



Councils Working Together

Zero waste to landfill

Marten Gregory Recycling Team Leader
Wessex Energy & Environmental Management Group meeting
29 January 2018 - Blandford



 recycle for Dorset

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Introduction

- DWP
- Recycle for Dorset collection service
- Quantities of household waste
- Cost of waste
- Household campaigns
 - Right stuff right bin
 - Slim your bins
- Where does it go
- Zero waste to landfill
- Commercial waste services

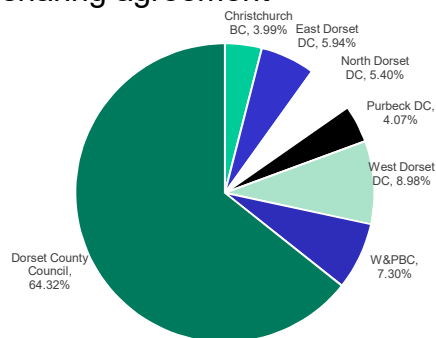
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Dorset Waste Partnership

6 district and borough councils plus county council
Governed through a joint committee (councillors)
Supported by a joint commissioning group (officers)
£33m budget (17/18) – cost sharing agreement

Dorset Waste Partnership	33,066,600
Waste Disposal	15,264,474
Operations	12,828,298
Capital Charges	1,826,750
Management & Admin	4,159,576
Garden Waste	-614,300
Trade Waste	-314,198
Container Charging	-84,000



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What we do

All waste-related services on behalf of the 7 partners:

- Rubbish collection
- Recycling (including garden waste)
- Household recycling centres (HRCs)
- Mini recycling centres
- Waste treatment and disposal
- Street cleansing
- Education/awareness
- Closed landfills
- Enforcement

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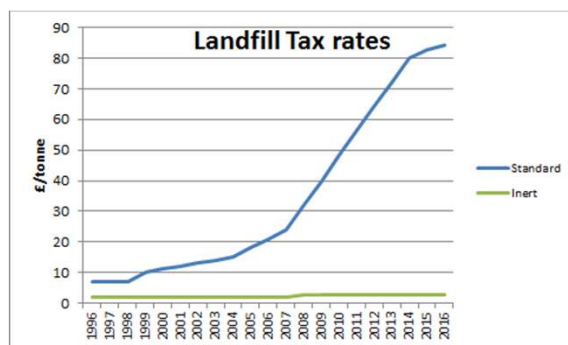
'recycle for Dorset' achievements

- Adoption uniform collection service - replaced 12 different systems (inc 3 different food collections)
- Roll-out of 'recycle for Dorset' to 200,000 households
- Doubling of recycling
- £3.3m annual saving (16/17)
- Overall 59.4% recycling rate (16/17)

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Key driver for reducing waste to landfill



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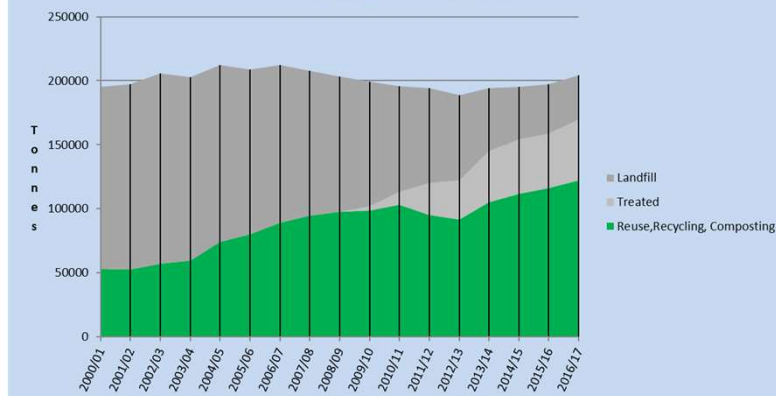
Cost of dealing with waste

Gate fees	1 tonne diverted from rubbish saving	1% rubbish saved*	5% rubbish saved*	10% rubbish saved*
Residual (cost p/t: £95-£110)				
Avoided waste (prevention)	£95 - £110	£62k - £72k	£311k - £360k	£622k - £720k
Recycling (cost / income p/t £20 cost to £8 income)	£75 - £118	£49k - £77k	£230k - £385k	£491k - £772k
Food (cost p/t £35-£45)	£60 - £65	£39k - £43k	£196k - £213k	£393k - £425k

*Based on kerbside collected rubbish
65,435 tonnes (Oct14 – Sept15)

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DWP Household Waste Recycling And Disposal



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Right stuff, right bin campaign

- Wider campaign
 - Right stuff, right bin brand
 - £1m message



If we all put the right stuff in the right bin, we could save up to £1million per year for essential public services



Now it's easier to contact Dorset Waste Partnership.

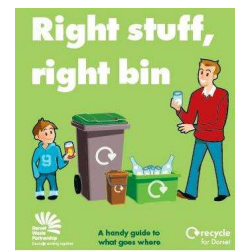


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Right stuff, right bin campaign

Literature



Only this stuff goes in your recycling bin



Only this stuff goes in your food bin



Only this stuff goes in your box for glass



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Area campaigns - RSRB

Somerford, Christchurch – 2,000 properties

Leigh Park, Wimborne – 700 properties

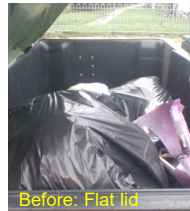
February – March 2016

Recycling communal bins
contaminated - 38/41 collected
as rubbish (Somerford)

Contaminated recycling
cost: £13,570 per year
(disposal and additional
Operations costs)

Campaign cost
(predominantly replacement
bins) : £17,613

Return on investment
after 15 months



Before: Flat lid



After: Aperture lid



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Rubbish bin sticker and tag 'intervention'



**No food
waste please**

Thank you for using your food recycling bin.
This helps to make savings for essential public services.



dorsetforyou.com/food-waste

recycle
for Dorset

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Food Waste – Social media



Facebook 'no food waste' advert
Weymouth & Portland area
Over 2 weeks from 8 May 2017:

- 8,881 people reached
- 34,341 local impressions
- 244 link clicks
- 11 page likes
- 29 comments
- 6 shares
- 62.8% women, 37.2% men
- Strongest demo: 25-34



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Slim your bins campaign



Feline overwhelmed by junk mail?

Reduce addressed mail by registering with the Mailing Preference Service (MPS)

Only get the mail you want and need! mpsonline.org.uk



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Junk mail – supermarket roadshow



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Household recycling performance

DWP Recycling and composting rate

- 2014/15 56.7%
- 2015/16 58.5%
- 2016/17 59.4%
- England rate: 44.9%

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Where does it all go?

'Dry' recyclables - delivered to one of a number of DWP transfer facilities.

Material is bulked up and sent directly to reprocessors (eg glass) or for further sorting at a Materials Recycling Facility (MRF) eg Shotton MRF*, North Wales.

*



"Approximately 99% of all materials sorted at the Shotton MRF remain in the UK, with 80% of them travelling only a few miles to be reprocessed."

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Paper and Cardboard

These material are separated from the material mix with the use of mechanical screens (ballistic separators) designed to sort out two dimensional and three dimensional materials.

Paper and Cardboard then get reprocessed at the UPM Shotton Mill into new products.



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Plastics



Near Infra Red Technology

This is used to separate mixed plastics. Each Polymer reflects a unique level of light intensity which allows various plastic types to be removed from a conveyor into individual streams



Once separated these plastics are chipped and pelletised for use in moulding new plastic products.

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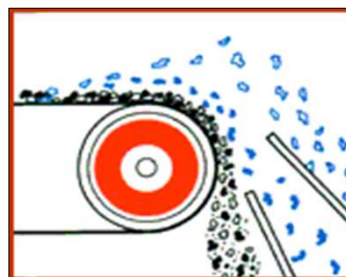
Cans

Separating Steel from Aluminium



Steel cans are separated from the material mix with the use of magnets operating over conveyors.

Aluminium cans become magnetised when passed through a magnetic field allowing them to be extracted from the mix. This is known as eddy current separation



Cans are melted down and reprocessed into more cans or aluminium ingots

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- Optical sorting to separate various colour fractions
- Down to 10mm.
- Majority will go to re-melt
- Recycled into new glass bottles and jars.
- Brown/green to Europe

Food Waste - Anaerobic Digestion (AD)



Piddlehinton

- Breaks down the waste in the absence of oxygen
- Biogas - used to generate electricity, for local businesses
- Heat - maintain the temperature in the digester
- Digestate - applied to farm land as a fertiliser



Green Waste



- Treated via windrow composting – Hurn
- Shredded and blended
- Laid out in rows
- Regularly turned to introduce oxygen to the compost

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Rubbish



Historically much of Dorset's waste went directly to landfill. The introduction of new service aims to avoid this method of disposal where possible.

Environmentally and financially this is the most unsustainable method of dealing with waste.

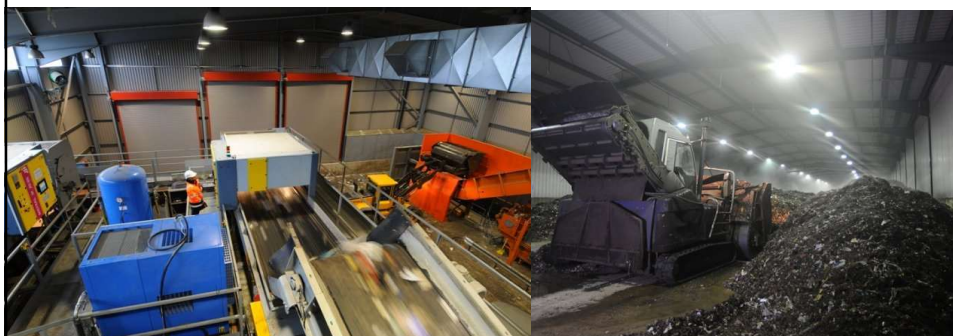
The DWP has contracts with landfill providers.

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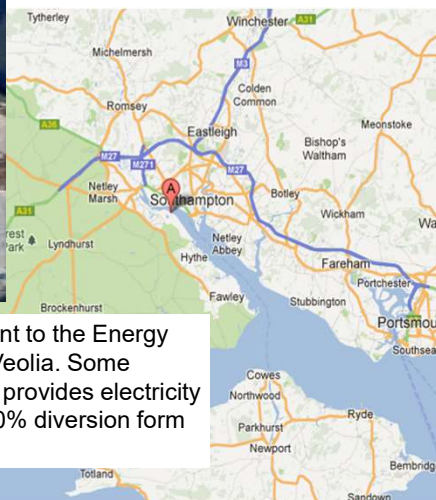


Rubbish - Mechanical Biological Treatment (MBT)

At least 30,000 tonnes per year of rubbish from Dorset is treated at the New Earth Solutions MBT plant. This process extracts recyclables people have missed and composts any remaining organic matter. Some materials extracted from this process are sent for energy recovery and typically the plant achieves 95% + diversion from landfill.



Rubbish - Energy From Waste

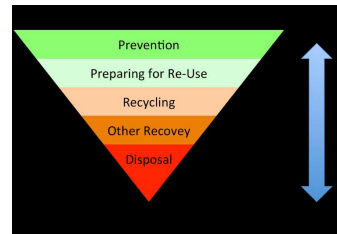


At least 10,000 tonnes of rubbish per year is sent to the Energy from waste plant in Southampton operated by Veolia. Some metals are extracted for recycling and the plant provides electricity for 20,000+ local homes. This plant achieves 80% diversion from landfill.



Zero waste to landfill

In February 2011 the Waste (England and Wales) Regulations introduced the legal requirement for organisations to apply the waste hierarchy when dealing with waste. This means organisations must take all reasonable steps to prevent and reduce waste and where waste does arise demonstrate that they have dealt with it in the most environmentally friendly way possible



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Commercial waste

- Provide waste and recycling services to Dorset businesses
- The commercial services we provide are:
 - Rubbish collections
 - Recycling collections
 - Glass collections
 - Food waste collections
 - Street sweeping
 - One off events
 - (Weymouth Seafood Festival & Melplash Show)
- 35 dedicated commercial waste & recycling rounds per week
- 281 domestic rounds where commercial customers can be collected on



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Commercial waste

- We provide commercial waste, recycling, glass and food waste services across all of Dorset (not including Poole and Bournemouth)
- We offer collection frequencies from daily to 4-weekly
- Key results from our December 2016 satisfaction survey
 - 94% customer satisfaction rate
 - 81% of our customers agree that our services offer value for money
 - 95% of our customers would recommend our commercial services

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