

# Case Study: Public Sector Food Waste Arisings in the North East

## BACKGROUND

This pioneering project on public sector food waste in the North East region, was commissioned by RENEW and other stakeholders including NISP, the Environment Agency and JohnWarrenABP in 2009. A new method was developed for assessing the amount of food waste produced by specific types of public sector organisation. The aim was to determine:

- ◆ How much food waste might be available as feedstock for any proposed organic reprocessing plant;
- ◆ The best places to locate such a plant;
- ◆ Which types of plant might be viable for the types and volumes generated.

The project focused on all types of food waste produced from:

- ◆ Schools, colleges and universities
- ◆ Prisons
- ◆ Leisure centres
- ◆ Hospitals



## METHODOLOGY

The methodology for this project was complex, demonstrating M·E·L Research's unique ability to bring together different and innovative research techniques, including:

- ◆ Carrying out desktop research into previous studies of the amount and types of food waste produced by different public sector organisations, working alongside our Associate Consultant Lewis Herbert of WasteWise
- ◆ Using secondary data to estimate the likely amounts of food and organic waste arisings in the North East region
- ◆ Collecting and weighing separated food waste from several institution types across the region and calibrating an innovative model for more precisely estimating the total quantities generated
- ◆ Assessing different plant and location options across the region
- ◆ Undertaking a telephone survey of organisations to provide in-depth information on food waste at different institution types in the region.

The research broke new ground in setting out a standardised methodology for estimating likely food waste quantities from public sector premises based on the average number of 'diner-days' at each premises and the typical 'kg per diner per day' generated at each type of organisation.

## OUTCOMES

The final analysis showed that over 9,000 tonnes of food waste are produced annually from the listed public sector organisations in the North East region. The largest quantities in total come from schools and higher education institutions, suggesting these might be the most fruitful sources of feedstock for food waste processing plant. The results suggest that these sources can contribute significantly to creating a viable feedstock for a possible Anaerobic Digestion (AD) facility, although other feedstocks such as municipal collected food waste, food processing industry waste, and waste from other public sector organisations such as defence and social care would also be needed for a plant to be viable.

The research also considered practical difficulties in diverting food waste from specific institutions as well seasonal differences in food waste arisings per institution type. A dissemination event was also held to review the findings of the project, and ways of expanding food waste diversion in the region.

Overall the project produced in-depth evidence not previously available, to guide decisions of investors and waste management technology companies in developing new waste management infrastructure and employment in the region, and cut the region's disposal of biological wastes to landfill.

For further information about this project, please contact  
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