

Background

In October 2009, IKEA partnered with CORE to implement a new approach to food waste in their Edinburgh store. Cyrenians Organics Waste Recycling (CORE), are a social enterprise founded in 2009, now part of the MITIE Group. CORE established themselves as the first company in Scotland to offer an economically viable alternative to landfill for commercial and industrial food waste and is now the leading food waste recycling company in Scotland.

Phase 1 successfully introduced the segregation of all food waste produced by the on-site food preparation process and sent it for AD treatment.

In 2011, phase 2 of the food recycling project kicked in, resulting in 99% of all food waste produced by the store being recycled.

The Objectives

The new approach aimed at:

- 1. Disposing of the food waste in the most environmentally friendly manner;
- 2. Reducing the store's carbon emissions;
- 3. Re-designing the collection of waste;
- 4. Implementing a comprehensive stakeholder engagement programme.

The Challenge

An in-depth assessment of IKEA's food waste practices highlighted that the waste was

produced in 2 different places in the store: the kitchen and the cafeteria. All food waste was placed with the general waste and sent to landfill. Designing the right food recycling system and changing behaviours were critical to the success of the implementation.

The approach

Our approach is a specialist approach, bespoke for each client. To successfully divert food waste from landfill, we have to understand the client's internal processes of how food waste is produced, enabling those processes to be aligned with the implementation of a new food waste policy. This is a combination of introducing the correct bins in the best location, with the right capacity. A suitable collection schedule can then be established, while working on behaviour change through marketing and stakeholder engagement.

Phase 1 successfully introduced the segregation of all food waste produced by the on-site food preparation process and sent it for AD treatment.

Phase 2 aimed at tackling the food waste produced in the cafeteria, which was mainly composed of post-consumer "leftovers".

The second phase involved IKEA working with CORE to implement a highly efficient segregation scheme in the public areas. A central recycling hub was built in the cafeteria, with a 3-bin system for food waste, general waste and recycling. The hub is user friendly, aesthetically pleasing and clearly explains to shoppers where to place the waste.





At the same time, we introduced compostable disposables (cups, plates, bowls, cutlery...) to simplify the food waste recycling scheme and divert more material from going to landfill.

Practical training sessions were also delivered to IKEA's cafeteria staff by the partners to demonstrate how to use the new segregation system and to address any concerns that arose.

How beneficial was it?

CORE recorded the amount of food waste collected from day one and the trend analysis provides evidence that this new approach has been very successful.

Before October 2009, no food waste was recycled. Between October 2009 and May 2011, CORE collected an average of 2.1 tonnes per month from the kitchen. Phase 2 started in June 2011 and an average of 6.5 tonnes is now being fully diverted from landfill per month.

In addition, the food waste CORE collected from IKEA has a contamination level of less than 3%, which is significantly better than the industry average of between 20% and 60%.

This indicates that the segregation system put in place is working very effectively, with minimal contamination in the food waste stream from packaging or general waste. Introducing compostable disposables really helped this.

This means that the waste is processed (without further pre-treatment) at the AD plant and used to produce both a nutrient-rich digestate and a methane-rich biogas (which is used to generate electricity that can be fed back into the National Grid).

It's a closed loop process as the waste turned digestate is re-sold as a fertiliser/soil conditioner, used to grow more food by local farmers.

The process has also significantly reduced the store's Greenhouse Gas emissions, saving 15.2 tonnes of CO2 and 6.8 tonnes of methane per month (based on DEFRA averages).

We believe that our partnership has delivered an example of best practice for managing food waste within a retail environment.

Now to use your food waste recycling service?



The benefits

Working in partnership with MITIE, IKEA has moved waste up the waste hierarchy, replacing landfilling by the most environmentally option for their food waste: anaerobic digestion with energy generation.

IKEA and CORE were awarded the Green Apple Environmental Best Practice Awards in London in November 2012 and the 2011 CIWM Scottish Waste & Resources award in October 2011 for this outstanding partnership in sustainability.

core

