

## Landfill Tax and Changes in Waste Management in the UK



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#### Scope





- Birmingham and West Midlands Context
- UK Fiscal and Policy Context ≻Impact of Landfill Tax
- West Midlands waste profile
- The role of the private sector
- Changes in waste management
- Politics and Planning for new facilities

#### Birmingham and West Midlands



## Birmingham and West Midlands



- Populations 5.5 million and an area of 13,000 km<sup>2</sup>
- 14 strategic local authorities responsible for waste management
- 20 smaller municipal authorities responsible for waste collection
- Birmingham metropolitan area is the UK's second largest with a population of about 3.7m and is also the 9th largest metropolitan area in Europe ;
- Specialist manufacturing and service based economy;
- 15% growth expected by 2031

## Birmingham and West Midlands









#### Key Policy Instruments:

- Waste Management Plan for England 2013
- National Planning Policy for Waste 2014
- Landfill tax (1996 onwards)
- Waste (England and Wales) Regulations 2012
- Environmental Permitting (England and Wales) Regulations 2010
- Producer responsibility and waste shipment regulations and other topic-specific policies



- Local (District) authorities responsible for the collection of municipal waste either themselves or by contracting private companies;
- Strategic authorities responsible for providing waste recovery and landfill facilities for municipal waste and for development consents for all waste management facilities;
- Private companies are contracted to provide about 50% of waste collection services and almost all waste recovery and landfill sites. They may also build and operate other facilities for managing business waste on a commercial basis;
- Many strategic authorities have long term, high value contracts with private companies which allow them to pay for expensive new facilities (EfW c. £60-£130 million) which they will then own.



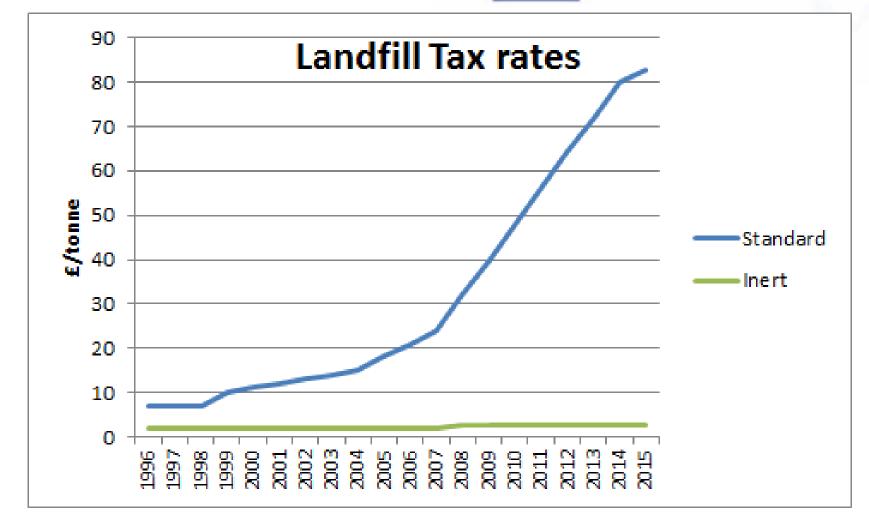
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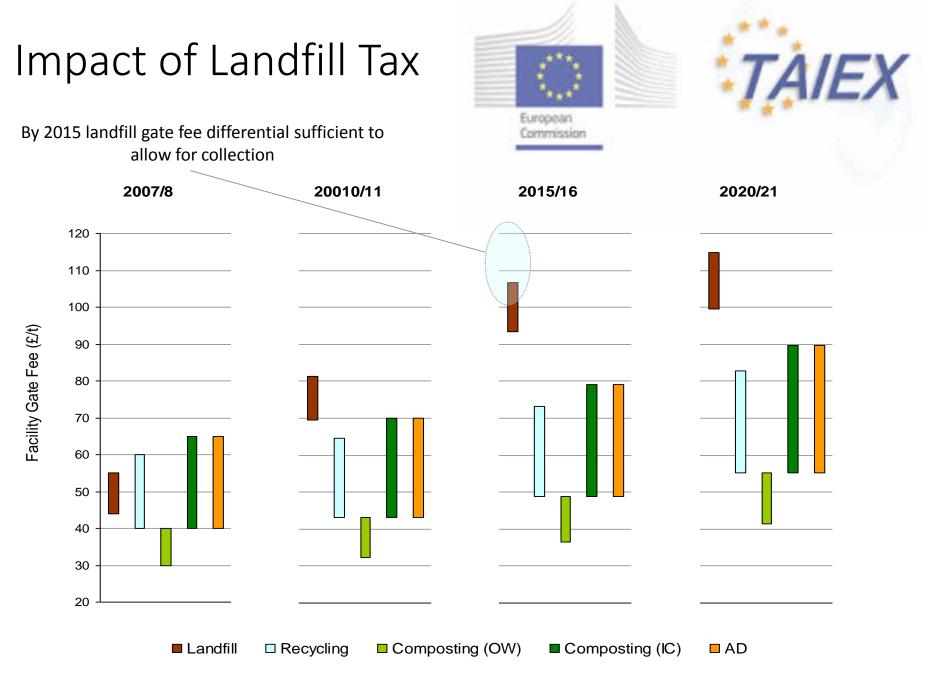
#### UK Waste Regulation

- From 2015, waste collection authorities must collect recyclable materials separately;
- All waste must only be transported by a licensed carrier;
- Waste Permits for all waste recovery and disposal facilities. Air emissions from waste to energy plants are very tightly controlled;
- Strict control and recording of Hazardous waste from production, movement, management, and recovery or disposal;
- Packaging waste regulations (Producer Responsibility);
- Waste shipment regulations control movements of waste between the UK and other countries

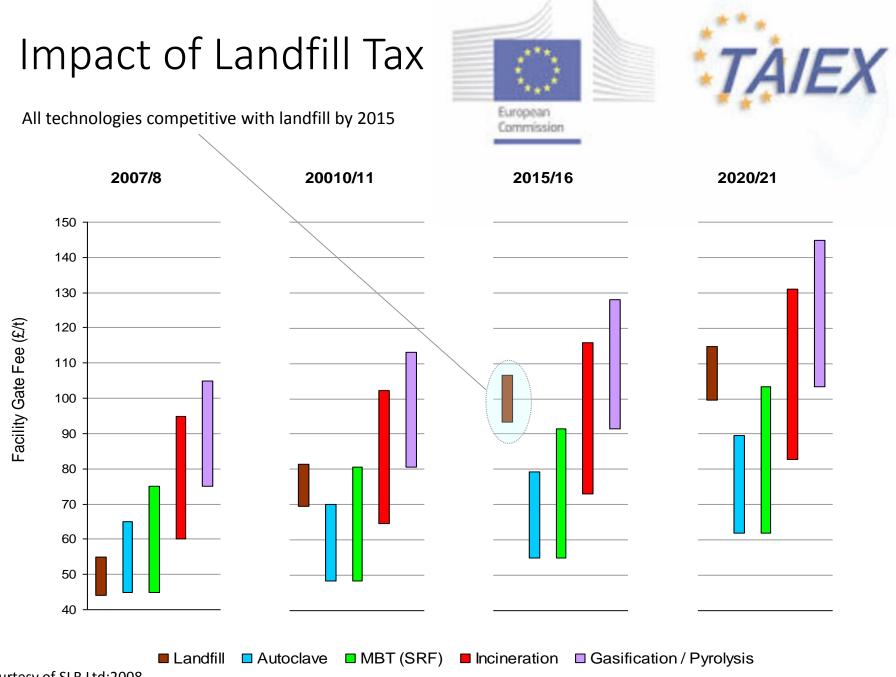






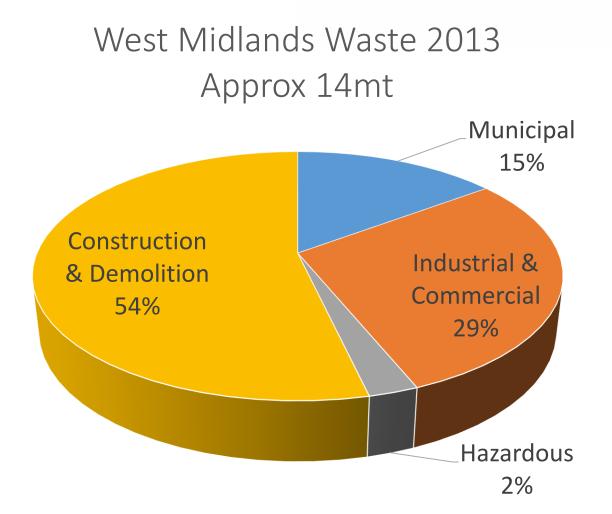


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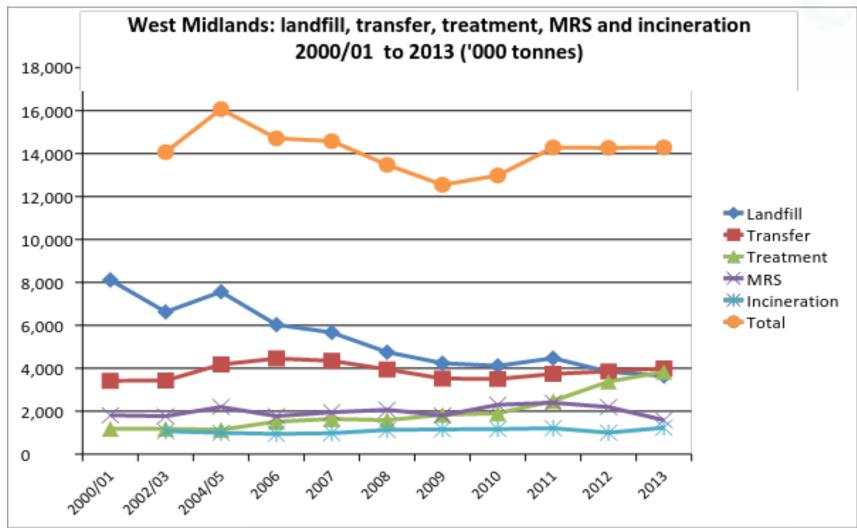






- Waste landfilled halved from over 8m tonnes in 2000/01 to about 4m tonnes in 2010;
- 80% increase in waste inputs to treatment sites (including metal recycling), from about 2.9m tonnes in 2000/01 to over 5.5m tonnes in 2012;
- Incineration increased to 1.23m tonnes in 2013, and new capacity is under construction;
- 53% of waste recovery in the metropolitan area, 63% of landfill in rural hinterland in 2013;







#### Key Issues:

- Region is largely self-sufficient in facilities;
- Significant intra-regional flow of waste;
- 'Industrialisation' of waste: 3.4mt additional 'treatment' capacity required (approx 133Ha);
- Safeguard existing waste processing facilities;
- More intensive use of existing facilities;
- 380,000? new homes needed growth in waste / competition for development land?
- Severe penalties needed to discourage 'waste crime'



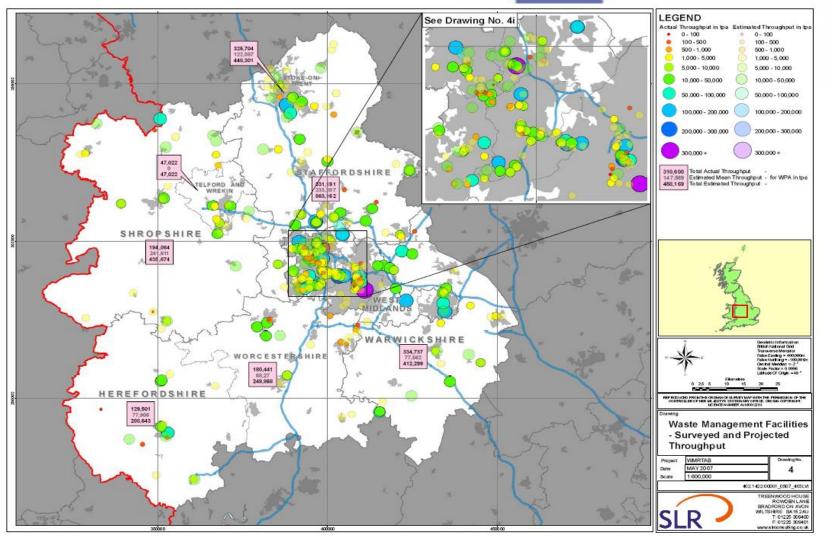


- Recent closure of major landfill site for Birmingham: 'Packington':
  - 2009: 90% waste to landfill;
  - 2015: 50%
  - 2020 projection: 10%
  - Strategy for 'Zero waste to landfill' by 2026
- At peak: 2000 lorry deliveries/day (one of EU's largest);
- 155Ha, 35 million tonnes in all;
- Now Recovery focus:
  - 7MW landfill gas generation;
  - Green waste 50ktpa;
  - Wood Fuel 70ktpa;
- Other facilities: Tyseley Energy Recovery Facility
  - 350,000 tonnes / year
  - 25MW (41,000 Homes)









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The role of the private sector







Biffa





#### shanks. waste solutions.





# The role of the private sector





- Most non-municipal waste (85% of total) managed by private sector;
- Compulsory competitive tendering for municipal waste (Local Government Act 1988);
- About half of municipal waste services now contracted out to private sector;
- Small number of large contractors, many multi-national
- Contract scope / high value / long duration improves affordability, but limits competition;
- Planning and development of facilities is technically complex and expensive;
- Commercial only facilities can be risky municipal facilities provide a stable base for commercial services.

Changes in waste management:

# How it used to be (1980's)







Changes in waste management:



#### Reasons

- Landfill is expensive for waste producers.
  - Tax: April 1996: £7/tonne, April 2015: £82.60
  - Alternatives getting cheaper
- Increased competition from technology change;
- Policy Drivers: Climate change, producer responsibility, green procurement policies, zero waste, circular economy;
- Environmental compliance costs for landfill: post-closure liabilities.

## Changes in waste management: What's replacing landfill?

- Dry recyclables:
- ➤Separate collection(s)
- ≻MRFs
- Food/organics/garden:
- ➢Separate collection
- AD (food/wet: source segregated)
- Compositing (woody/garden: open windrow & IVC)

#### Residual waste:

- ➤Separate collection
- ► MBT (still needs an EfW outlet)
- ≻Fuel (RDF) to EfW
- ≻Landfill









## Politics & Planning

#### Contradictory messages:

 Sustainable waste management vital, we all need it, its modern and well controlled (National Policy Guidance)

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 Waste Management facilities are bad neighbours and everyone should object and expect compensation and handouts if they live near one

#### Naivety?

- Community engagement seen as a 'magic bullet'
- Unrealistic expectations for some technologies and scales of provision
- Rise of the objection "industry" and compensation culture
- Success takes time and money!

#### Conclusions



- Waste under-valued materials which are in the wrong form or in the wrong place;
- Good data is crucial;
- Landfill tax is a key tool;
- Working across sectoral and administrative boundaries is crucial;
- Private sector has a significant role to play;
- Openness & transparency is important to build public confidence in new technologies.