Communities and Local Government

ERDF low carbon economic growth in the East of England

European Union
European Regional Development Fund
Investing in your future

Waste not, want not

Leftover food is a significant part of the UK's landfill, therefore finding a solution to reduce and reuse this waste is essential in reducing CO_2 levels.

Leading the way in this field is Adnams Bio Energy Ltd who has developed a groundbreaking facility in Suffolk, designed specifically to produce renewable energy and to reduce carbon emissions and landfill waste in the East of England.

Completed in 2010, the anaerobic digestion facility will convert food waste from local businesses, hotels and restaurants, along with brewery waste from the nearby Adnams plant, into green gas and other by-products.

Lyn McGoff, technical development manager for Bio Group Ltd who is responsible for designing and constructing the facility, explained: "The new facility has been designed to take advantage of the most recent developments in the field of anaerobic digestion and will be the first of its kind to generate renewable energy which will be made available to the national grid.

"The anaerobic digester will break down 12,000 tonnes of organic waste per year to produce biogas for fuelling converted vehicles as well as the green gas which will be injected into the gas network."

The anaerobic digester itself will consist of two digester units, both 3.5 meters in length, in which naturally occurring bacteria will act without oxygen to break down the matter into biogas (methane and CO_2) and liquid waste. As with any process there will be by-products, but even these are recycled with the liquid waste being used as fertiliser for local farm land and the CO_2 potentially being used to grow algae, which is then recycled through the digester.

The new facility will be built on the site of the Adnams brewery at Reydon, Southwold, next to one of the principle waste producers. For other local businesses, a collection service will be established to help with the logistics of transporting waste to the plant.

The digester will have a considerable impact on the reduction of carbon emissions in the region. It is estimated that the facility will save the equivalent of at least 50,000 tonnes of CO_2 compared to landfill and up to 2,400 tonnes per annum from fuel use – the equivalent to just over 30,000 flights from London to New York.

The digester will also have a positive impact on the local economy, saving an estimated 5 per cent in landfill costs for every customer who uses the facility and creating new jobs in the area.

With the Adnams Bio Energy facility being at the forefront of developments in anaerobic digestion, the facility will be used to demonstrate the use of innovative low carbon technology, particular in its generation of renewable energy, and it is hoped that it will inspire other organisations and businesses to consider similar projects.

The whole project is set to cost in the region of £2.9 million and has received funding from a number of sources. £806,241 has been received from the European Regional Development Fund (ERDF), £480,000 from EEDA and a further £480,000 from the Department of Energy and Climate Change (DECC).

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<tr><th colspan="4">Priority Axis 3</th></tr>
<tr><td>Funding:</td><td colspan="3">Total Project Cost: £2,968,493
ERDF: £806,241
EEDA: £480,000
DECC: £480,000</td></tr>
<tr><td>Solution for Business Product:</td><td colspan="3">Improving Your Resource Efficiency</td></tr>
<tr><td>Scope:</td><td>Suffolk</td><td>Project Duration:</td><td>Sept 2009–April 2010</td></tr>
<tr><td>More Information:</td><td colspan="3">Lyn McGoff, technical development manager, CRS Bio Design: lynn.mcgoff@crservices.co.uk or +44 01353649800</td></tr>
<tr><td>ERDF Details:</td><td colspan="3">The European Regional Development Fund (ERDF) is a seven-year investment programme part financed by the European Union. Its objective is ‘towards low carbon economic growth’ in the East of England and €110.9 million has been allocated to our region.
The fund aims to help small and medium size enterprises respond to the challenges of climate change and the huge commercial potential behind a low carbon economy.
For more information visit w:
http://www.communities.gov.uk/regeneration/regenerationfunding/europeanregionaldevelopment/eastengland/
or tel+44 0303 4446400</td></tr>
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