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Waste Management Strategy

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Waste Management Strategy

1. Introduction

1.1. Project Background

- 1.1.1.Tier Consult has been appointed by Tritax Symmetry Ltd to develop a Waste Management Strategy for an Industrial Development Scheme on the B4100 adjacent to Junction 10 off the M40.
- **1.1.2.** This Strategy considers the potential impacts that could arise from waste generated during the Proposed Development, with the overall aim of developing a strategy for legislative compliance and good practice in the separation, storage and collection of waste arising.

1.2. Proposed Development

- **1.2.1.**The Proposed Development comprises 300,000 sq m GEA building with a provision for office accommodation estimated at approximately 14,800 sq m.
- **1.3.** The following report covers Waste Legislation Policy together with any Local Authority waste regulations in respect of commercial waste and the management thereof.
- **1.4.** In addition, the report identifies the requirement for any trade effluent waste to be disposed of via a license through Anglian Water who are the foul water utility provider in the vicinity.

2. Policy and Guidance

2.1. Overview

- 2.1.1. The development and implementation of European Union (EU) waste policy and legislation is delivered by EU Directives, such as the Landfill Directive, Waste Electrical and Electronic Equipment Directive etc. Member States must implement the policy drivers and requirements of these Directives through national legislation.
- 2.1.2. The Waste Framework Directive (rWFD) is an EU Directive clarifying the definition of "waste" and of other undertakings such as "recycling", "recovery" and "reuse". It implements a revised Waste Hierarchy, expands the 'polluter pays' principle by emphasising producer responsibility and applies more stringent waste reduction and management targets for Member States. It also requires Member States to take measures to promote high quality recycling and to set up separate collections of paper, plastic, metal and glass.



- **2.1.3.** The UK government has transposed the directive into UK law and then to UK statute. EU environmental legislation will therefore remain in force as part of UK law and can be repealed or amended at the will of Parliament or the devolved parliament.
- **2.1.4.** Oxfordshire Joint Municipal Waste Management Strategy was generated in 2007 by the Oxford Waste Partnership (OWP) which is made up of the County and District Councils of Oxfordshire. The Management Strategy accords with European legislation and defines the definition of municipal waste.

2.2. UK Legislation

A list of relevant items of national waste legislation is outlined below in reverse chronological order:

- Waste Management, The Duty of Care Code of Practice (2016 update)
 This code of practices replaces the 1996 Code and is pursuant to Section 34(9) of the Environmental Protection Act 1990. It sets out practical guidance on how to meet waste duty of care requirements and is admissible as evidence in legal proceedings i.e. its rules will be taken into account where relevant in any case based on breach of the duty of care.
- The Waste (England and Wales) Regulations 2011 (as amended) -Waste collection authorities must collect waste paper, metal, plastic and glass separately. It also imposes a duty on waste collection authorities, from the date, when making arrangements for the collection of such waste, to ensure that those arrangements are by way of separate collection.
- Environment Protection Act 1990 -- Part II of the act was originally implemented by the Duty of Care Regulations 1991. The Duty of Care is a legal requirement for those dealing with certain kinds of waste to take all reasonable steps to keep it safe and is set out in Section 34 of the Act. The Waste (England and Wales) Regulations 2011 repealed the Environmental Protection (Duty of Care) Regulations 1991 and apply the Duty of Care requirements by the Environmental Protection Act 1990.

2.3. Local Waste Policy

- 2.3.1. The relevant national and local waste policy that was reviewed during the preparation of this Waste Management Strategy is provided in **Appendix A:**Oxfordshire Joint Municipal Waste Management Strategy.
- **2.3.2.**Cherwell District Council Planning and Waste Management Design Advice dated 2016.

3. Residential Waste

There will be no residential waste generated by the Development.



4. Commercial Waste

4.1. Commercial waste shall be collected by a local licensed company contracted by each individual unit occupier. Waste shall be separated by the operator in order to facilitate ease of transfer to the commercial waste management service, as outlined in Table 4.1 below.

Table 4.1

able 4.1	1
Recycling from staff consumption	Paper and cardboard Plastic food tubs and containers Drink cans Tinned food packaging Plastic bottles and cartons Glass bottles and jars
Garden waste from landscaping / maintenance	All grass cuttings, leaves and weeds are to be removed by appointed contractor. Waste certification to be provided
Food waste	Staff consumption and waste from food preparation associated with industrial kitchen and canteens
Commercial waste	Printer cartridges Cardboard and paper Lightbulbs and electrical equipment Broken furniture Scrap metal and offcuts

- 4.2. Estimated waste generated by each employee amounts to approximately 0.2 tonnes per annum. The schedule within Appendix D provides the estimate of waste for each of the individual units.
- **4.3.** Cardboard waste and packaging should be placed in compactors in order to reduce volume. In the event a unit is used for logistics, space for compactors should be provided by the occupier. All suitable cardboard should be recycled to a registered company.

5. Industrial Foul Effluent

- **5.1.** Currently there is no requirement to obtain a license for trade effluent from the Development Site. Foul waste shall therefore be restricted to toilet and kitchen facilities that support the individual office infrastructure.
- **5.2.** The cleaning of industrial vehicles should adopt a policy of using recycled water rather than discharging to the foul network.



5.3. Kitchen appliances should be fitted with either grease traps or dosing units to reduce fat congealment within the foul water drainage network and associated pumps.

6. Summary and Conclusions

- **6.1.** It is estimated that the overall development when fully operational will generate approximately 713 tonnes of waste through general employment and 25 tonnes per annum from landscape waste.
- **6.2.** Each unit shall provide recycling collection bins to separate out the waste prior to collection.
- **6.3.** The Local Authority will not visit site to collect refuse. All refuse shall be contracted to local suppliers to cover the following generated waste:-
 - **6.3.1.** Kitchen food waste
 - **6.3.2.** Garden waste
 - **6.3.3.** Recyclable containers
 - **6.3.4.** Paper and cardboard
 - **6.3.5.** Steelwork and offcuts
- **6.4.** The proposed development Waste Management Strategy shall meet the requirement of the national and local waste policies and associated guidance.
- **6.5.** All waste types have been identified within the document and their method of collection and disposal established.

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APPENDIX A

OXFORDSHIRE JOINT MUNICIPAL WASTE MANAGEMENT STRATEGY



APPENDIX B

CHERWELL DISTRICT COUNCIL PLANNING & WASTE MANAGEMENT DESIGN ADVICE



APPENDIX C DEVELOPMENT PLAN



APPENDIX D

SCHEDULE OF ESTIMATED WASTE GENERATED BY EMPLOYEES (PER UNIT)

Oxfordshire Joint Municipal **Waste Management** Strategy

2013



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List of Abbreviations

CAG Community Action Group

Eu European Union

HWRC Household Waste Recycling Centre

JMWMS Joint Municipal Waste Management Strategy

LATS Landfill Allowance Trading Scheme

LEQ Local Environmental Quality

M&WDF Minerals and Waste Development Framework

OCC Oxfordshire County Council
OWP Oxfordshire Waste Partnership
PAT Portable Appliance Testing

SEA Strategic Environmental Assessment

UK United Kingdom

WCA Waste Collection Authority
WDA Waste Disposal Authority

WEEE Waste Electrical and Electronic Equipment

WET Waste and Emissions Trading Act

WPA Waste Planning Authority
WPS Waste Prevention Strategy

WRAP Waste and Resources Action Programme



1. About Oxfordshire Waste Partnership

- 1.1. Oxfordshire Waste Partnership (OWP) is made up of the County and District Councils of Oxfordshire, these are: Cherwell District Council, Oxford City Council, Oxfordshire County Council, South Oxfordshire District Council, Vale of the White Horse District Council and West Oxfordshire District Council
- 1.2. OWP became a statutory joint committee in April 2007, with powers to develop and implement a sustainable waste management strategy for Oxfordshire. A Joint Municipal Waste Management Strategy (JMWMS) was developed and adopted in 2007. Oxfordshire Councils now work together through OWP to manage and improve waste management within the county by implementing the JMWMS. The duty to prepare a JMWMS is currently a legal obligation under the Waste Emissions and Trading (WET) Act.
- 1.3. The delivery of waste management operations, such as waste collection and managing treatment and disposal site contracts, is undertaken by the individual partner councils within OWP. The district councils, as Waste Collection Authorities (WCA), are responsible for waste & recycling collections, and street cleaning operations. Oxfordshire County Council, as Waste Disposal Authority (WDA), provides Household Waste Recycling Centres (HWRCs), treatment and disposal sites. These operations are guided by the objectives and policies within the JMWMS, but are managed by the individual partner councils.
- 1.4. As well as being the WDA, Oxfordshire County Council (OCC) is also the Waste Planning Authority (WPA). As the WPA, OCC is responsible for preparing waste related development plan documents for the Minerals & Waste Plan for Oxfordshire. OCC also determines minerals & waste planning applications, and is responsible for monitoring and enforcing minerals & waste planning controls. The roles of WDA and WPA are separate. The JMWMS does not set policy to determine where waste management facilities should be sited; the JMWMS details how municipal waste will be collected and disposed of. The WPA determines where these facilities should be located.
- 1.5. Previously the term 'Municipal Waste' was used in waste policies and nationally reported data to refer to waste collected by local authorities. In other European legislation the definition of municipal waste included both household waste and that from other sources (that may or may not have been collected by local authorities). In 2010 after discussions with the European Union (EU), the UK expanded its definition to align with the wider European definition and include waste from other sources that is similar in nature and composition. The term "local authority collected waste" has subsequently been developed to replace the old UK definition of municipal waste. This strategy is therefore addressing all wastes produced in Oxfordshire that come under the heading of 'local authority collected waste'. This includes waste produced within Oxfordshire by householders, commercial waste collected by district councils, waste deposited at Household Waste Recycling Centres (HWRCs), street sweepings, litter and fly tipped materials.



2. Oxfordshire's Vision for the future:

2.1. Our vision for the future is: A society where everyone tries to prevent waste and sees waste materials as a potential resource. Oxfordshire is pursuing a clear vision for sustainable waste management and resource efficiency:

"We will work in partnership to reduce waste and to maximise reuse, recycling and composting. We will treat residual waste before disposal to further recover value and to minimise the environmental impact of managing our waste streams"



3. Changes since the adoption of the 2006/7 JMWMS

- 3.1. There has been considerable change and development in the five years since the JMWMS was agreed. Firstly, OWP councils have made great strides in reducing waste and improving recycling and composting performance. Secondly, there has been legislative development in the form of the EU Waste Framework Directive, which was revised in 2011. Thirdly, national government published a review of waste policy in England in 2011, and finally the way that performance is measured is changing; with an increasing focus on measuring the carbon emissions associated with our activities and seeking to reduce these over time.
- 3.2. In 2005/06 Oxfordshire's households produced around half a tonne of waste per person. Around 33% of this waste was recycled or composted, the rest was sent directly to landfill. The 2006/7 JMWMS set out how Oxfordshire councils were going to manage our waste over the next 25 years and improve our recycling performance. It identified the future challenges, the need for change and set out our shared vision for the future.
- 3.3. Since agreeing the JMWMS Oxfordshire has:
 - Introduced new waste collection schemes that collect more recyclable and compostable materials from the kerbside and expanded recycling facilities at HWRCs,
 - Built food waste processing plants so that food waste from every household in the county no longer has to go to landfill, but is instead used either to make compost or to generate green electricity,
 - Signed a contract to build an Energy from Waste (EfW) facility at Ardley to manage our non recyclable waste and recover value from this waste through electricity generation.
- 3.4. In 2011/12 OWP councils recycled or composted over 60% of household waste. We now produce less waste per person than any other County Council in England. Our recycling rates continue to improve, making Oxfordshire one of the highest performing areas in the country. The targets set out in the JMWMS have been achieved earlier than expected. Recycling and composting levels have exceeded expectation and OWP councils are ambitious to do more; reduce waste further, recycle more and send less waste for disposal.
- 3.5. The JMWMS commits to regular reviews in order to ensure that it remains current and its policies are relevant. As part of the 2012 review we have evaluated the progress that has been made so far and consulted on our plans and priorities for continual improvement across the county.
- 3.6. A public consultation on a draft five-year review of the JMWMS was undertaken in the summer of 2012. This updated strategy document includes changes made in response to the public consultation findings. The detailed consultation findings and accompanying management response can be found at: http://tinyurl.com/6ytw63d



4. EU Waste Framework Directive

- 4.1. The European Union Waste Framework Directive was transposed into national law in March 2011. There are three key developments for OWP resulting from this:
 - The waste hierarchy (shown in figure 1) is now law and all waste producers must have regard for the waste hierarchy when managing their waste.
 - A national waste prevention plan must be developed by 2014, increasing the importance of waste reduction activity.
 - All waste producers (including councils) must have recycling services in place for glass, metals, paper and plastics by 2015.
- 4.2. In 2010/11 OWP approved a county wide Waste Prevention Strategy, four years before required under EU law. The strategy, already in implementation, details how we will encourage residents and businesses to reduce the amount of waste that they produce. This strategy embeds the waste hierarchy within our activities, helping us to comply with the Framework Directive.
- 4.3. All District Councils now provide opportunities to recycle a wide range of materials at the kerbside, or through bring banks and are continually looking to expand the range of materials accepted. Those District councils that collect commercial waste now offer recycling services to their customers. OCC have a dedicated Commercial Waste Reduction Officer who assists business to identify where they can reduce and recycle more of their waste.



Figure 1: Waste hierarchy



5. National Review of Waste Policies

- 5.1. National Government published its review of waste policy and plans for a zero waste economy on 14th June 2011 following consultation with local government, industry and members of the public. This JMWMS review seeks to ensure that the refreshed Oxfordshire JMWMS remains aligned with government policy and objectives.
- 5.2. Oxfordshire is well placed to incorporate the national review findings. We already:
 - Prioritise waste prevention, and produced an updated waste prevention plan in 2010/11;
 - Collect waste regularly and have good levels of public satisfaction;
 - Have high levels of recycling and composting that exceed the EU target of 50% by 2020;
 - Realise the benefits of Anaerobic Digestion with a long term contract and facilities in place;
 - Recognise the role of Energy from Waste within the context of the waste hierarchy,
 We are aiming for zero waste to landfill with an EfW plant due to open in 2014;
 - Work with local businesses to reduce waste and increase recycling collections;
 - Take a common sense approach to environmental enforcement, pursuing only serious or persistent offenders.
- 5.3. The national review set out plans for voluntary responsibility deals with a number of industry sectors to reduce waste. OWP will seek to participate and support these where appropriate. Agreements are being developed with:
 - Hospitality sector
 - Paper manufacturers
 - Direct Marketing industry
 - Textiles industry
 - Construction industry
 - Packaging industry
 - · Waste management companies.
- 5.4. The government's review stated that "the public have a reasonable expectation that household waste collections services should be weekly, particularly for smelly waste." In September 2011 the Department for Communities and Local Government backed this statement with the announcement of a £250 million fund for local authorities wishing to retain or reinstate weekly residual refuse collections. OWP will lobby against a return to weekly refuse collections as these will result in a decrease in recycling & composting levels and consequently increased landfill and financial cost. OWP will argue instead for funding to be targeted on improving recycling and composting collection services.



5. National Review of Waste Policies

- 5.5. The national review did not set out any new landfill diversion or waste recycling targets, the EU waste Framework Directive recycling and composting target of 50% by 2020 being the only target set out. This is despite the governments in Scotland and Wales setting more ambitious recycling targets of 70% by 2025.
- 5.6. The most significant development within the national review is perhaps the abolition of The Landfill Allowance Trading Scheme (LATS) from 31 March 2013. This follows the reclassification of municipal waste to bring it in line with the broader European definition.
- 5.7. LATS is a permit trading scheme whereby WDAs are set limits on how much waste they can landfill each year up to 2020. The limits are set so as to ensure that the UK meets its obligations under the EU Landfill Directive. WDAs are able to trade LATS permits with others in order to help them meet these annual targets.
- 5.8. Under the revised definition, more commercial and industrial waste falls within the scope of the EU landfill directive; yet LATS deals only with local authority controlled waste. Government accepts that LATS is a burden on local authorities, but not private companies who also collect the wider definition of municipal waste. LATS is no longer considered a necessary or appropriate way of meeting the UK's obligations under the Landfill Directive.
- 5.9. Abolishing LATS removes a barrier to local authority involvement in the collection of commercial waste, potentially improving the choice of waste management options available to businesses. OWP councils will aim to provide advice and appropriate services to local businesses to help them reduce waste. OWP is committed to high standards of customer service and will sign up to the Business Recycling and Waste Services Commitment announced in the national review and developed by the Waste and Resources Action Programme (WRAP).



A number of developments since 2006/7 impact upon the costs of implementing the JMWMS:

6.1. Landfill Allowance Trading Scheme

6.1. The abolition of LATS in 2013 removes the prospect of financial penalties of up to £150 per tonne for exceeding landfill allowances. However, it also removes the opportunity of trading LATS permits (i.e. selling any surplus permits to other waste disposal authorities that need them, or buying permits in any years where Oxfordshire may have otherwise exceeded its allowance). Ending LATS will make budgeting easier. The value of LATS permits varied with market forces and was difficult to predict. Accurately forecasting waste arisings can also be difficult, so coupling uncertain waste tonnage predictions with estimated future LATS values made for challenging budget setting conditions for councils.

6.2. Landfill Tax

- 6.2.1. Landfill tax is to have a ceiling level of £80 per tonne by 2014/15 although no further measures were added to this existing commitment by the national waste review. Landfill tax is now the main fiscal instrument encouraging the diversion of waste from landfill. In 2011/12 landfill tax, set at £56 per tonne, cost Oxfordshire County Council over £6 million, an increase of around £3 million since 2006/7.
- 6.2.2. Total expenditure on landfill tax has increased despite overall waste arisings within Oxfordshire having dropped since 2007. Added to this, increased recycling and composting levels have meant that there has been a sharp decrease in the amount of household waste sent to landfill. This has helped reduce the financial impact of the escalating landfill tax rate, but it still remains a significant proportion of the costs of waste management.



6. Costs

6.3. Reduced Public Spending

6.3. Local Authorities are undergoing a period of challenging austerity measures. Local authority budgets are expected to reduce by 28% by 2014/15. OWP remains committed to working collaboratively to manage costs. We will do this through:

- Embedding the waste management hierarchy in our work: reducing the amount of waste produced and maximising reuse, recycling and composting in order to avoid expensive and less sustainable waste disposal options.
- Joint procurement of contracts and goods in order to gain best value for money.
- Recognising waste materials as a resource, and seeking to maximise income received through the sale of recyclables
- Working jointly to avoid duplication, share effort, resources and best practice.
- Developing innovative and creative cost saving solutions whilst protecting front line services

6.4. Climate change

- 6.4.1. The positive environmental impacts of waste prevention and increased recycling have long been realised. However, there is now a greater focus on (and growing understanding of) greenhouse gas emissions (such as carbon dioxide, methane and other greenhouse gasses) associated with waste management activities. Every Local Authority in Oxfordshire is compiling annual green house gas reports outlining their annual emissions. Reducing emissions helps reduce the impact of climate change and measuring the carbon impact of our activities has become more important. Landfills are large emitters of methane, a greenhouse gas 21 times more polluting than carbon dioxide. By reducing the amount of waste that we send to landfill we are helping to reduce the carbon footprint of our activities.
- 6.4.2. We have already made significant achievements in reducing our carbon emissions, for example West Oxfordshire District Council have reduced their fleet carbon emissions by 17%, leading them receiving the Energy Saving Trust's Best Public Sector Fleet award in 2011.
- 6.4.3. The OWP Waste Prevention Strategy set out carbon emissions information associated with some of our waste prevention activities for the first time. These are home composting, food waste avoidance and junk mail avoidance.
- 6.4.4. OWP will increasingly seek to use carbon accounting to support our decision making. This will mean measuring wherever possible the carbon savings resulting from our work. We will seek to prioritise activities that offer the greatest carbon reductions.



7. Key Achievements: 2006/7 – 2011/12

7.1. OWP has:

- Reduced the amount of household waste generated by 8%
- Increased the amount of household waste recycled and composted from 38.5% in 2006/07 to over 60% in 2011/12
- Reduced the amount of household waste sent to landfill from 61.4% in 2006/7 to 38% in 2011/12
- Obtained more than £1 million in Performance Reward Grant from Government and worked collaboratively to reinvest funds in new waste management services (through the establishment of the OWP New Initiatives Fund).

7.2. Waste Reduction

7.2. Helping people to reduce the amount of waste that they produce is a key priority. Since 2006/7 we have helped reduce the total amount of waste generated by 8% through providing advice and information on topics such as food waste avoidance (through the Love Food, Hate Waste campaign), smart shopping, home composting and reuse. Compared with other counties in England, Oxfordshire performs very well; our residents produce a lower amount of waste per person than any other county. Reducing waste not only saves councils money as there is less to collect and dispose of, but also helps to reduce carbon emissions from landfill and preserves natural resources used in manufacturing products.



7. Key Achievements: 2006/7 – 2011/12

7.3. Waste Recycling and Kerbside Collections

- 7.3.1. Oxfordshire has raised its recycling rate from 33% to over 60% in just 6 years. This tremendous performance means that we have already exceeded our existing target to recycle 55% in 2020.
- 7.3.2. To reach these remarkable recycling rates, Oxfordshire's District Councils have all made substantial changes to their collection schemes, collecting food waste from every house in the county, expanding the range of recyclable materials collected at the kerbside and collecting residual waste on an alternate weekly basis. In 2011/12, each of our District Councils were amongst the top 125 (out of 353 councils in England) for recycling and composting in England and three councils were in the top 10. This excellent kerbside performance is combined with performance at the county council HWRCs. In 2011/12 Oxfordshire County Council as WDA had the highest recycling and composting rate of any county council in England.

7.4. Reducing Landfill

- 7.4.1. By promoting waste reduction, reuse, recycling and composting, we have reduced the amount of waste that we sent to landfill each year from 199,686 tonnes in 2005/06 to 105,957 tonnes in 2011/12 (a reduction of 93,729 tonnes). Landfills produce carbon which can contribute to global warming and they need looking after for many decades after they are full. OWP want to continue to reduce the amount of residual waste produced and recycle and compost as much as possible, before sending the remainder for energy recovery.
- 7.4.2. New district waste collection systems have been introduced alongside new waste treatment facilities. All Districts have let new waste services contracts helping to increase recycling rates and reduce costs. Some districts have partnered with their neighbours and introduced a shared officer structure realising further savings.
- 7.4.3. Significant investment in new waste infrastructure has occurred in the last five years. Since 2006/7 we have opened an In-Vessel Composting plant at Ardley and an Anaerobic Digestion facility at Cassington to process household food and green waste from within the county. A second AD plant is under construction near Wallingford. Oakley Wood HWRC has also been fully refurbished. We have signed a contract to build an EfW plant in Ardley that will be able to take all of Oxfordshire's residual waste and when operating to capacity will produce enough electricity to power some 38,000 households.



7. Key Achievements: 2006/7 – 2011/12

7.5. Partnership Working

7.5.1. Many of the achievements set out above have been made possible through the stronger partnership working arrangements established by OWP. By working together, OWP councils were able to agree Local Area Agreement improvement targets with government. OWP was awarded more than £1 million for meeting these targets, which was subsequently reinvested by the partnership to deliver key objectives within the JMWMS. The fund was used to support the development and roll out of new food waste collection services, the provision of recycling services for flats and the development of commercial waste recycling services. The funding also supported early trials for innovative schemes such as on-street recycling bins and WEEE recycling banks; projects that have subsequently been rolled out across the county.

7.6. Commercial Waste Management

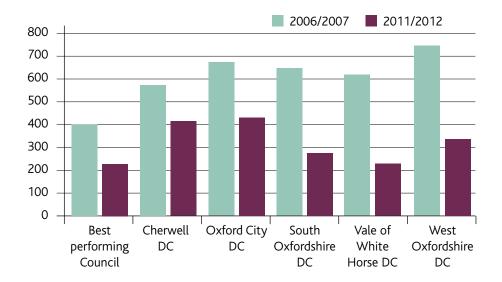
- 7.6.1. The terms "trade waste" and "commercial waste" are used interchangeably by local councils to describe waste from businesses. To help businesses manage their waste in accordance with the hierarchy, those districts that provide a commercial waste collection service are now able to collect recyclables as well as residual waste. Commercial recycling services were introduced with the help of OWP funding and now operate in Cherwell, Oxford City and West Oxfordshire.
- 7.6.2. We have provided free of charge waste audits to over 800 businesses, providing detailed information on how they can reduce waste and increase recycling, leading to a potential 60% reduction in waste arisings and an average saving of around £1000/business. OWP has also run networking and information events for different sectors, providing information on legislation and greener ways of working. We have also launched a reuse website (retrader.org.uk) to allow local businesses to reuse unwanted items and assisted groups of businesses to use bulk buying networks to obtain better value.
- 7.6.3. Oxfordshire is one of the few authorities in the country to have a commercial area at one of its HWRCs, allowing local businesses and sole traders to pay to use the local facility to deposit and recycle waste. To prevent abuse of the household areas of sites we have introduced a van and trailer permitting scheme for householders. By reducing the amount of business waste being illegally deposited as household waste, this scheme has resulted in significant savings. It has allowed us to engage with those businesses misusing the site, enabling us to provide them with information and advice on how to comply with legislation.



8. Performance benchmarking

8.1. Chart 1 shows how OWP councils have managed to reduce the amount of residual waste produced per household (measured in kg). This is a useful measure as areas of different population sizes can be compared equally. The chart shows that OWP councils produced between 572kg/household/year and 745kg/household/yr in 2006/7. This is much worse than the best performing English council at the time (which produced 399kg/household/yr). On the same chart we can see our performance in 2011/12; we have reduced the amount of waste being produced per household dramatically, and one district (Vale of White Horse District Council) now has the lowest rate in the country. OWP councils now produce between 238kg/household/yr and 419kg/household/yr.

Chart 1: Total residual waste produced per household (kg)





8. Performance benchmarking

8.2. Overall (including waste deposited at HWRCs) Oxfordshire County Council is now ranked top with only 409kg residual waste/head produced, 44.99kg less than the second placed WDA. Table 1 shows that the achieved reductions in household residual waste levels have improved OWP councils ranking when compared to all other English councils. All District Councils have made significant improvements, with Vale of the White Horse improving by 117 places; making it the lowest producer of residual waste per household in England.

Table 1: Total residual household waste per household national ranking			
Authority	2006/2007 National ranking	2011/2012 National ranking	Improvement
Cherwell DC	73	38	+35.0
Oxford City DC	164	43	+121.0
South Oxfordshire DC	128	2	+126.0
Vale of White Horse DC	118	1	+117.0
West Oxfordshire DC	235	11	+224.0

8.3. Chart 2 compares the total tonnage of household waste collected for recycling, reuse and composting by OWP Councils for both 2006/07 and 2011/12. All districts are now collecting much higher tonnages. Cherwell District Council has improved upon an already high tonnage collected in 2006/07, whilst changes to collection systems in other districts have also led to improvement. South Oxfordshire District Council has seen the largest increase.

Chart 2: Tonnage of Household waste collected for reuse, recycling or composting per annum



8. Performance benchmarking

8.4. Chart 3 sets out the improvements made to District Council recycling rates (%) over the last five years. Huge improvements have been made, with four of the five districts now recycling more than 50%, These improvements have also enhanced positions within the national league tables with all councils making big improvements. This is shown in Table 2.

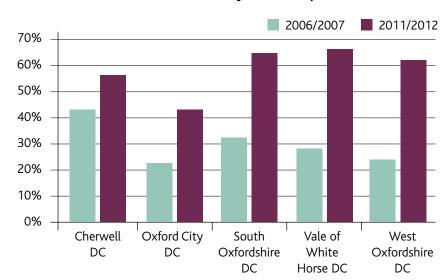


Chart 3: % Household waste reused, recycled or composted

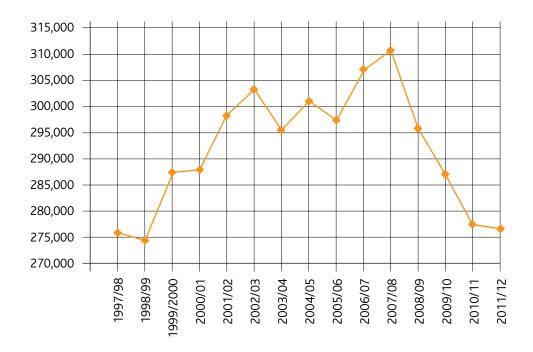
Table 2: National ranking % recycled, reused or composted			
Authority	2006/2007 National ranking	2011/2012 National ranking	Improvement
Cherwell DC	27/319	18/319	+9
Oxford City DC	261/319	124/319	+137
South Oxfordshire DC	119/319	2/319	+117
Vale of White Horse DC	174/319	1/319	+173
West Oxfordshire DC	209/319	8/319	+201
Oxfordshire CC	13/39	1/39	+12



9. Waste Tonnage Forecasting

9.1. It is important to try and predict the amount of waste that will be generated during the lifetime of the strategy so that we can plan for its management. Chart 4 plots total household waste arisings over the last 10 years. This shows that historically, waste levels increase over time. Waste generation is influenced by growth in the number of households and also by economic growth. The last few years have seen a sharp year on year decrease in waste, which is now levelling out. It is believed this is linked to the wider economic recession. However, greater resource efficiency is also playing a part.

Chart 4: Total Household Waste (Tonnes)

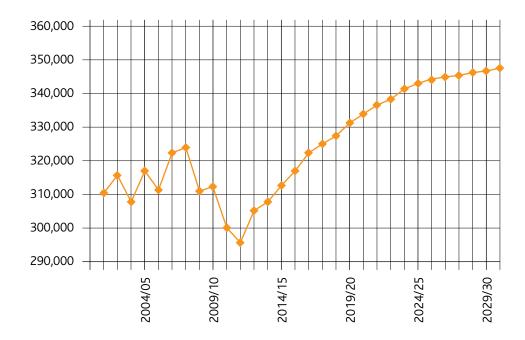




9. Waste Tonnage Forecasting

9.2. Chart 5 sets out forecast waste arisings through to 2030. Early indications are that after several years of continual waste reduction, we will see a small rise in waste arisings in 2012/13. From this point forward we have predicted 0% growth per household, but with overall waste levels increasing due to growth in the number of houses within the county. Waste arisings are notoriously difficult to predict, as they are influenced by a number of external factors, including the wider state of the economy. Therefore, we will seek to regularly update our forecasting information over the life of the strategy.

Chart 5: Total Municipal Waste





10. Elements of the JMWMS

- 10.1. The JMWMS consists of a "core strategy" document, detailing the key objectives and policies, and two supporting Annexes
 - Core Strategy Document This sets the scene and outlines the main policy objectives to be achieved.
 - Annex A Oxfordshire Waste Partnership Action Plan. This document is updated
 and agreed by the Partnership yearly and details the short and medium term
 actions needed to ensure the delivery of the policy objectives.
 - Annex B —Waste Prevention Strategy 2010-2020. This details where we will focus
 our efforts over the next decade and how we will demonstrate the impact and
 'value for money' of our activities.
- 10.2. In 2007 a number of additional Annexes were produced which assessed various different options for recycling and composting collections, residual waste treatment and how we were going to engage residents in making decisions. As changes have now been implemented, these documents have been archived, but are still available to view on our website (www.oxfordshirewaste.gov.uk). A full Strategic Environmental Assessment was also completed in 2007, and this, along with a review of the success of mitigation measures can also be found on the OWP website: http://www.oxfordshirewaste.gov.uk/wps/wcm/connect/occ/OWP/Home/About+us/OWP+-+About+us+-+4+Strategy.



11. Policy 1

Oxfordshire Waste Partnership will encourage the efficient use of resources, reduce consumption and take responsibility for the waste that they produce.

11.1. Progress to date (2006/07-2011/12):

- 11.1.1. OWP councils have improved the way in which waste from their own activities and premises is dealt with. Waste audits have shown that District Councils are now recycling 65% of the waste from their own buildings compared to 46% three years ago and have reduced overall levels of waste by over 40%.
- 11.1.2. The County Council has reused over 39 tonnes of office equipment and furniture from decommissioned buildings by making it available to local businesses and charities, saving them over £132,000 in procurement costs. We are looking to reduce the amount of waste produced by council premises and increase the range of materials that can be recycled.
- 11.1.3. OWP offers two free compost bins to schools, along with advice from Master Composters to help them teach their pupils about home composting. OWP provides a wide ranging environmental education service, currently delivered by Groundwork Thames Valley. Groundwork engages with pupils, school staff and local communities on a wide range of waste and energy topics. As well as taking these messages home, pupils are also able to improve the environmental performance of their school.
- 11.1.4. By moving to Alternate Weekly Collections and increasing the efficiency of collection rounds, district councils have been able to reduce vehicle emissions associated with residual waste collection. Development of in-county treatment facilities, such as the food and green waste treatment plants, also helps to reduce distances travelled.



11. Policy 1 continued

11.2. Future plans:

- 11.2.1. OWP will continue to embed the waste hierarchy (reduce, reuse, recycle, recover) and proximity principle in our decision making. We will continue to improve waste reduction and recycling in council operated premises and monitor progress regularly, leading by example whenever possible.
- 11.2.2. Emphasis is shifting; materials can be seen as valuable resources rather than waste. OWP will try to secure the best possible outlet for our wastes. Some ways in which we will do this are by seeking reuse outlets for furniture and electrical goods and by formulating site waste management plans for all major building, landscaping and construction works that we undertake. We will also seek to share our learning with local businesses.
- 11.2.3. We will measure the carbon impact of our activities and contribute towards the 'Oxfordshire 2030' strategy target of a 50% Oxfordshire wide reduction of carbon on 2008 levels by 2030. More information on Oxfordshire 2030 can be found at www. oxfordshirepartnership.org.uk.



12. Policy 2

Oxfordshire Waste Partnership will lobby central government to focus on waste as an integral part of sustainable resource management.

12.1. Progress to date (2006/07-2011/12):

12.1.1. OWP lobbies the Government directly on legislative changes and policy developments. It responds to relevant government consultations and also writes to Government on issues of concern. OWP officers and partners are members of a number of industry bodies (such as the Local Government Association, Keep Britain Tidy and the Local Authority Recycling Advisory Committee) who work in partnership to influence businesses on national issues such as packaging waste, the quality of the local environment and waste collection systems.

12.2. Future plans:

- 12.2.1. We will continue to support industry bodies in their efforts to influence national issues such as packaging waste and increasing producer responsibility.
- 12.2.2. We will explore the opportunities presented by the Localism Act 2011, such as increasing the role of local community groups in waste reduction and reuse.
- 12.2.3. We will lobby to retain enforcement powers, used appropriately, to ensure the proper presentation of waste for collection by householders and businesses. This will enable us to maintain and improve our recycling rates whilst ensuring that streets remain clean and free from accumulations of waste.
- 12.2.4. We will lobby to stress the importance of waste audits and compositional analyses in order to obtain good quality data to inform waste collection policies and identify materials to target for recycling.
- 12.2.5. Whilst devolved administrations have set targets to achieve 70% recycling and composting by 2025, the 2011 Waste Review by Government did not increase the English National Recycling targets. OWP believe that England should also set more challenging targets and will lobby government to increase these along with appropriate resourcing.
- 12.2.6. OWP believes that alternate weekly residual collection combined with a food waste collection from every household is the most effective way of helping residents to waste less and recycle more. We will resist any change to return to weekly residual collections which we believe will lead to a decrease in the amount of waste sent for recycling and increase waste disposal costs.



12. Policy 2 continued

- 12.2.7. OWP will develop policies to implement the Controlled Waste Regulations (CWRs) 2012, so that all premises are encouraged to reduce waste and recycle more. The CWRs set out local councils responsibilities for collecting and disposing of waste from various premises such as:
 - Schools, colleges and universities
 - Hospitals
 - Residential and nursing homes
 - Prisons
 - Public halls
 - Charities

The CWRs 2012 allow for waste disposal costs to be recovered by local authorities from a wider range of premises than was previously the case.



13. Policy 3

Oxfordshire Waste Partnership will help households and individuals to reduce and manage their waste in order to ensure zero growth or better of municipal waste per person per annum.

13.1. Progress to date (2006/07-2011/12):

- 13.1.1. Household waste arisings have decreased by 8% over the last 5 years.

 Communication campaigns have included 'Love Food, Hate Waste', which promotes food waste avoidance, home composting, real nappies and zero waste places. Our highly successful Community Action Groups (CAGs) have diverted large amounts of material from landfill through holding regular swap shops and have helped communities to become more sustainable in a way that works for them. We have a wide ranging environmental education programme for schools that covers waste reduction reuse, recycling, landfill and disposal as well as energy conservation and green technologies. The programme visits schools and community groups across the county. For more information on all of these schemes, please see www. oxfordshirewaste.gov.uk
- 13.1.2. District Councils have all changed their collection schemes to make it easier for households to recycle a much wider range of materials. Each district has introduced food waste collections and moved to alternate weekly collections for residual refuse.
- 13.1.3. A number of HWRCs have been remodelled since 2006; improving site lay-out and expanding the range of materials that can be recycled.
- 13.1.4. These improvements are reflected in the massive increase in Oxfordshire's recycling rate from 33% to over 60% countywide.
- 13.1.5. Household waste levels have decreased by more than 10% in the last five years.

 While the changing economy will have an impact on this, Oxfordshire's residents have embraced the waste reduction message and we now produce a lower amount of waste per head than any other County Council in England.



- 13.2.1. We will continue to support residents in their efforts to reduce waste through our waste prevention strategy and environmental education programme. We will support national campaigns and seek to be part of innovative projects that assist residents in reducing their waste even further. We will help to facilitate recycling wherever possible at public events. Additionally all districts now have on-street recycling systems in place which we will continue to develop so that residents can recycle when out and about.
- 13.2.2. We will continue to encourage reuse through a new, dedicated reuse and sustainability centre in Bicester. We will also provide information to the public about local charity and reuse shops and support local communities who wish to exchange goods locally. We will continue to explore opportunities for the reuse of materials collected at the county's HWRCs.
- 13.2.3. We have developed and will continue to promote an A-Z listing of all the goods and materials that can be reused and recycled in Oxfordshire. This guide includes detailed listings for all the County's charity shops and reuse organisations.
- 13.2.4. We will continue to support local community action on waste reduction through the CAG project. The CAG project is a network of more than 44 local community groups taking action on climate change and waste reduction to protect the environment.
- 13.2.5. We will also help to promote wider environmental awareness that is complimentary to our work, such as sustainable travel, water conservation and energy efficiency.
- 13.2.6. OWP will continue to produce an annual communications plan setting out how we will contact and engage with Oxfordshire residents on sustainable waste management issues. We will continue to use more established media such as roadshow events, press releases, leaflets, newspaper and radio ads, but will also seek to engage with residents online through websites, email and social media. We will continue to monitor our communications work to ensure that it is both effective and value for money.



Oxfordshire Waste Partnership will provide an integrated system of collection and processing of household waste which will achieve, as a minimum:

By 31st March 2020: recycle or compost at least 65% of household waste;

By 31st March 2025: recycle or compost at least 70% of household waste;

14.1. Progress to date (2006/07-2011/12):

14.1.1. Through the tremendous efforts of Oxfordshire's District Councils in introducing effective recycling collections, and the dedication of residents in using these new services, in 2010/11 we achieved the county wide 55% recycling and composting target that we were aiming to reach by 2020. We then continued to improve on this in 2011/12 by recycling over 60%. This is a significant achievement in what appeared in 2006 to be a very challenging target. Our current county wide performance of 60% is 17% higher than the national provisional estimate recycling rate for 2011/12 of 43%.

- 14.2.1. Under the EU Waste Framework Directive, The United Kingdom is obligated to achieve a 50% recycling and composting rate for household waste by 2020. The devolved administrations in Scotland and Wales have set national recycling targets of 70% by 2025. There are currently no recycling targets for local authorities in England. However, with some Oxfordshire districts recycling and composting over 60%, we want to continue to challenge ourselves and improve on our already high performance.
- 14.2.2. We will continuously seek to expand the range of materials that can be recycled locally. New materials that have been added recently include waste electrical and electronic goods, batteries and mattresses.
- 14.2.3. We will ensure that all collected materials are of good quality and free from contaminants. This will ensure that the materials can be recycled into new products and that lower grade, less environmentally sustainable applications, are avoided wherever possible.
- 14.2.4. We will publish the end destinations of all of the materials we collect so that people can see where materials are sent for recycling. We will update this information at least annually.
- 14.2.5. We will try to make recycling systems easy to understand and to use. We will adopt national branding and recycling symbols, and wherever possible we will seek to develop recycling services that are broadly consistent across the county.
- 14.2.6. We will avoid fining residents for minor waste related offences such as putting out the wrong materials for recycling and will instead encourage people to reduce waste and recycle more. We will explore the development of incentive schemes that reward residents for recycling. However, we will continue to take enforcement action against individuals that persistently breach the law or carry out more serious offences.



Oxfordshire Waste Partnership will ensure that recycling facilities and services are available to all residents.

15.1. Progress to date (2006/07-2011/12):

- 15.1.1. We have sought to ensure access to kerbside residual and recycling collections for all households and are continuing to roll-out recycling services to flats. District Councils all offer a bulky waste collection service so that those residents unable to take materials to a HWRC are able to safely and legally dispose of them.
- 15.1.2. The new kerbside collection schemes have expanded the range of materials that can be recycled; these are supplemented by a network of local recycling banks in each district. The range of materials that can be recycled at HWRCs has also been extended, with recycling rates at HWRCs currently reaching 70%.

- 15.2.1. Recycling and food waste collections from flats will continue to be rolled out over the short term, ensuring that as many households as possible have access to these services.
- 15.2.2. OWP partner councils aim to ensure an uninterrupted schedule of waste & recycling collections for residents. During periods of severe weather we will use a range of methods to communicate with residents and keep them updated of any interruptions to collections, as well as working with Highways departments to keep roads accessible. We have robust catch-up plans in place for times where services are unavoidably affected by the weather. We will continue to contribute to emergency plans to ensure that waste management services are available to residents following other emergency events such as flooding.
- 15.2.3. We will try to ensure that recycling banks are located in easily accessible places and can accept a wide range of materials, including those that are not widely collected at the kerbside (such as small electrical goods) and we will work to recycle more of the bulky waste collected directly by District Councils. Where education and enforcement measures are unsuccessful, sites that are continually prone to abuse and fly tipping may be removed in order to protect the local environment and reduce disposal and clean up costs.
- 15.2.4. The implementation of our HWRC strategy is monitored on an on-going basis and the need for changes to the strategy will be kept under review. The underpinning aims of the HWRC strategy, aim to locate modern, fit for purpose sites centres near to centres of population. We will continue to investigate outlets for materials, aiming to recycle as much of the material deposited at sites as possible. We will support reuse facilities and work with charities to repair and refurbish materials for resale where possible.
- 15.2.5. We will also investigate the possibility of establishing staffed 'recycling and reuse only' sites in more rural areas of the county where householders are able to take larger items (such as fridges, TVs and green waste) for recycling, but these sites will not accept residual waste.



Oxfordshire Waste Partnership will encourage businesses to reduce, reuse and recycle by providing good quality recycling services, information and advice.

16.1. Progress to date (2006/07-2011/12):

- 16.1.1. Around 800 waste audits have been provided to Oxfordshire businesses to help them identify where they can reduce waste, increase recycling and save money. We have also initiated a pilot business waste recycling bring site at Monument Park, Chalgrove to establish the demand and feasibility of such facilities.
- 16.1.2. Cherwell District Council, Oxford City Council and West Oxfordshire District Council have introduced recycling collections for commercial waste customers. The separate collection of food waste from Small and Medium Size Enterprises is currently being trialled within Oxford City, with project funding secured from Remade South East. A commercial waste recycling area is currently provided at one HWRC and we hope to open further HWRCs to businesses in the future.
- 16.1.3. 'Re-trader', an online materials exchange for businesses has also been established where unwanted goods can be exchanged with other companies and voluntary groups. The site also provides information to businesses to enable them to dispose of their waste legally.



16. Policy 6 continued

- 16.2.1. A new Business Recycling and Waste Services Commitment has been developed by the Waste and Resources Action Programme (WRAP) to help local authorities improve the satisfaction of business customers with how their rubbish and recycling is collected and ultimately boost recycling rates. Our commitment to quality will be demonstrated through signing up to this service standard which focuses on:
 - Making recycling easy
 - Providing value for money
 - Consulting on and clearly communicating services.
- 16.2.2. OWP will continue to work with businesses to help them reduce the amount of waste that they produce and increase the amount that they can recycle. We will seek external funding and look to be part of pilot projects that can offer businesses opportunities to improve their environmental impact and reduce their costs.
- 16.2.3. We will monitor usage of the Retrader on-line materials exchange through 2012/13. We will also engage with local businesses on the development of a reuse and sustainability centre that is being planned in Bicester. This facility may benefit from the donation of goods from local businesses that can be reused.
- 16.2.4. Those district councils that collect commercial waste will look to introduce additional material streams making it easier for companies to increase their recycling rate and ensuring compliance with the EU Waste Framework Directive requirement to separate at least paper, metal, plastic and glass from the municipal waste stream (i.e. local authority collected waste) by 2015.



Oxfordshire Waste Partnership will minimise waste to landfill and recover energy from non-recyclable waste through the operation of the Ardley Energy from Waste facility. We will seek to landfill no more than 5% of non-recyclable household waste.

17.1. Progress to date (2006/07-2011/12):

- 17.1.1. The Landfill Allowance Trading Scheme (LATS) is a regulatory mechanism designed to reduce the amount of biodegradable waste that councils send to landfill. In order to meet our targets and avoid fines, Oxfordshire has opened two food waste treatment plants and has procured an EfW plant to recover value from any residual waste. The EfW plant is due to open in 2014/15
- 17.1.2. In its 2011 waste review, Defra abolished LATS with effect from 2012/13, acknowledging that other factors were encouraging recycling and diversion from landfill. Whilst Oxfordshire no longer needs to meet LATS targets, the EU Landfill Directive targets for the UK as a whole remain in place, restricting the amount of waste that the country as a whole should landfill. Government continues to discourage landfill through a landfill tax, which will reach £80 per tonne by 2014.
- 17.1.3. Landfill void is the term used to describe the remaining capacity at landfills; as more waste is deposited the void space decreases. England has limited landfill void space, through waste reduction and increased recycling we have helped to preserve landfill void within Oxfordshire.
- 17.1.4. Oxfordshire's planned increase in reuse capacity as well as our high recycling rate emphasises our commitment to the waste hierarchy and to only recovering energy from non recyclable waste. The EfW plant will reduce our dependency on landfill even further preserving void space.



17. Policy 7 continued

- 17.2.1. We will continue to divert material away from landfill, driving materials up the waste hierarchy and contribute to the achievement of EU landfill directive targets that the UK must meet. We will do this through implementing our waste prevention strategy, working to increase reuse capacity and by maximising the capture rates of our recycling and composting collection systems. All residual waste (that can be processed by EfW) will be treated at the Ardley facility once it is opened in 2014, a facility that when operating to capacity will produce enough energy to power 38,000 homes. Residual waste treatment will result in Oxfordshire achieving what the Government describes as zero waste. This will mean virtually no untreated municipal waste being landfilled.
- 17.2.2. Contracts for bulking and transfer facilities were signed in January and February 2013 to ensure that District Council collected waste can easily be transferred to the Ardley EfW. These facilities will result in fewer vehicle movements to the Ardley site and will help to ensure that the productivity of District Council collection rounds remains high.
- 17.2.3. As part of the drive to a Zero Waste Economy envisaged by national Government, landfill is the waste management option of last resort. After waste reduction, reuse and recycling has taken place, we will seek to recover energy from waste, aiming to send as little material to landfill as possible. There are some materials that are not suitable for processing in the EfW plant (such as mattresses, settees, PVC doors and windows), and these will be targeted for recycling where possible. We aim to send less than 5% of our untreated residual waste to landfill.



Oxfordshire Waste Partnership will provide waste management services for specialised, potentially polluting material streams such as hazardous waste and waste electrical and electronic equipment, which as a minimum meet legislative requirements.

18.1. Progress to date (2006/07-2011/12):

18.1.1. Household clinical waste is collected by District Councils as part of a dedicated collection round. It is either landfilled or incinerated as appropriate. We have facilities at HWRCs to recycle electrical items, florescent tubes and energy saving light bulbs, hazardous household chemicals, batteries, plasterboard and asbestos. We are also introducing recycling facilities for household electrical items and for batteries at recycling banks across the county. We ensure that there is a clear audit trail and that we know where all of our materials go for reprocessing. OWP has funded Portable Appliance Testing (PAT testing) equipment for use by community groups at swap shops so that good quality electrical items can be reused.

- 18.2.1. The EfW will not be able to process hazardous waste and therefore hazardous waste is likely to continue to be managed separately. District Councils will work with clinical waste service users to ensure that material is correctly classified and segregated to ensure environmentally and cost effective management of the waste. We will also continue to encourage the repair and reuse of electrical items through the planned reuse shops and by providing PAT equipment and training to community groups running swap shops.
- 18.2.2. We will continue to promote the reuse and recycling of electrical and electronic waste materials and will explore the recycling and reuse options for other materials such as printer cartridges.



Oxfordshire Waste Partnership, working with the Waste Planning Authority, will ensure that waste facilities are suitably sized and distributed with the aim of minimising the transport of waste. Facilities will be well related to areas of the population, given the environmental and amenity constraints, and the availability of suitable sites.

19.1. Progress to date (2006/07-2011/12):

19.1.1. Oxfordshire has secured long term contracts to manage our food, green and residual waste, these facilities are capable of managing more than just our household waste. Facilities have been designed to be able to treat waste from commercial and industrial businesses. Due to the high costs of constructing and operating new technologies, larger facilities are often more commercially viable than smaller sites.

19.2. Future plans:

19.2.1. OWP works closely with the Minerals and Waste Planning Team to ensure that Oxfordshire has the capability to treat materials or move them to processing plants. The County Council is preparing a new Minerals and Waste Plan, which will set out a strategy and polices for the location of new waste facilities that are needed in Oxfordshire. While we are fully capable of managing all of our own residual waste, flexibility for recyclate to move into and out of the county for processing will allow more materials to be returned to productive use, allowing greater environmental benefits to be realised. Where appropriate we will encourage businesses to establish themselves within Oxfordshire and increase our capacity to manage our own recycling, seeing environmental benefits by reducing the miles that Oxfordshire's recycling will have to travel.



Oxfordshire Waste Partnership will assist the development of local markets for recovered materials.

20.1. Progress to date (2006/07-2011/12):

- 20.1.1. OWP encourages local reuse and recycling wherever possible to ensure that materials are processed and used locally. We have an extensive network of community led groups focussing on waste reduction and sustainable living; the Oxfordshire CAG project is widely hailed as best practice. OWP also funds a network of "Master Composters" volunteers that promote and encourage home composting in their local communities.
- 20.1.2. OWP promotes local repair and refurbishment outlets and organisations to encourage people to reuse goods locally rather than send them further afield for recycling. We work with local charities such as Emmaus and Orinoco who collect and refurbish furniture and bikes from some HWRCs and we are looking to expand this where possible.
- 20.1.3. For businesses, our 'Retrader.org.uk' website allows them to market unwanted items and surplus goods to others. Outputs from our food and green waste treatment are used by local farmers as a soil conditioner, reducing the need for farmers to purchase expensive, man made fertilisers made using non renewable sources. We promote the purchase of goods made from recycled materials and try to lead by example.
- 20.1.4. Local facilities were encouraged when procuring interim landfill contracts and food and garden waste treatment facilities, with the distance travelled by District Council collection vehicles to treatment facilities forming part of our contract evaluation criteria.

20.2. Future plans:

20.2.1. We will continue to use waste audits to identify materials that could be removed from the residual waste stream. When investigating potential new reprocessors for our materials we will encourage local facilities to tender for our business. To increase reuse capacity within the county we will work with local charities and businesses to repair items for resale. OWP is currently seeking to develop reuse stores in community settings such as Bicester. We are also looking to increase the range of items recycled; with inert waste and mattresses both forming part of a current recycling trial with local reprocessors.



Oxfordshire Waste Partnership councils will work together, with local communities, and with our service providers to reduce the environmental and financial costs of waste management.

21.1. Progress to date (2006/07-2011/12):

- 21.1.1. OWP operates as a statutory joint committee. It is responsible for the development of a JMWMS for Oxfordshire and oversees the implementation of a joint strategy action plan. OWP also delivers a number of functions on behalf of its partner councils, the main one being communications support. This includes the marketing and promotion of waste management services, working with and supporting community groups and overseeing an environmental education programme.
- 21.1.2. By working together, OWP has been able to secure good value, long term services to manage Oxfordshire's waste into the next decade. A strong partnership was central to the recent development of food waste collection and treatment, where all partner councils had to invest in new systems in a coordinated way.
- 21.1.3. South Oxfordshire and Vale of the White Horse District Councils have integrated a large number of services, including waste management; making substantial savings while delivering a new award winning service. Cherwell District Council has partnered with South Northamptonshire District Council to form a shared management structure. West Oxfordshire is working in partnership with Cotswold District Council and all OWP councils are partnering to procure goods and services such as fuel and bins.
- 21.1.4. We have developed a joint environmental education programme with the Environment and Climate Change team at Oxfordshire County Council. This replaces two previously discrete services and allows schools to book a comprehensive green education package for their pupils, covering both waste and energy issues. OWP will increasingly seek to play its part in the development of a low carbon economy within Oxfordshire and will continue to meet jointly with the Oxfordshire Environment Partnership.

- 21.2.1. OWP councils will continue to work together to coordinate our activities making it easier for Oxfordshire's residents to reduce the amount of waste they produce and increase the amount they can recycle and compost.
- 30.2.2. OWP will explore the development of better, more effective partnership working arrangements to improve value for money and service quality. This may include the joint marketing of materials to maximise the income received, or joint contracting to maximise economies of scale and deliver service improvements at lower cost.



Oxfordshire Waste Partnership will seek to improve local environmental quality through effective communications and enforcement activity.

22.1. Progress to date (2006/07-2011/12):

- 22.1.1. District councils are responsible for local environmental quality (LEQ). This includes services such as street sweeping, removing fly-tipping, graffiti and fly-posting, cleaning chewing gum deposits, emptying litter bins and tackling dog fouling. They also have the responsibility of enforcing against these offences and are able to prosecute those caught littering, fly-tipping, allowing their dog to foul, or for the misuse of waste services (for example depositing commercial waste at a HWRC or using household kerbside collections for the disposal of commercial waste).
- 22.1.2. Since the adoption of the JMWMS in 2006/7 OWP has broadened to include the coordination of LEQ issues. Similar to our waste management function, OWP is responsible for the development of joint communications campaigns and sharing information and best practice. Through the collective efforts of OWP councils, levels of fly-tipping have more than halved, whilst over 95% of streets monitored we found to be free or largely free of litter (obtaining grades A or B under the National Indicator 195 reporting framework).
- 22.1.3. We have worked in partnership with highways colleagues in all Districts to overcome litter problems following the cutting of grass verges along fast roads. District Councils and the Highways Authority now work in Partnership to co-ordinate grass cutting and litter clearance efforts. This has improved the cleanliness of major routes throughout Oxfordshire
- 22.1.4. In November 2010 a van and trailer permitting scheme was introduced at HWRCs. Householders owning a van or trailer are asked to register for a permit to allow them to deposit their household waste at site. Businesses are not granted a permit and are referred to sites that can accept commercial waste. Early indications are that this scheme has successfully deterred commercial users, reducing waste at site by around 14% and saving around £250,000 in disposal costs in the first 8 months of operation, without a corresponding increase in fly-tipping.



22. Policy 12 continued

- 22.2.1. District Councils within OWP will work to ensure that litter and dog waste bins are available and correctly situated and we will continue to take enforcement action against those caught committing environmental crimes.
- 22.2.2. We will continue to work with the Highways Agency to ensure that road verges are litter picked before being mown to maintain cleanliness standards.
- 22.2.3. High levels of local litter are often associated with fast food outlets. We will work with national bodies to influence fast food and convenience store outlets, aiming to ensure that high Local Environmental Quality standards are maintained.
- 22.2.4. Oxfordshire County Council will continue the van and trailer permitting scheme, with support for enforcement coming from District Council partners. This scheme reduces the cost to the tax payer by ensuring that HWRCs are not used to illicitly dispose of business waste.
- 22.2.5. OWP will continue to develop promotional and educational campaigns to promote positive behaviour and good local environmental quality. Campaign messages will be developed according to local priorities identified through our monitoring data. These will include campaigns to discourage littering, dog fouling and fly tipping. These were the top 3 priorities identified in our 2012 public consultation on this waste strategy.
- 22.2.6. OWP councils are part of a wider fly-tipping forum and work with neighbouring councils, Thames Valley Police and the Environment Agency to share information and develop best practice on reducing environmental crime.



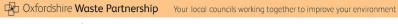
Bodicote House Banbury Oxon. OX15 4AA Tel. 01295 221903 @RecycleForOxon

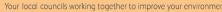
Oxfordshire Waste Partnership c/o Cherwell District Council

Email owp@cherwell-dc.gov.uk **Web** www.oxfordshirewaste.gov.uk

Recycle for Oxfordshire

Oxon Waste Partnership



















Waste Management Strategy 2013

Cherwell District Council Planning and Waste Management Design Advice

Section 1: Background and Purpose

Section 2: Waste Management – Container types

- 2.1. Dry recyclables
- 2.2 Garden waste and food waste
- 2.3 Residual waste
- 2.4 Collection points
- 2.5 Bin stores for flats
- 2.6 Vehicle access
- 2.7 Home composting
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Planning Design Advice

Waste Management (Waste, Recycling and Street Cleansing)

Background and Purpose

The aim of this guidance note is to provide advice for developers, architects and builders on Cherwell District Council's contractual requirements for waste & recycling storage in all new developments. This includes all residential developments, whether conversions or new build, houses, flats, student or sheltered accommodation. These requirements are based on Cherwell's commitment to making the area a cleaner, greener and safer place through the Environmental Strategy, the Community Plan and the Corporate Plan and Improvement Strategy. The guidance will seek to ensure that waste collection, recycling and street cleansing matters are all approached and dealt with in a comprehensive and consistent manner on all future new developments.

Applicants will be expected to comply with the requirements set out in this guidance note and include all the necessary information at the detailed planning application stage.

Under Section 46 of the 1990 Environmental Protection Act the Council can stipulate for any domestic premise the kind and number of waste containers required (including separate containers for recycling waste) and also from where they will be collected.

It is particularly important that the appropriate number and size of refuse containers are provided for developments. Guidance can be obtained from Cherwell District Council Environmental Services before submission in all cases. As part of any pre-application discussion, and/or upon the receipt of a planning application, planning officers are encouraged to bring the requirements in respect to refuse and recycling to the attention of applicants and or development personnel.

Bin storage areas should be a minimum 1.8 square metres per dwelling for houses/bungalows and 1.4 square metres per dwelling for flats or multi occupancy properties.

Where possible, bin storage should be provided externally and within the curtilage of the site. In extreme cases, and only where there is not a suitable external area, an internal bin store may be acceptable.

Within communal bin storage facilities, clear signage should indicate: the day of collection and the implications of not complying with the Environmental Protection Act 1990.

Waste Management - Container types:

Dry recyclables

The council requires a blue 240 litre wheeled bins for a one off cost of £20.00 for all properties.

Dimensions; width 580 mm, height 1080 mm, depth 730 mm

Dry recyclables currently collected are:

- Food tins and drink cans
- Plastic bottles and containers
- Newspapers, magazines and directories
- Paper and card
- Aerosols

Garden waste & Food Waste

The council requires a brown 240 litre wheeled bin for a one off cost of £20.00 for all properties. This bin will be used to collect garden waste and food waste as well.

Dimensions; width 580 mm, height 1080 mm, depth 730 mm

Garden waste currently collected:

- Grass cuttings
- Plants & leaves
- Prunings
- Pet straw & sawdust

The provision of recycling and garden waste containers, as well as making recycling as easy as possible for residents, is part of Cherwell's commitment to increasing recycling and reducing the amount of waste we send to landfill.

Residual waste

The council requires a green 180 litre wheeled bin for a one off cost of £20.00 for all properties, for residual waste.

Dimensions; width 480 mm, height 1080 mm, depth 725 mm

Some large families may be entitled to a larger residual bin.

The waste currently collected in the residual bin is:

- Kitchen waste,
- Nappies
- Plastic bags
- Cling film
- Polystyrene

For new developments it is strongly recommended that developers supply a collection point space large enough for several containers for each waste service. Larger properties should have additional space provided to account for larger containers that may be required.

Each new household will require an equivalent area of three 240 litre wheeled bins. These containers, or their current contemporaries, will only be collected from the front of the property adjacent to the public highway. Where there are steps on the property special considerations should be made in regards to moving the bins on and off the property. Smaller bins are available for small families and elderly people.

It is recommended that an area is provided close to the kitchen area to house the waste containers whist waiting for the collection day. If the containers are stored to the rear of the property, there should be either side access or a rear service path to allow containers to be brought to the front of the property. Distance and physical capabilities of the expected residents should be taken into account when designing this solution. Under no circumstances should waste containers be expected to be carried or wheeled through a property.

For developments of over 10 dwellings, the bins should be bought and available by the developer for the residents, under 106 Agreements.

Collection Point and Bin Storage

Both refuse, recycling and garden waste collection are an 'edge of private property service'. This means that they are collected from a point on the edge of a property, or if there is no suitable point on the edge of the property, a point just inside the boundary of a property

Waste and recycling storage should be built into the property where there is no garden or private area distinguishable from the public footpath or end of curtilege of the property. (In all cases it would be recommended that these forms of developments be avoided).

For all developments, a clear division between waste and recycling should be maintained. The base area of the collection points should be solid paving with the enclosure surrounding being of planting or building materials aesthetically beneficial to the development and therefore should be designed to the same quality as the main development. The enclosure needs to be over 1.5 metres high. Facing doors are recommended but not essential, as primarily the function of the enclosure is to screen the bins and to allow for a neat and universal solution for service provision. Where driveways are provided, developers shall consider the location of collection points to make sure that a vehicle driver's view is not obstructed from or onto the access road.

Where a centralised collection point is required in dense developments or in terraces, residents should have suitable access for their refuse and recycling to be carried or wheeled from the storage point to the centralised collection point. Such a route should not entail the need for walking through the house to take materials from the rear of the property to the kerbside.

The Council will not collect waste or recycling if this involves driving over a private road. Residents living in properties situated on private roads will be required to carry or wheel their refuse and recycling to the nearest public highway. This can lead to an accumulation of materials which looks unsightly, particularly where materials are put out early for collection and left for a number of days. (This is illegal under the Clean Neighbourhoods Act 2005).

Where private roads are unavoidable, design guidance will always indicate a separate waste and recycling collection area immediately adjacent to the public highway. These should be planned in such a way as to minimise the travelling distance for residents, and so that both the collection crew and the resident have suitable pedestrian access to the refuse and recycling collection point. Gravel and other non-constituted surface materials are not deemed as suitable for the movement of wheeled or carried containers and should therefore not be used within a development where such containers will need to be wheeled or carried.

In all dense developments where a lack of manoeuvre space for vehicles or absence of road access is planned, a communal refuse and recycling area will be considered following the guidelines for flats.

Bin Stores for Flats:

Where blocks of flats are proposed, waste collection should be through the use of communal collection containers or through provision of individual bins held in a communal location.

Communal bins stores should not be provided for groups of houses unless (as explained above) they are serviced by a private road. Communal bins should be housed ideally in a secure storage area and the following issues should be taken into account: -

- stores should be no more **than 5 metres** from the kerbside or point where the vehicle would stop (vehicle access has to be proven rather than assumed)
- to provide sufficient space for residents to deposit their waste, a minimum of 1m must be provided in front of the containers
- to provide sufficient space to remove the bins to empty them, a minimum of 150mm must be provide between and around containers

- where more than one bin is to be placed in a storage area, the bins must be positioned so
 that they can be easily accessed without users having to move other bins. In short they must
 not be ranked or more than one deep
- a door or gate of a minimum opening of 1600mm should also be provided. Smaller doors for residents use can be provided in addition to this requirement
- doors should open outwards, but not over the public highway or parking spaces
- a path leading from the kerbside to the bin store should be provided, with a minimum width of 1.5m. The path should be level or a gentle slope and should not contain steps
- stores should not be behind gates or security barriers that would prevent them being emptied
- the structure must be robust enough to withstand everyday use
- stores should not be behind designated parking bays or require the movement of containers past or through legally parked cars
- communal bin compounds should be far enough away from housing units so as to reduce the impact of noise during bin use and collection but sufficiently close for easy use.
 Eliminating the need for collection vehicles to reverse will also assist in keeping noise to a minimum
- dropped kerbs should be provided
- a block of four flats/apartments need an enclosed bin storage area with a foot space of 3m by 2m to accommodate the waste and recycling containers. Developers are asked to pro rata this up or down dependent on the size of the development
- glass collection banks should have the following amount of space allocated for installation of 3 containers:

This photo illustrates a good practical layout. The choice of materials and design will depend on site conditions and location.



Points to be considered:

- large doors for bin removal and should open outwards
- close to pavement not too far to move bins, but not opening directly onto highway.
- store at front of properties/accessed from public highway.
- entrance to store not blocked by car parking spaces.

Vehicle Access

The current domestic waste and recycling vehicles are 26 tonne GVW (Gross Vehicle Weight) and their turning requirements should be taken into consideration.

Street layout design should ensure that such vehicles have suitable access and can get to within 5m of the kerbside collection points for all properties. On all developments, collection vehicles will not be expected to have to reverse more than two complete vehicle lengths. This means that turning circles or turning points will have to be provided with restrictions on parking at collection points. Road structure should be equivalent to that of a main highway and suitable, where necessary, to carry the weight of a fully laden collection vehicle. Rumble strips and block pavers are not suitable at junctions or any other location where a collection vehicle would be expected to turn. Manholes and other utilities covers should be sited away from the road where possible. If locating these covers within the road is unavoidable, they should be designed to withstand in excess of the maximum GVW of our collection vehicles.

Home Composting

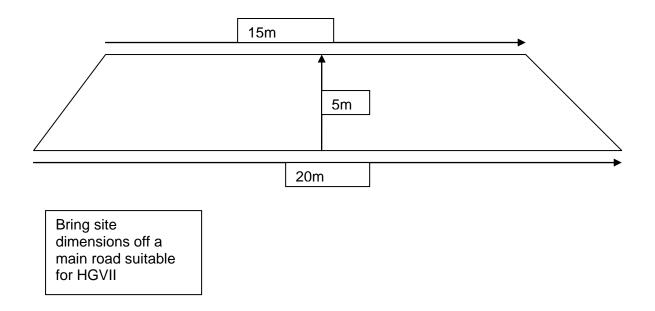
The Council encourages residents to compost their own garden waste at home and is promoting the sale of reduced-price home composters.

Developers should give thought to garden layouts and should allow space for home composting bins or heaps. **Developers should provide 330litre home composters for properties at their own cost and show their inclusion in planning submission**. Consideration should be given the different requirements for different garden sizes.

Recycling Banks

To complement the kerbside collection of paper, cardboard, cans and plastic the Council provides recycling banks for glass. However in developments of 100 residential properties or non-residential developments over 1000m2 gross floor area, developers should make provision on site for a glass recycling bank to complement the kerbside collection. On larger residential developments, above 100 properties, a complete range of banks (brown, green, clear glass, and textiles for non-profit) should be provided. To minimise vehicle movements, banks should be provided at key locations such as schools, shops and open spaces within developments. The off-road area required for a bring site is:





Street Cleansing

Provision of Litter Bins

Where residential developments contain public open space or retail units, developers will be required to provide litter bins and recycling bins. The number, type and location should be agreed with the planning authority, waste management team. Similar provision may also be required on non-residential developments.

Road Adoptions

Where roads are to be adopted as public highway the Council strongly urges developers to work towards early adoption. The longer roads are left unadopted the greater the chance that debris and weeds will accumulate. This results in a greater cost to developers, to get the areas up to an adoptable standard, and a greater cost to the public purse in maintaining these areas after they are adopted. New developments that have not signed S38 agreements at the time of handover to new owners will not, in the majority of cases, receive a kerbside collection. Residents will have to deposit their waste at the nearest adopted road.

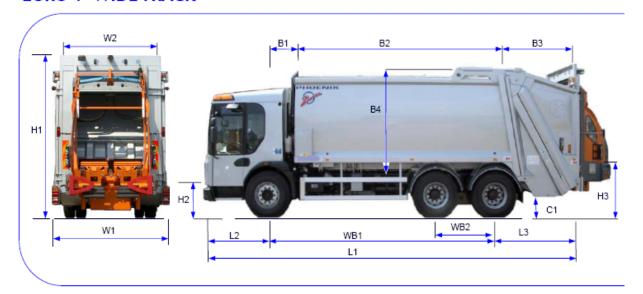
Once the adoption process has begun, residents will be entitled to a kerbside collection during the application. However, street cleansing activities cannot be carried out until the adoption process is complete.

Further Information

For further information on the issues covered by this guidance, please contact Environmental Services (Ian Upstone) on 01295 227003.

Phoenix 2 Series - Smooth Body RCV **EURO 4 - WIDETRACK**

6 x 4 Wide



Vehicle Model		Phoenix 2-18W 6x4	Phoenix 2-20VV 6x4	Phoenix 2-23W 6x4
Compacting Body volume (m²)		19.45	22.20	24.07
		Elite 2 6x4	Elite 2 6x4	Elite 2 6x4
Chassis type				
Maximum GVW (kgs)		26000	26000	26000
Unladen weight - no options (kgs) (a)		12720	13180	13280
Front axle Plated Weight		7100 kgs *	8000 kgs	8000 kgs
Rear Bogie Plated Weight		19000 kgs	19000 kgs	19000 kgs
WB1	Wheelbase	4750	5300	5600
WB2	Axle 2 to 3	1385	1385	1385
TWB	Theoretical Wheelbase	4200	4670	4840
L1	Overall Length (excluding binlift)	8490	9090	9390
	Overall length - tailgate raised	9620	10220	10520
L2	Front overhang	1665		
L3	Rear overhang	2125		
	Rear overhang - tailgate raised	3255		
W1	Overall width	2530		
W2	Width inside hopper	2200		
H1	Overall height at exhaust tip	3500 (nominal)		
	Overall height - tailgate raised	5050		
	Overall height - at RCV body	3420		
H2	Floor height (inside cab)	790		
H3	Manual loading height - open-back	1050		
B1	Axle 1 to front of RCV body	650		
B2	Body floor length	4660	5260	5660
B3	Tailgate length	1515		
B4	RCV body height from chassis	2455		
C1	Ground Clearance - Rear unladen	410		
	Approach angle	15.5°		
	Departure angle		16°	
	Turning Circle - metres (b)	16.5	18.9	19.9

NOTE: Unless otherwise stated, all dimensions are nominal, in mm and represent an unladen condition. All specifications are subject to manufacturers tolerances. An allowance of +/- 2% should be made for all weights. All weights are in kgs and include AdBlue, 50 litres of fuel, oil and water. Additional equipment may after dimensions and weights quoted. Weight data is based on Volvo D7E 290 bhp engine and Allison MD3000 series gearbox.

For 4 and 5 man crew seat versions, add 100kg to weight. Typical bin-lifting equipment will add up to 900kg

Turning circles quoted are kerb-to-kerb with standard tyres, for wall-to-wall figures add 1600mm.

* In open-back form front axle plating at 8000kg required with 315/80R 22.5 tyres. # Optional Cycle guards shown for illustration purposes only







APPENDIX D

ESTIMATED TONNAGE PER UNIT FROM EMPLOYEE WASTE

Unit No	Estimated Number of Employees	Employees Waste per annum (T)
1	1113	223
2	908	162
3	236	47
4	270	54
5	284	57
6	133	27
7	376	75
Total	3320	645