



BioDynamic (UK) Ltd www.biodynamicuk.com

“As Nottingham’s first and only food waste AD, BioDynamic is aiming to put the East Midlands firmly on the map. With ambitious expansion plans we hope to create more energy and more jobs for the local community now and for future generations”

Background

BioDynamic is based in Colwick and operate one of the UK’s largest food waste anaerobic digestors in the UK. This technology converts food waste into biogas which is used to generate on-site electricity, it also produces fertiliser products.

Anaerobic digestion means that waste is diverted from landfill completely, and therefore reduces the release of methane.

BioDynamic is surrounded by well-known waste companies, such as Biffa, Wastecycle plus various food processing plants. These companies are encouraged to send their food waste to BioDynamic to help them lower their carbon footprint and put them on the right road to becoming zero waste to landfill organisations. BioDynamic aim to be a zero waste to landfill site in the near future.

BioDynamic currently converts up to 50,000 cubic metres of food waste per annum. Most of this waste comes from retail and hospitality businesses and consists mainly of out of date food - they also receive organic waste from food processing plants.

The electricity they produce is enough to power around 2,000 homes, with plans underway to expand to reach a capacity to power 6,000 homes.

Low Carbon Hub Input from Inntropy

BioDynamic are keen to increase their energy efficiency. To help drive this forward they submitted a bid to Innovate UK. The bid is for a study and full scale implementation of technologies to improve the efficiency and throughput of the anaerobic reactor by improving the management and recycling of the digested solid wastes and process water. To ensure the bid was as strong as possible they required input from a microbiologist. Nick Gostick from Inntropy met with BioDynamic’s Technical Director and provided the expert knowledge they needed.

Outcomes

BioDynamic are still waiting to hear if their Innovate UK bid has been successful.

In the mean time BioDynamic have plans to develop and expand. The River Trent and nearby railway line offer the potential to bring waste to the plant by barge or train - they can also use these transport links to remove organic fertiliser.

“It is useful to be able to source free, specialist knowledge that we do not have in house. Nick provided the missing piece to our bid which no doubt would have strengthened it. We are always striving to lower our impact on the environment and by concentrating on our internal operations we are will be able to do just that, we feel positive about this bid.” Gary Burgess, Technical Director

