


## Energy from Waste: A policy perspective

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RSC Environment, Sustainability & Energy Division Symposium 14 March 2012  
Energy, Waste & Resources – three sides of the same coin ?




## Introduction

- Why is waste so important?
- Government's role and ambition
- Energy from waste policy



## Why are we all so interested in waste?

- Excessive or poorly-managed waste leads to:
  - environmental damage
  - the loss of valuable resources that could be put to better use
  - health risks (hazardous wastes)
- Biodegradable wastes:
  - ending up in landfill produce methane, a powerful greenhouse gas (hence both domestic carbon budgets and EU landfill directive limits)
  - can be a source of renewable energy (anaerobic digestion, biogenic fraction of mixed waste EFW), contributing to EU targets
- Waste policies affect citizens in their daily lives (and their newspapers):
  - household waste collection, fly-tipping, carrier bags etc
  - public attitudes to incinerators



## Some fundamental concepts of EU (and domestic) law

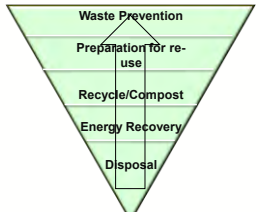
### Definition of waste

'Waste' is material that someone:

- i. does
- ii. is required to, or
- iii. intends to


**discard**

### The waste hierarchy



The waste hierarchy is a pyramid with five levels from top to bottom: Waste Prevention, Preparation for re-use, Recycle/Compost, Energy Recovery, and Disposal.

Once something is 'waste', it is subject to a range of EU and domestic regulatory controls and targets, including being handled in accordance with the waste hierarchy; and it stays 'waste' until it is 'fully recovered'



## Progress over the last decade

- Over 9m tonnes of Local Authority collected waste diverted from landfill since 2000
- Landfill Directive targets met for 2010, on track for 2013 & 2020
- Household recycling rates up from 11% in 2000/01 to 40% now
- 52% of commercial and industrial waste was reused or recycled in 2009, compared with 42% in 2002/3
- 173 authorities are now collecting 5 or more dry recyclables at kerbside
- Average residual waste per person has reduced by 76kg since 2006/07 to 275kg/person/year in 2009/10



## Government Review of Waste Policy in England 2011

- Published June 2011
- Sets out Coalition Government view of waste and resource policies, and the roles of Gov't and other key actors in moving towards a 'zero waste economy'
- Twin themes:
  - a more sustainable approach to the use of materials
  - improving service to households and businesses

While delivering environmental benefits and supporting economic growth



## Energy from Waste (EfW)



- Government supports EfW as part of the waste hierarchy
- Environmental benefits and energy generation
- Aim: Most energy out of waste, not the most waste into it
- Technology neutral - right technology for right fuel



Allington, Kent

## Delivering more energy



- EfW can make a significant contribution to renewable energy targets
- Need to get more energy out of less waste
  - Improving processes
  - Different products
- Look ahead and be adaptable



## Importance for economic growth - the road to a greener economy



- A green economy is one in which value and growth are maximised across the whole economy while managing natural assets sustainably.
- The waste market in the UK accounts for some **0.7% of GDP**.  
(BIS "Less is more": Business opportunities in Waste and Resource Management, March 2010)
- Opportunity is in **the development of new markets for recovered products**
- Government is committed to reducing the burden of regulation

## Going forward



- Waste becoming seen as a valuable but diminishing resource
  - Need to get more value out of waste not more waste in
- Look towards new technologies, processes and products
  - Energy from waste beyond electricity and heat
  - Deliver valuable energy in a sustainable manner
  - Opportunities for growth in a green economy