

Harper Adams have recently built an anaerobic digester which started generating power earlier this year. The AD plant has been developed as part of a wider environmental campaign at the University College; including solar and PV panels, biomass and awareness and education for staff and students.



The best practice visit started with a presentation by Paul Moran, the Estates and Facilities Manager. He gave details of how the University College had started by saving energy and then moved onto generating their own. Driven by the aim of being self sufficient in electricity and heat and being carbon neutral, they took out an interest free loan to build the AD plant. Paul then briefly described the anaerobic digestion process describing the digester as being like a “mechanical cow”.



Paul outlined how the electricity generated is used on campus with excess being sold to the grid or bought back dependent upon the demand. The aim is to also install a link to allow the heat generated to be used by the University College. The digestate that is left at the end of the process is pasteurised and used as fertiliser on the University College’s farm land. This means that the nutrients are not lost and are put back into the soil to complete the nitrogen cycle.

Paul then outlined the need for anaerobic digestion, citing the figure of 16 million tonnes of food waste that is generated nationally each year. 40% of which is sent to landfill where it generates half of all greenhouse gas emissions from waste.

Paul then moved on to discussing the benefits to business of participating in the food collections that they’re working with Cartwright’s Waste Disposal Services to offer. There is an estimated reduction of 50% of disposal costs because no landfill tax must be paid. Taking food waste out of the residual waste can reduce frequency of collections needed thus making savings.

Everyone was then invited to ask any questions that they had; these related to the collection rounds, the capacity of the plant and exactly what food waste would be suitable. James Wood, the Plant Manager then showed everyone the stages of the process from the viewing gallery and then outside to see the digestion tanks and the generator.



It is hoped that there will be a BESST group of companies who will join together for the food waste collections for mutual benefit.