take* days
- Promoting Swishing** events
- Promoting Waste Electrical and Electronic Equipment (WEEE) reuse through the WEEE contract
- Consideration of funding bid to DAWRRC to revamp and improve signage to and publicity of Refurnish Reuse shops
- Improvements will be made to the operation of the resale areas at Recycling Centres
- The Recycling Centre Contractor will take the opportunity to partner with the Community Sector to promote re-use where possible
- Consideration of hierarchy of reuse for Bulky Household Waste items
- Research with the retail sector partnership working for furthering reuse
- Work closely with the social housing sector to promote furniture reuse
- Carry out market research on capacity/value of central and satellite re-use centres
- Research web-based system for advertising items for re-use from Refurnish
- DCRN and DCCN and Refurnish will continue to support the community sector
- DCRN will continue to support Refurnish to develop a Gift Aid scheme whereby a tax rebate can be reclaimed following the sale of donated goods

*Give and take days are similar to jumble sales but no money changes hands and the goods are weighed to identify savings from landfill

**Swishing events are social events where unwanted clothes are taken along for exchange. No money changes hands.

The majority of the initiatives above have been carried out. The only ones that haven't are:

**The housing sector has not been engaged*

**Refurnish have not chosen to develop web based sales*

**DCRN and DCCN are no longer supported with funding by the LAs. Composting credits are still paid.*

Recycling

- Devon district councils and the county council will continually looking at ways to improve and rationalise their services
- Recycling of cardboard (as opposed to composting it) across the county is being investigated
- Recycling of mixed plastics across the county is being investigated
- Consideration is being given to approaching supermarkets to offer plastics recycling banks
- Research will be carried out to determine the optimum methods to be used for quality and economic recycling and also into the relevant costs
- Devon Authorities will seek to expand 'Recycle on the Go' where appropriate

The LAs have expanded and improved their recycling services. A comprehensive service is offered in all districts.

Recycling (HWRCs)

Proposals for the next 10 years include:

- Relocation of Woods Farm (Sidmouth) site 2013
- Relocation of Ivybridge site 2014/15

And subject to funding being available:

- New site for Cullompton/Tiverton/Willand
- Improvements Phase 2 to Tavistock site
- Relocation of Totnes site
- An ongoing programme of general infrastructure improvements will be implemented
- The County Council will continue to strive for improved customer service through its Recycling Centre contract
- Consideration will be given to expanding the services offered at Recycling Centres where space and resources allow.
- Advice will be given to any communities who wish to develop, fund and manage their own Recycling Centres

There has been £18 million capital investment in new sites in the last 10 years. New sites at Sidmouth and Ivybridge sites have been constructed within the last 5 years. Improvements have been made at other sites. Sites for a "Tiverton" facility and a Tavistock one are being sought as is the capital funding. Customer service is an on going performance requirement for the HWRC contractor.

Organic waste

The Devon Authorities will continue to promote home and community composting

The County Council will continue to support large scale treatment of garden and food waste in the most appropriate way including by Anaerobic Digestion.

*Home composting is promoted through Recycle Devon campaign work
Food waste is separated out for AD in all districts except Exeter and South Hams.*

Residual waste

During 2012/13 the County Council will begin the process for tendering the contract for dealing with the residual LACW waste emanating from Torridge and North Devon. The contract will direct waste away from landfill but leave the market to offer solutions.

Discussions will be held with regional partners to discuss opportunities for joint working

All kerbside residual waste now goes to ERF in Exeter, Plymouth, Avonmouth and Cornwall.

Behavioural change, community engagement and waste education in schools

The Community Engagement Project will be implemented from June 2012 if a European funding bid is successful. If not, alternative funding will need to be sourced.

Behavioural Change towards more sustainable waste management practices will be encouraged through online and digital methods and via a range of other communication methods detailed in the Communications Strategy.

Waste Education in Schools will continue to be a priority for Devon Authorities through the Waste Education Contract and the Waste Education in Schools Strategy and Action Plan

The Community Engagement Contract is being implemented under contract to Resource Futures as Community Action Group Devon, by DCC.

Engagement with communities and in schools continues to form the bedrock of Devon's behavioural change work.

Partnership working

The Devon Authorities will aim to progress partnership working towards a Waste Integrated Service Partnership subject to individual councils adopting this approach.

The Devon Authorities will continue to enter into partnerships with relevant groups where mutually beneficial.

The Devon authorities and Torbay continue to work in close partnership under the auspices of the Devon Authorities Strategic Waste Committee.

Redundant landfill sites

To continue to maintain and monitor closed landfill sites to ensure their impact on the environment is minimised

Achieved

Commercial waste

The local authorities will confirm whether disposal charges will apply to Schedule 2 groups from 2013/14.

The local authorities will support businesses to carry out more sustainable waste management practices where resources allow.

The local authorities will promote sustainable tourism.

Waste disposal charges are applied under the amended Controlled Waste Regulations 2012

Some WCAs are offering trade waste recycling services

Districts assist tourist venues to reduce, reuse and recycle where possible.

LA achievements since 2013

Authority	Achievements
East Devon	<ul style="list-style-type: none"> • New recycling system and restricted capacity refuse collection system launched in 2017 • Recycling rate increased from 45.6% 2015/2016 in to 59.1% in 2018/2019 • Bring banks removed in 2018 • Chargeable green waste service launched in 2018 gaining 8,000 customers in launch year • Second in English league table for kilograms of refuse per head of population at 126.8kg/capita in 2017/2018 • Multiple award winning new recycling service – green apple, international green apple, DEBI, LARAC • East Devon App launched in 2014 with 20,000 users in 2019 • Alexa recycling skill launched in 2019 winning LARAC award for ‘Best new idea in the recycling sector’
Exeter City	<ul style="list-style-type: none"> • Introduced commercial recycling collections of glass, paper, cardboard, plastic and cans so businesses have the same opportunities as our residents to recycle. Now collecting from over 500 business addresses • We are among the 10% of best performing English local authorities for waste reduction (former Best Value Performance Indicator 84: kg of collected waste per head) • Approval obtained to go for the Devon-aligned recycling service,
Mid Devon	<ul style="list-style-type: none"> • All residents moved to fortnightly residual collections • Weekly food waste collections introduced • Chargeable garden waste collections introduced • Expansion of dry recycling service to accept card and mixed plastics • Opening of WTS so all residual waste now to EFW rather than landfill
North Devon	<ul style="list-style-type: none"> • Introduced commercial recycling collections • Expanded recycling service to take mixed plastics, WEEE and food waste on a weekly basis • Introduced chargeable garden waste collection service • Opening of WTS so all residual waste now sent to EFW rather than landfill • Introduced the “aligned” collection services
South Hams	<ul style="list-style-type: none"> • The Council have approved the move towards the Devon Aligned Service by September 2020. • This will see a weekly recycling collection including food waste. • The number of materials collected for recycling will increase by the addition of glass, plastic pots, tubs and trays, printer cartridges and textiles to the kerbside service. • Single use plastic sacks currently used for recycling will be replaced by reusable containers.

Teignbridge	<ul style="list-style-type: none"> • Introduced weekly collections of increased range of dry recyclables and food waste to all properties. • Introduced a charged garden waste service • Increased our recycling rate from 53.6% 2013/14 to 56.3% 2018/19 • Reduced residual waste from 376kg/hh/yr to 337kg/hh/yr between 2013/14 and 2018/19 • Major investment in fleet, depot and waste transfer station to enable service improvements and deliver efficiencies
Torridge	
West Devon	<ul style="list-style-type: none"> • The Council has introduced a charged garden waste service in line with the Devon Aligned Service. • Whilst this has resulted in an anticipated decrease in garden waste tonnage, the decrease is not matched by the additional tonnage diverted to Household Waste Recycling Centres which is less than half this amount. Residual waste over this period has also decreased along with the number of fly tips comprised of garden waste. It can therefore be assumed that the charges have resulted in this waste being treated higher up the hierarchy by an increase in home composting. • The kerbside recycling service will be enhanced in December 2019 as the number of items that can be recycled will increase to include plastic pots, tubs and trays, printer cartridges, card drink cartons and foil. • In February 2020, a trial will begin involving collecting residual waste on a three weekly basis and information from this trial will inform the decision whether to extend this service to all households in 2021.
Devon	<p>New Infrastructure</p> <ul style="list-style-type: none"> • Exeter ERF • Plymouth ERF • Ivybridge HWRC • Sidmouth HWRC • Exeter TS • North Devon TS • Mid Devon TS <p>New contracts for Anaerobic Digestion of food waste</p> <p>Initialisation and implementation of Shared Savings Scheme</p> <p>Behavioural change</p> <ul style="list-style-type: none"> • Waste Prevention and Reuse Strategy • New Schools Waste Education Strategy • Development of Community Action Groups • EU Ecowaste4food Project • Appointment of Reuse Project Officer • Devon Plastic Strategy published • Resue Officer wins LARAC Recycling Officer of the Year award in 2019 <p>Successful funding bids</p> <ul style="list-style-type: none"> • WEEE x2

	<ul style="list-style-type: none"> • Ecowaste4food
Torbay	<ul style="list-style-type: none"> • HWRC Bike recycling project in partnership with Channing's Wood Prison (Award obtained by the lead prison officer for lecturer of the year 2015) • Diversion of Residual waste to ERF end of April 2015 • Food waste project 2015/16 in partnership with WRAP achieving a 5.2% increase in food waste collected • Achieving zero to Landfill apart from a small amount of Asbestos collected at the HWRC in 2017/18 giving 0.2% as recorded in NI 193 • Last of Torbay's 13 recycling Green apple awards achieved by the recycling officer in 2015

Carbon impact of waste management service

Environmental consultants Eunomia Research and Consulting Ltd have carried out research into carbon impacts of waste management and have produced a yearly carbon index, http://www.eunomia.co.uk/carbonindex/pdfs/2017_18.pdf.

This shows which local authorities' recycling activities are delivering the greatest carbon benefits. Local authorities' recycling performance data for 2017/18 is taken from WasteDataFlow and multiplied by the same carbon 'factors' used by Zero Waste Scotland to produce the Scottish Carbon Metric. This process converts tonnage data for each recyclable material into carbon dioxide equivalents (CO₂ eq.). This shows the total embodied carbon in the material that authorities are diverting from disposal to recycling. Local authorities that collect more of the materials with a higher embodied carbon for recycling will show greater benefits. Account is also taken of the emissions impact of source separated and comingled collections. Devon's index of 102 is in the top 10% of authorities, with Torbay in the good performers' category. The key material metrics are as follows:

Material	Carbon factor (kgco2eq)	Carbon metric weighting
Textiles	-14069	100.0
Aluminium	-9267	65.9
Mixed cans	-3911	27.8
WEEE	-1374	9.8
Wood	-1224	8.7
Plastics	-1205	8.6
Paper and card	-799	5.7
Food and drink	-612	4.4
Glass	-223	2.8
Garden waste	-255	1.8

Table 1: Key material carbon factors and weighting

The table below shows CO₂e generated from each material through the manufacturing and use processes. It can be seen that depending on the material there are different levels of benefit/disbenefit from recycling/composting, thermal treatment and landfill.

	Textiles	Metal	Food	Plastic	Glass	Paper	Card
kgCO ₂ eq/t generated	20444	12950	3744	3189	1210	885	885
Impact of recycling and composting	-5828	-9966	-70	-539	-755	-547	-547
Impact of thermal treatment	216	n/a	-12	1665	69	-180	-180
Impact of landfill	599	n/a	993	5	5	498	498
Net carbon gain/loss thru recycling	14616	2984	3674	2650	455	338	338
% recov'ed of kgCO ₂ e/t	28.5	77.0	1.9	16.9	62.4	61.8	61.8

Table 2: CO₂e generated from each material through the manufacturing and use processes

In winter 2019/2020 Eunomia were commissioned to look at Devon authorities' waste management service and analyse its carbon impact in detail and to make recommendations on how to reach carbon neutral by 2050 or sooner as well as meeting recycling targets. Their recommendations are as follows:

- A primary focus on reducing the amount of plastics in the residual waste
- To capture more carbon intensive materials – i.e. textiles, metals, plastic
- To encourage/enable greater commercial waste recycling
- To explore carbon capture

And to reduce carbon impact but also increase the recycling rate:

- To reduce residual waste arisings
 - By less frequent collections
 - Smaller bins
 - No side waste
- To aim for higher capture rates of key materials
- To expand the range of materials collected
- To carry out a site by site review of Household Waste Recycling Centres (HWRCs) to emulate best sites, residual waste analysis and greater focus on textiles
- To deliver consistent communications including websites

The key to improving the carbon saved is to follow the waste hierarchy, and when recycling, improve the capture rates of the higher impact materials such as textiles, metals and plastics, and when recovering energy to minimise the amount of plastic in the residual waste.

The tables below show the carbon impacts per district with and without the HWRCs. The impacts vary significantly depending on the amount of reuse, the carbon intensity of materials recycled, the Energy Recovery Facility (ERF) used for

residual waste, and transport. On a consumption based analysis (where UK recycling is taken into account) the authorities overall are already carbon neutral if HWRCs are included. However, on a territorial basis (explain) they are not. As tables 5 and 6 show the carbon impact will increase with time (based on today's tonnages) mainly due to the decarbonisation of the electricity grid which will make the ERFs relatively less carbon efficient.

	East Devon	Exeter	Mid Devon	North Devon	South Hams	Teign-bridge	Torridge	West Devon	Total
Transport	7,308	3,316	3,582	5,646	5,139	5,703	3,296	2,355	36,345
Reuse	-4,682	-3,221	-1,668	-2,836	-3,051	-5,282	-1,612	-1,730	-24,083
Dry Recyclables	-13,549	-7,631	-6,278	-8,167	-6,415	-10,830	-5,165	-4,387	-62,421
Organics	-1,689	-377	-859	-578	-375	-1,532	-614	-546	-6,570
Incineration	5,298	4,147	5,276	3,344	4,315	4,355	1,794	1,981	30,510
Landfill	1,250	1,406	544	966	6	7	576	9	4,763
Net Impacts – Consumption basis	-6,064	-2,359	597	-1,626	-380	-7,579	-1,726	-2,318	-21,455
Impacts – Territorial Inventory	12,167	8,493	8,543	9,378	9,085	8,533	5,052	3,799	65,049

Table 3: Household Baseline, Tonnes CO₂e. 2020 – including HWRCs

	East Devon	Exeter	Mid Devon	North Devon	South Hams	Teign-bridge	Torrridge	West Devon	Total
Transport	5,422	2,067	2,763	4,509	4,138	4,454	2,520	1,745	27,616
Reuse	-976	-39	-54	-453	-694	-2,567	-23	-442	-5,248
Dry Recyclables	-8,832	-3,632	-4,136	-5,129	-3,333	-7,251	-3,088	-2,182	-37,582
Organics	-1,281	-155	-770	-479	-275	-1,350	-542	-414	-5,266
Incineration	5,140	4,024	5,017	3,283	3,649	3,809	1,767	1,625	28,314
Landfill	0	0	0	0	0	0	0	0	0
Net Impacts – Consumption basis	-527	2,265	2,820	1,731	3,484	-2,905	634	331	7,834
Impacts – Territorial Inventory	9,281	5,936	7,010	7,313	7,512	6,913	3,745	2,955	50,664

Table 4: Household Baseline, Tonnes CO₂e. 2020 – excluding HWRCs

	2020	2025	2030	2035	2040	2045	2050
Transport	36,345	32,105	27,865	23,624	19,384	15,144	10,904
Reuse	-24,083	-24,083	-24,083	-24,083	-24,083	-24,083	-24,083
Dry Recyclables	-61,875	-61,875	-61,875	-61,875	-61,875	-61,875	-61,875
Organics	-6,750	-6,109	-5,522	-5,166	-4,956	-4,914	-4,873
Incineration	30,510	37,369	46,549	52,036	55,096	55,729	56,362
Landfill	4,763	4,833	4,926	4,982	5,013	5,020	5,026
Net Impacts – Consumption basis	-20,908	-17,759	-12,139	-10,481	-11,420	-14,979	-18,538
Impacts – Territorial Inventory	65,049	68,198	73,818	75,476	74,537	70,978	67,419

Table 5: Projected Total Household Carbon Impacts with HWRCs, tonnes CO₂e

	2020	2025	2030	2035	2040	2045	2050
Transport	27,616	24,395	21,173	17,951	14,729	11,507	8,285
Reuse	-5,248	-5,248	-5,248	-5,248	-5,248	-5,248	-5,248
Dry Recyclables	-38,164	-37,963	-37,963	-37,963	-37,963	-37,963	-37,963
Organics	-5,266	-4,805	-4,218	-3,862	-3,652	-3,610	-3,568
Incineration	28,314	34,575	42,956	47,965	50,758	51,336	51,914
Landfill	0	0	0	0	0	0	0
Net Impacts – Consumption basis	7,252	10,953	16,699	18,842	18,623	16,021	13,419
Impacts – Territorial Inventory	50,664	54,165	59,910	62,054	61,835	59,233	56,631

Table 6: Projected Total Household Carbon Impacts without HWRCs, tonnes CO₂e

Exeter University were also asked to look at ways that the Energy Recovery Facilities could reduce their carbon impact. The conclusions from this work were:

- To reduce the amount of plastic in the residual waste
- To increase the efficiency of the plants by increasing the use of heat
- To explore carbon capture

The table below shows the relative impacts of a range of scenarios. All the scenarios have their limitations, for example reducing the plastic in the residual waste depends on manufacturers, the public, pre-treatment technologies and markets; increasing the plant efficiencies depends on suitable offtakers, and carbon capture is currently prohibitively expensive but may become less so in the future.

CHG reduction scenario	Exeter ERF		Devonport EfW CHP	
	Fossil kt CO ₂ e	% reduction	Fossil ktCO ₂ e	% reduction
Base case				
2018 emissions	15.7		39.3	
Reduced fossil content				
Plastics -100%	3.4	78%	-14.8	138%
Plastics -50%	9.6	39%	12.3	69%
Dense plastics -45%	13.2	16%	27.7	29%
Increased heat offtake				
Zero electricity export	-4.8	130%	-65.5	267%
Net zero heat	0.0	100%	0.0	100%
Max practical heat	7.9	50%	12.0	69%
Carbon capture and storage				
"Just Catch" and storage	-2.9	119%	-51.8	232%
Combined scenario				
Dense plastics -45% and max practical heat offtake	2.6	83%	-0.3	101%

Table 7: Range of scenarios for reducing carbon impact of ERFs

The data for Plymouth includes all waste entering the plant. The contribution of the Devon Authorities is approximately 1/3rd of the total, i.e. 60,000 tonnes, and Torbay similarly.

Table 8 below shows a summary of carbon impacts and the relationship with Devon's material tonnages. The summary notes explain the potential order of priority in terms of carbon impact reduction for the various actions – reduce, reuse, recycle.

Key

For each column the colours show the 1st 2nd and 3rd best material to tackle for that particular action e.g. Considering waste prevention alone (Column B) textiles are the material to focus on. Considering waste prevention and the tonnage of that material in the residual bin (Column F), food waste would be best to focus on.

Green: greatest impact

Orange: 2nd greatest impact

Red: 3rd greatest impact

A	B	C	D	E	F = BxE	G = CxE	H = DxE	I	J = I/(E+I)	K = E/125,571
	TCO2eq /t generated through manufacture and use	Impact of recycling (TCO2eq/t)	Impact of thermal treatment (TCO2eq/t)	Tonnes in Devon's residual dustbins	Waste prevention carbon saving (TCO2eq/t)	Recycling carbon saving (TCO2eq/t)	ERF carbon impact (TCO2eq/t)	Tonnes of material recycled by Devon's districts	% of material available recycled	% of material in residue
Textiles	20.44	-5.83	0.216	6,530	-133,473	-38,070	1,410	1,095	14.3	5.2
Metals	12.95	-9.97	n/a	4,269	-55,284	-42,562	0	3,080 (+2,000 from ERFs)	42.0 (54%)	3.4
Food	3.74	-0.07	-0.012	37,797	-141,360	-2,645	-435	21,522	36.0	30.1
Plastic	3.19	-0.54	1.67	18,082	-57,681	-9,764	30,197	7,000	28.0	14.4
Glass	1.21	-0.76	0.069	4,143	-5,013	-3,149	285	23,000	84.7	3.3
Paper and card	0.89	-0.55	-0.18	19,464	-17,323	-10,705	-3,503	30,000	60.7	15.5

Table 8: Summary of carbon impacts and the relationship with Devon's material tonnages.

This table shows how waste prevention, recycling and energy recovery have different carbon impacts depending on the material in question:

- **Prevention:** Textile production has the greatest carbon impact per se, followed by metals, food and plastic. Waste prevention therefore is most effective in that order. However, given the quantities of materials in the residual, the scope for most impactful waste prevention might be food, textiles, plastic, metals, paper
- **Recycling:** Metals recycling has the greatest impact per se followed by textiles, glass, paper and plastic. However, given the quantities in the residual, the scope for most impactful recycling is metal, textiles, paper, plastic, glass.
- **Energy recovery:** Plastics to ERF has the greatest impact per se followed by textiles, paper, glass. However, given the quantities in the residual, the scope for most impactful ERF avoidance is plastic, textiles, glass. Putting food and paper waste into the ERFs reduces the carbon impact

Waste Analysis October 2017

East Devon Residual bin contents

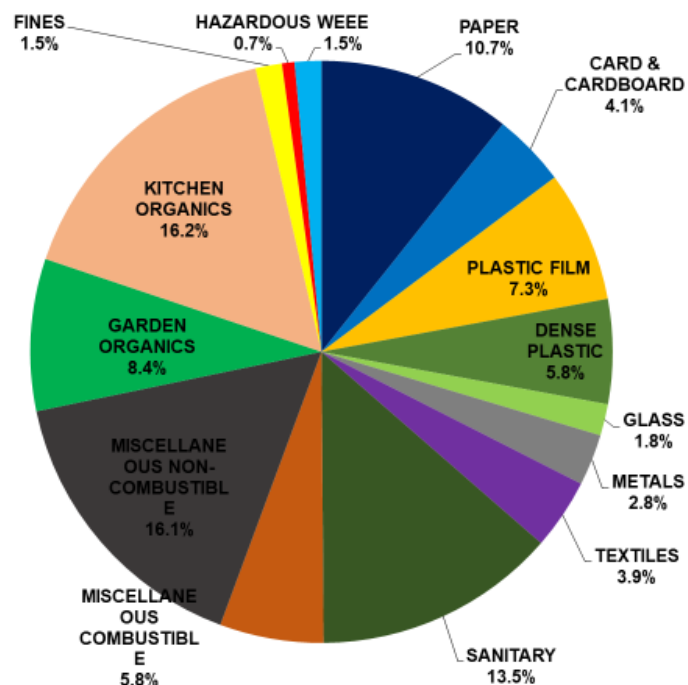


Figure 1: Contents of the residual bins October 2017: East Devon

Exeter Residual bin contents

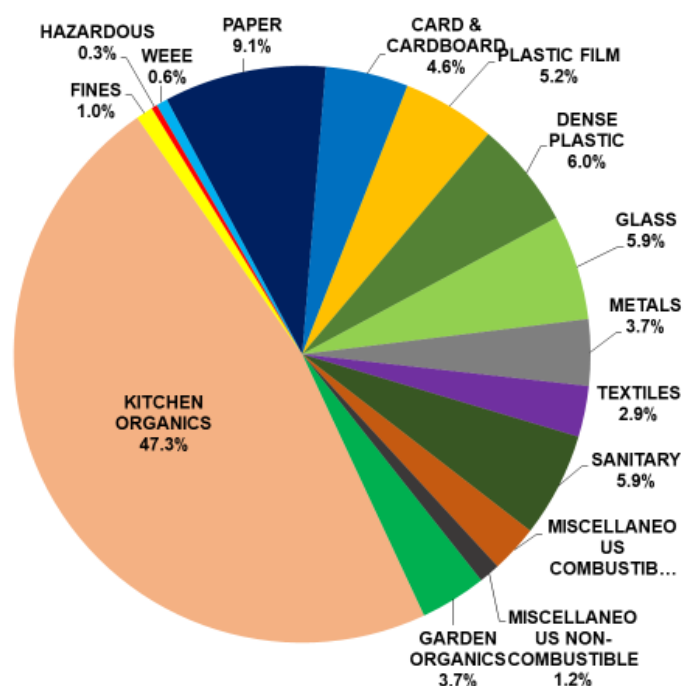


Figure 2: Contents of the residual bins October 2017: Exeter

Mid Devon Residual bin contents

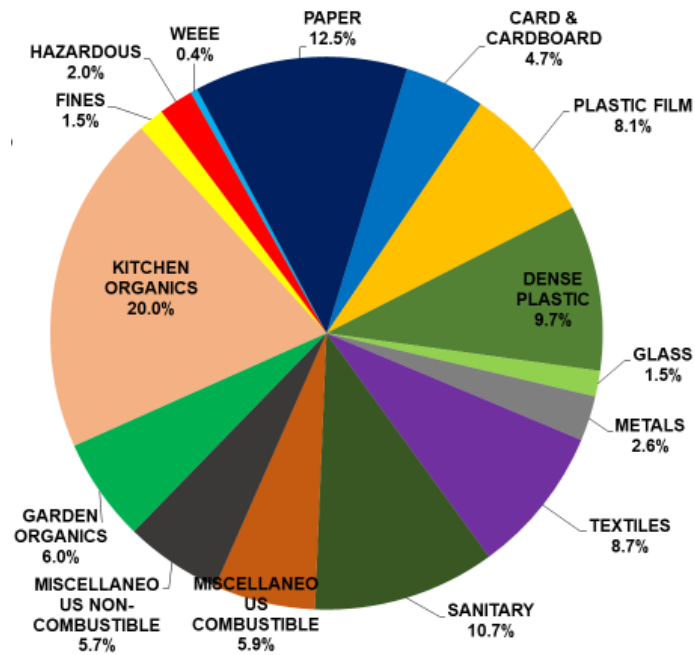


Figure 3: Contents of the residual bins October 2017: Mid Devon

North Devon Residual bin contents

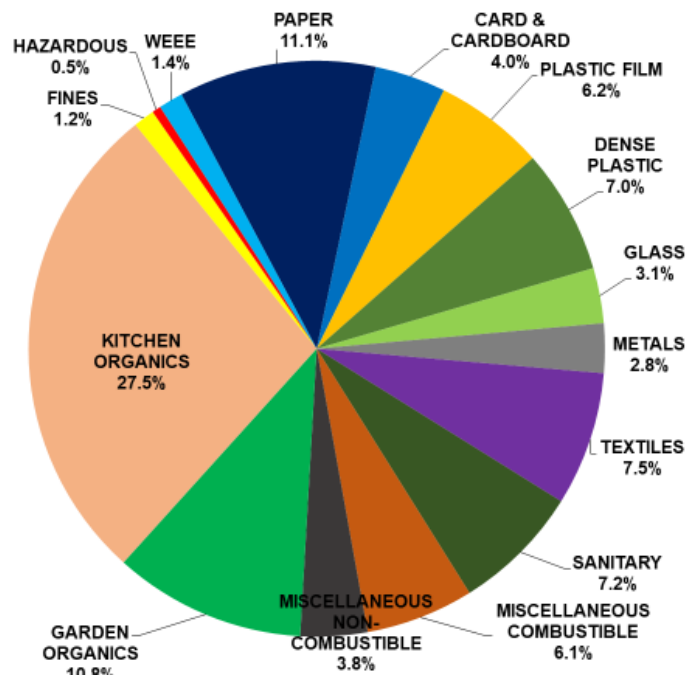


Figure 4: Contents of the residual bins October 2017: North Devon

South Hams Residual bin contents

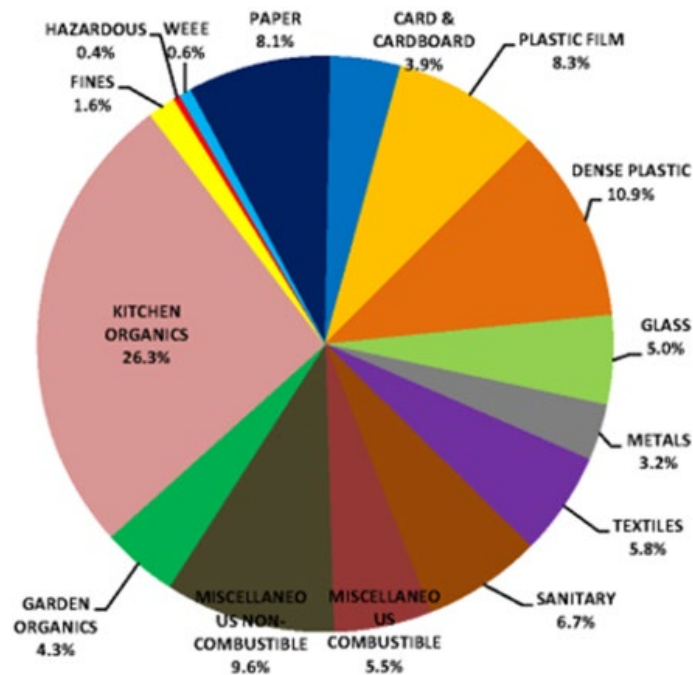


Figure 5: Contents of the residual bins October 2017: South Hams

Teignbridge Residual bin contents

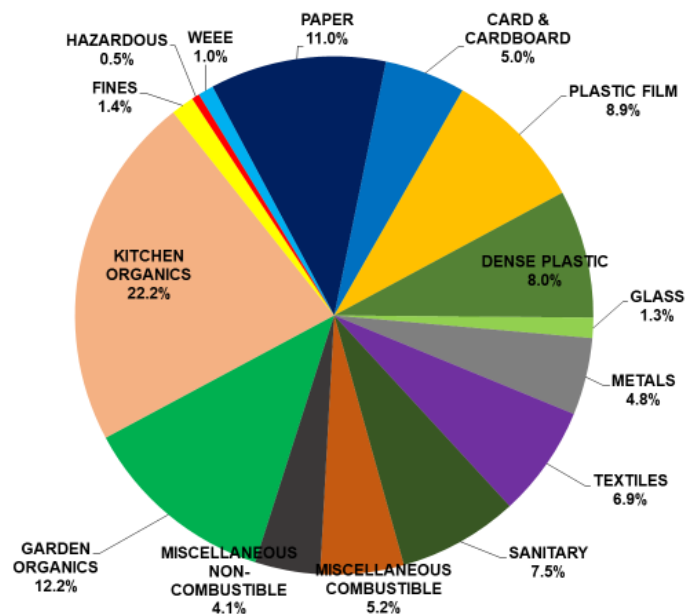


Figure 6: Contents of the residual bins October 2017: Teignbridge

Torridge Residual bin contents

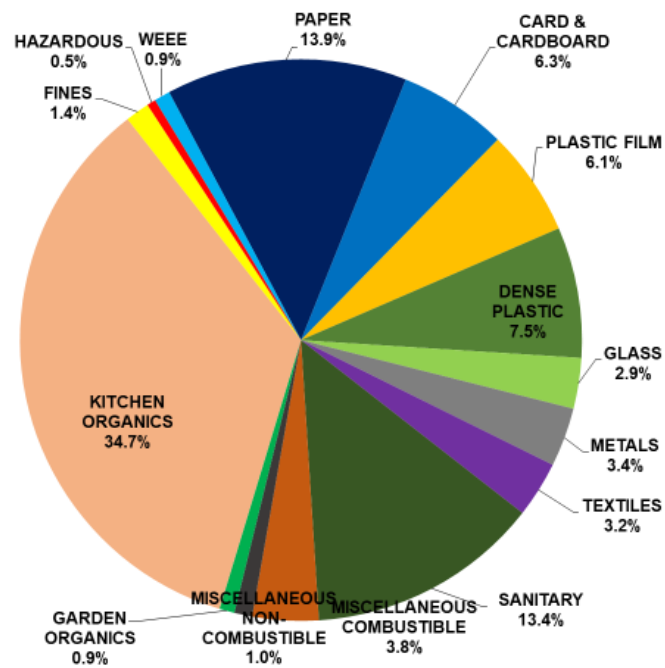


Figure 7: Contents of the residual bins October 2017: Torridge

West Devon Residual bin contents

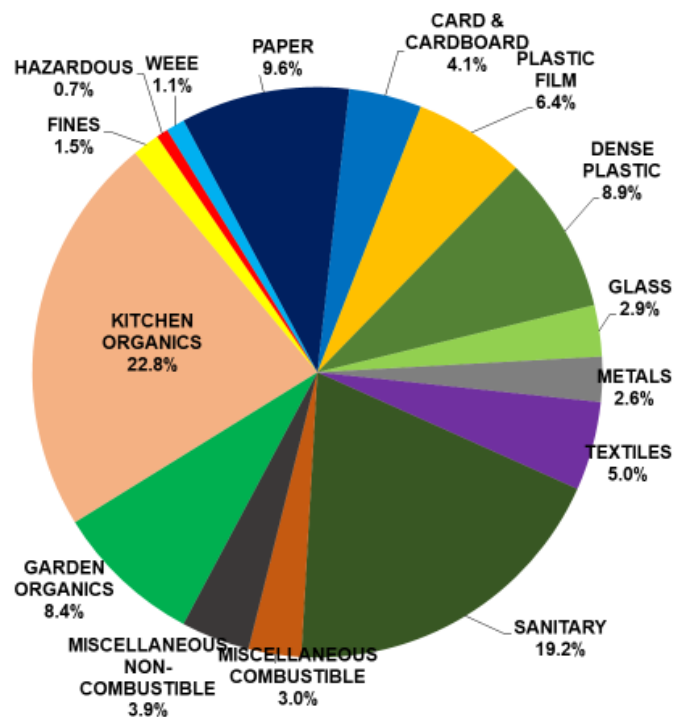


Figure 8: Contents of the residual bins October 2017: West Devon

Litter and fly tipping legislation

Litter

Local authorities, national park authorities, the Broads Authority and police community support officers have powers to take enforcement action against offenders. Anyone caught littering may be prosecuted in a magistrates' court, which can lead to a criminal record and a fine of up to £2,500 on conviction. Instead of prosecuting, councils may decide, under section 88 of the Act to issue a fixed penalty notice, otherwise known as an 'on-the-spot fine', of up to £150. Under section 88A, councils in England outside London can also issue civil penalties (not carrying criminal liability) to the keeper of any vehicle from which a littering offence is committed.

Section 89 of the Environmental Protection Act 1990 also imposes two distinct duties on a range of bodies to "keep their relevant land clear of litter and refuse" and to "keep the highways clean". In complying with these duties, "duty bodies" (district councils, highway authorities, educational institutions, the Crown and statutory undertakers such as rail and tram operators and water companies) must "have regard to" the statutory Code of Practice on Litter and Refuse. The Code sets out the legal standards that duty bodies are expected to be able to achieve in carrying out these duties on different types of land and seeks to encourage duty bodies to maintain their land within acceptable cleanliness standards. The emphasis is on the consistent and appropriate management of an area to keep it clean, not on how often it is cleaned.

To assist them in achieving these standards, litter authorities (predominantly district councils) have access to a range of other powers and duties designed to deter littering and prevent the defacement of land by litter and waste. E.g. Anti-social Behaviour, Crime and Policing Act 2014 which provides local agencies (councils, local police forces and registered social housing providers) with a range of flexible powers to tackle various anti-social and nuisance behaviours. For example, Community Protection Notices (CPN) may be used to deal with particular, ongoing problems or nuisances which negatively affect the community's quality of life, by targeting those responsible. Also, Public Space Protection Orders (PSPOs) provide similar protection from nuisances in public spaces by imposing conditions on the use of that area. For example, a PSPO may be used to require dog owners to pick up their dog's faeces.

Fly Tipping

Fly-tipping is the illegal deposit of waste on land. Fly-tipping differs from littering in that it involves the removal of waste from premises where it was produced with the deliberate aim of disposing of it unlawfully, or as a result of legitimate outlets not being available. The offence of fly-tipping, and the additional offences of 'knowingly causing' or 'knowingly permitting' fly-tipping, are set out in Section 33(1)(a) of the Environmental Protection Act 1990. Section 33 is enforceable by both the Environment Agency and the local authorities.

The penalties for these offences are:

- Summary conviction: to imprisonment for a term not exceeding 12 months or a fine or both; and
- On conviction on Indictment: to imprisonment for a term not exceeding five years or a fine or both.

Directors, officers and senior employees can be imprisoned, and there is the possibility of licences being revoked if the person in question is not regarded as a 'fit and proper person' following conviction.

The registered keeper of a vehicle is liable for conviction if their vehicle is used during a fly-tipping offence.

Anyone who produces waste has a duty of care under section 34 of the Environmental Protection Act 1990 to ensure that it is disposed of properly. Therefore a person may be guilty of an offence under section 34 if their waste has been found to be dumped, even if the dumping was carried out by someone else. The duty applies to both businesses and householders.

For further information see

<http://www.tacklingflytipping.com/Documents/NFTPG-CaseStudies/Fly-tipping-responsibilities-Guide-for-local-authorities-and-land-manage....pdf>

Brief description of the Communications Strategy

The communications strategy covers all forms of targeted marketing and communications, including public relations, publications, campaigns and one-to-one engagement and aims to:

- Set objectives in line with government and local authority strategic aims
- Support and raise awareness of local, regional and national waste communication initiatives.

The strategy focusses on the following areas:

Audiences

- Make use of data for identifying key target audiences e.g. waste analysis and recycling collection tonnages to identify priority areas for communications.
- Develop understanding of key stakeholders, partners, residents and the best methods of how to engage with and motivate them via different means.

Key messages

- Work in partnership to ensure that communications are consistent, clear and effective.
- Support groups, charities, individuals and businesses who are actively preventing waste and reusing e.g. by telling and sharing their stories.
- Motivate residents by letting them know how well they are doing.

Tools and activities

- Identify the communication methods that are most appropriate to communicating the key messages to target audiences.
- Embrace and utilise new digital communication technologies and use where appropriate.
- Encourage engagement from residents and respond to queries raised
- Work in partnership and support the community and charitable sectors to increase waste prevention, repair and reuse

Resources and timescales

- Work in partnership with stakeholders to achieve economies of scale, and budget/plan communications effectively.
- Keep residents informed of changes to waste and recycling services in good time.

Evaluation

- Assess how effective the strategy and communications are e.g. by carrying out market research and using analytical tools.
- Provide feedback to stakeholders on performance.
- Develop evidence-based communications where possible.