The purpose of this Case Study is to show how research commissioned by The Organics Group into food waste arising from public sector premises in the North East provides a valuable insight into the levels of that waste and to put forward ideas for more sustainable methods of managing it.

The Organics Group was formed with the aim of improving the sustainable management of organic wastes in the North East region. The consortium comprises public and private sector partners: RENEW, the Environment Agency, NISP, JohnWarrenABP Limited and specialist organics consultant, Eric Evans.

In summer 2009 The Organics Group commissioned M.E.L Research to conduct a study of food waste arising from public sector premises in the North East region.

The study was aimed at helping the partners identify options for improving the sustainable management of this waste stream and maximise the diversion of organic wastes from landfill. It also aimed to scope out the technological investment opportunities for improving waste management infrastructure in the region to enable these outcomes to be achieved.

This Case Study illustrates the second phase of a broader investigation by the Group into organic waste management in the region – The Organics Project – which aims to help the North East meet the challenging recovery targets as set out in both national and regional statutory documents such as the Waste Strategy 2007 and the former Regional Spatial Strategy. It also aims to stimulate economic growth, employment and investment in new waste management technologies in the region.

The first phase of the broader investigation focussed on food waste from the food processing industry. The second phase, reported here, looks at food waste generated by specific categories of premises in the public sector.
Project Methodology

There is no standard established methodology for estimating food waste from public sector premises. In this study, the methodology included three main stages:

Stage 1: results of an extensive survey of Commercial and Industrial waste carried out in the North West England region were used and adapted to the North East region based on public sector employment data.

Stage 2: public domain national statistics and case studies of food waste from specific sub-groups (such as primary schools, universities) were used to describe the amount of food waste likely to be generated from similar types of premises in the North East.

Stage 3: direct sampling of more than four tonnes of food waste generated from 87 sampling points within 23 selected Schedule A public sector premises in the North East and grossing-up the results to produce an estimate of the regional total.

Findings

Stage 1 provided the broadest picture. It resulted in an estimate for all public sector organisations in the North East of 16,400 tonnes per annum.

Stage 2 produced sector-specific estimates for ‘Schedule A’ organic food waste of only 6,090 tonnes per annum.

Stage 3, using the sector-specific approach of Stage 2 methodology but based on field survey observations of food waste in the region, produced an annual estimate of 9,024 tonnes per annum of organic food waste from Schedule A premises.

On balance, Stage 3 produced the most reliable and robust data but an adjustment was required – drawing on Stage 2 methodology – to cater for under-representation of hospitals in the field survey.

Moving Forward

Based on the research findings, The Organics Group recommends a series of follow-up initiatives, including:

- A dissemination event to be held in late 2010 to obtain first-hand site feedback and local knowledge on quantities and feasibility / barriers to food waste segregation.
- A pilot demonstration project involving introducing food waste separation and collection trials / micro-reprocessing trials to establish practicability of on-site separation. The trials would also check that the composition and seasonal variations in food waste material, and possible level of contamination of feedstocks, are within acceptable limits.
- A scale-study of viable organics technologies and appropriate investment scale calculated for either of the two possible plant locations (Teesside or Tyne and Wear). This would allow commercial and stakeholder interest in developing a plant for the North East to be assessed and evaluated.
- The dissemination event would provide an opportunity to address and progress these options.
- Food waste self-audits to be promoted and encouraged amongst public sector organisations and others, to help stimulate interest in food waste prevention and separate collection.