



Waste not, want not

Farm facts

Name: James Hart and Jeremy Iles

Location: Gloucestershire

Farm size and enterprise: 400 sows, farrow to finish, 4 broiler sheds (150,000 birds), 600ha arable and 100 suckler cows

Background

James and Jeremy had seen the increased interest in anaerobic digestion and with their combination of available pig slurry, FYM, poultry litter and arable land decided they had the sufficient facilities and raw materials to resource an anaerobic plant. The farm also has the capacity to use the generated heat and electricity on site.

The project was part funded (40%) by a Rural Development Programme for England (RDPE) grant. This extra funding means that they are not eligible to claim the Feed-In Tariff payments, however, they receive Renewable Obligation Certificate (ROC) payments for generated electricity.

Keeping the system as simple as possible and not relying on imported food wastes has helped towards the success of the plant.

Benefits

- The AD is utilising farm resources and adding value
- Guaranteed ROC payments for energy produced until 2027
- The business is protected against future gas and electricity price rises
- It improves the farm's environmental credentials
- Projected good return on capital invested.



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“ We seized on a solution to realise extra value from our waste product, while creating a further income stream from both farm businesses. ”
 James Hart, Owner

The system

- The continuous flow, mesophilic AD plant cost £1.2 million to install with the help of a £440k RDPE grant
- The plant was designed and project managed by the partners. Building work took eight months and the plant was on-line in March 2011
- A prototype AD plant was built to help understand the technology and gas yield that could be produced
- Feedstocks include pig slurry, FYM, chicken litter and maize silage
- The gas produced is used to power a CHP (combined heat and power) unit which produces electricity and heat
- The heat is used in the farmhouse and there is also the potential to heat the pig buildings and local school
- Surplus electricity is exported to the grid
- Digestate is used on their arable land.

Key to success

- Do your research first, set up a prototype AD unit if possible
- Choose the right renewable energy for your site
- Choose a recommended and reputable supplier
- Keep your system as simple as possible and where feasible do not rely on imported food waste, unless you have a long term contract
- It is a “busy business” needing constant attention 24 hrs a day even when running well.

For more information on renewable energy visit www.bpexenv.org.uk