

Design and development of a Cost Benefit Analysis tool for the food waste recycling

Client's objectives

WRAP trials have proven that low cost intervention measures, such as using bin stickers, information leaflets and caddy liners, can increase the amount of household food waste collected for recycling. With this in mind, WRAP's goal was to produce a Cost Benefit Analysis (CBA) tool that would be available to local authorities (LAs) and Anaerobic Digesters (AD) plant operators.

The tool would conduct a Cost Benefit Analysis of implementing these interventions under the local circumstances of the user, and consider three contract mechanisms that could be used to fund the interventions, i.e. cost sharing of intervention costs, energy profit sharing and variable gate fees.

The project

Anthesis was commissioned by WRAP to develop the CBA tool for use by LAs and AD operators. Firstly, our team liaised with a number of LAs and AD operators to understand their experiences of:

1. Food waste collections,
2. Implementing interventions aimed at increasing food waste yields, and
3. How effective contract mechanisms are at stimulating higher food waste yields.

Using the information obtained from this engagement, and our own understanding of food waste contract arrangements and AD operational costs, we developed the CBA tool. The tool was then tested by a number of LAs and AD operators, from whom we gathered feedback that was incorporated into the final design.

Key services delivered

- Gathering industry experience through engagement with LAs and AD operators.
- Development of a specification that covered the structure, layout and functionality of the tool.
- Creation of the CBA tool in the form of a macro-enabled Excel spreadsheet.
- Calculation of the default values for the tool, including AD operator costs and LA gate fees.
- Conducting a series of tests with the relevant stakeholders and potential users to determine the accuracy and presentation of the outputs, as well as its usability.
- Incorporating the outcome of the testing into the final tool.

Key project outputs

The final output from the project was an easy-to-use CBA tool, which uses locally-generated information about the collection and treatment of food waste to generate a fully bespoke assessment. The tool is now downloadable from the WRAP website.

Project impacts

WRAP has already used the CBA tool in collaboration with a number of LAs in London.

For further information

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