

Municipal waste composition – looking ahead and anticipating needs

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Where have we come from?

Victorian Times –

over 80% recycling / reuse municipal waste
low volumes of household waste per capita

20th Century

The Public Health Act gave councils the powers to collect household rubbish (cinders)

Clean Air Act (1956) stopped 'DBF' which was increasing in the consumer boom post war



Where have we come from? 2

3rd & 4th Quarter 20thC huge increase in packaging

Decrease in product Longevity ?

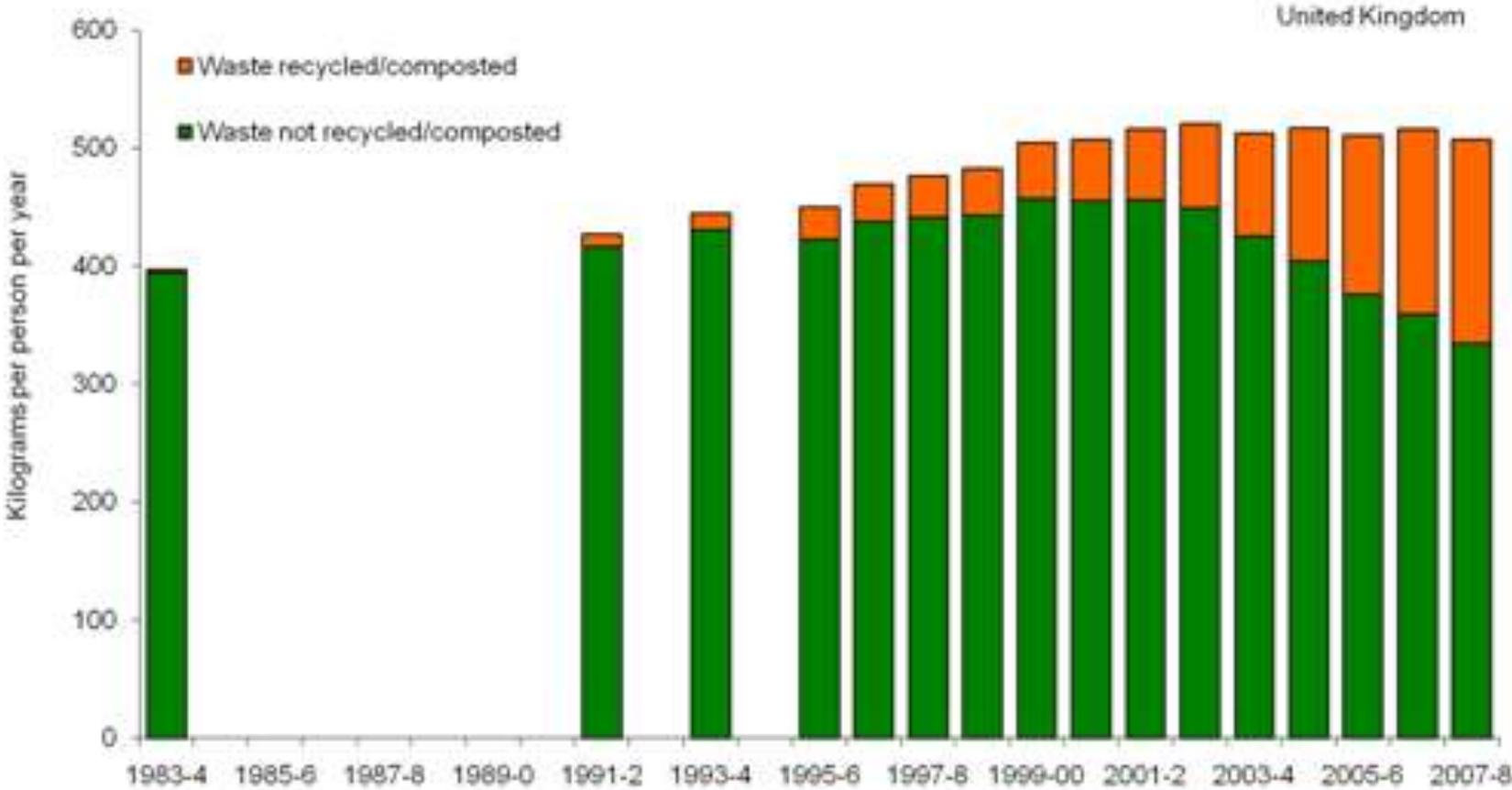
Huge reliance on Landfill – few business drivers to divert

COPA – EPA – EU targets eventually drive the market forward



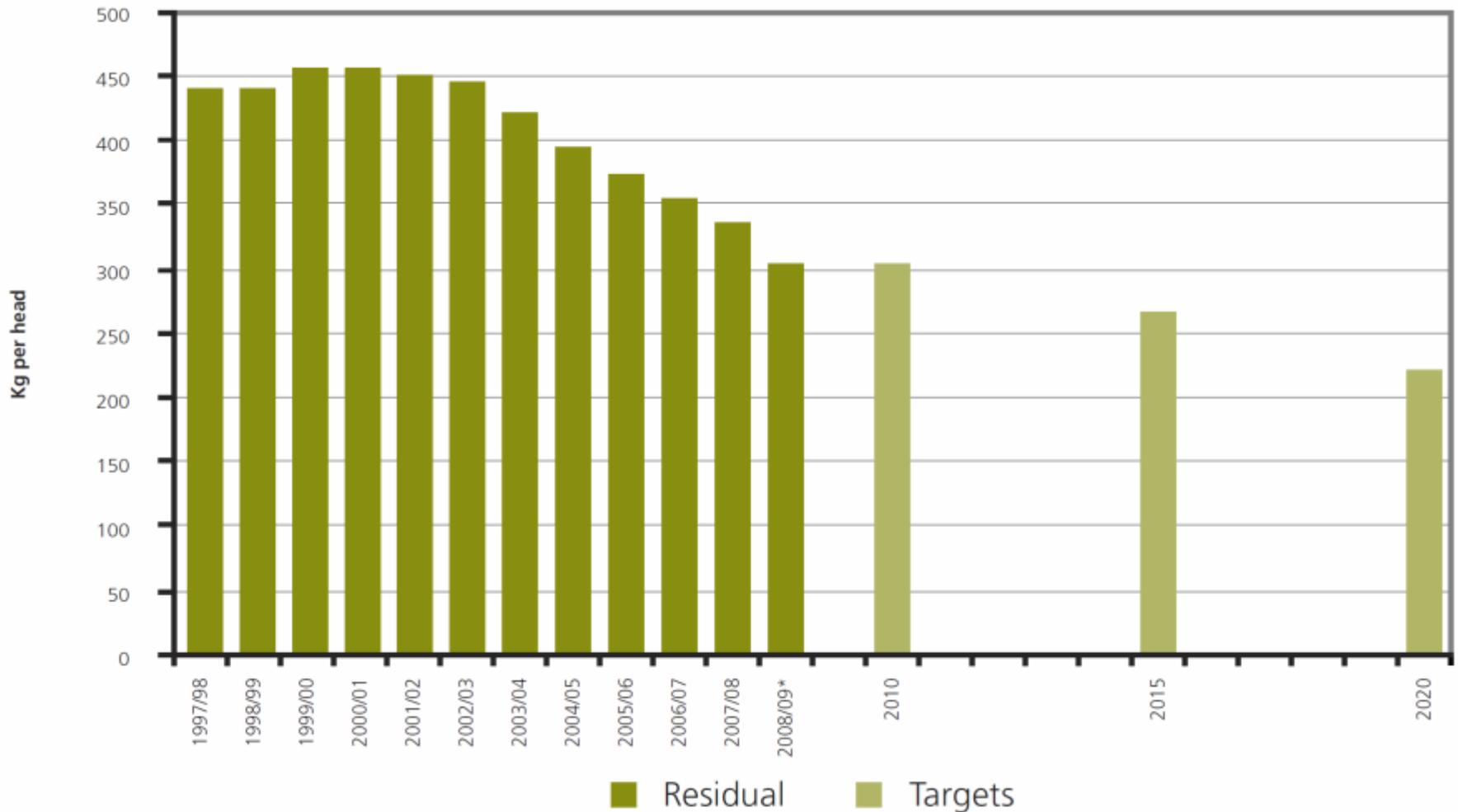
Historical Performance

Household waste and recycling 1983-4 to 2007-8



Source: Defra

Moving Forward



Separation Expertise

	PET	Polyethylene terephthalate - Fizzy drink bottles and oven-ready meal trays.
	HDPE	High-density polyethylene - Bottles for milk and washing-up liquids.
	PVC	Polyvinyl chloride - Food trays, cling film, bottles for squash, mineral water and shampoo.
	LDPE	Low density polyethylene - Carrier bags and bin liners.
	PP	Polypropylene - Margarine tubs, microwaveable meal trays.
	PS	Polystyrene - Yoghurt pots, foam meat or fish trays, hamburger boxes and egg cartons, vending cups, plastic cutlery, protective packaging for electronic goods and toys.
	OTHER	Any other plastics that do not fall into any of the above categories. - An example is melamine, which is often used in plastic plates and cups.

HWRC Streams 2010

Cardboard

Plastic

Waste Oil

Batteries x 2

Printer Cartridges

Scrap Metal

Green Waste

Textiles

Books

Chipboard

Plaster Board

Natural Wood

WEEE x 5

and landfillable



New Technologies

Putrescable Wastes Argument

- In Vessel Composting, AD
- Benefit to landfill
- MBT
- Gassification
- Pyrolosis
- Autoclaving

New Practices

Biodiesel

Electrically-powered Back Body Vehicles

Co-mingled – v – source segregated

MRF Technology

Potential For New Build Projects?



Populations

Initially use the core data from tender stage

Take account of mass changes due to emigration (total UK variance)

Take account of mass changes within the UK ('the drift south')

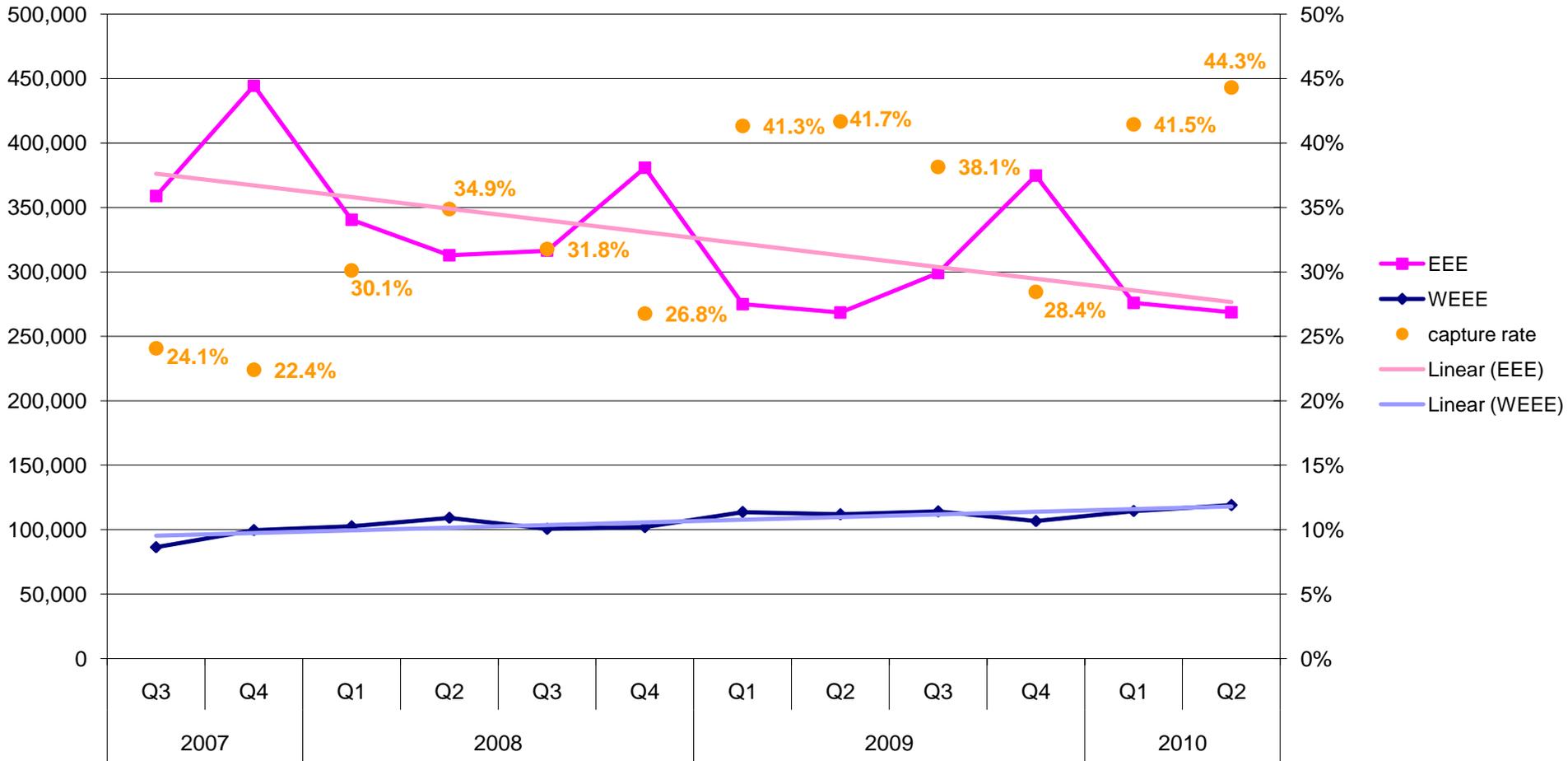
Model requirements accordingly

Population density

The WEEE Challenge



EEE vs WEEE in the UK - Q1 2007 to Q2 2010



In Conclusion

Legislative / Target driven

Old Practices must be reviewed as to their worth

Far more technical / scientific backdrop to Managing municipal waste in future

Is your treatment and recycling portfolio Broad enough?

Identify your recyclate markets and secure

Be prepared for more comparators

Be Innovative

