



The world's third poultry-fired power station and Europe's largest biomass-fuelled electricity generator is located in the region

Biomass

utilising crops and waste for fuel

As an agricultural area, the East of England is an ideal region to exploit the potential of biomass, with agriculture and food processing providing 13% of regional employment. Over 30% of the UK's pigs and 21% of the UK's poultry are farmed in the East of England leading to opportunities for the use of the resulting waste as fuel.

The agricultural economy in its search for diversification, is keen to adopt the commercial development of energy crops. Biomass energy can be used to generate electricity and heat and also for the production of liquid transport fuels such as bioethanol, a petrol additive or substitute and biodiesel, a diesel substitute.

The European Union has legislation – The European Biofuels Directive – in place which will require the UK to set indicative targets for biofuel use of 2% by 2005 and 5.75% by 2010.

Access established biomass projects

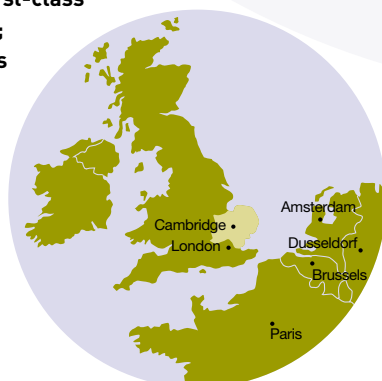
Straw Fired Power Station – the UK's first and the world's largest and most efficient straw-fired power station. This £60 million, 36MW facility consumes around 200,000 tonnes of straw, generating an annual total of 271.5 GWh of electricity which is enough to supply 80,000 homes.

Chicken Litter Biomass Power Station – the world's third poultry-fired power station and Europe's largest biomass-fuelled electricity generator which burns over 450,000 tonnes of poultry litter to produce 38.5MW of electricity, enough for around 93,000 homes. An additional project, in Eye, Suffolk, produces 12.7 MW of electricity and was the first small generator of this type to join the British Electricity Pool.

DriveECO Fuels – the first bio-diesel plant in the UK, Global Commodities UK at Dereham, in Norfolk, recycles cooking oil to power cars.

The East of England offers:

- Access to leading biomass projects already established;
- A cluster of experienced companies working in the biomass sector;
- A strong and established energy industry network, providing a platform for energy companies to work together;
- The opportunity to locate in a region renowned worldwide for its first-class R&D and academic excellence;
- Proximity to ports and airports for easy access to Europe.



EEI is the official international business support agency for the East of England. We provide a wide range of free, professional and confidential services to businesses wishing to set up or expand their presence in the UK. We also support East of England businesses seeking to develop new markets around the world.

It is estimated that biomass energy generation currently accounts for 13-15% of world energy production from energy crops, industrial waste, agricultural and forestry crop residues and animal waste



Banham Poultry is planning the first project of its kind in the UK for a new method of transforming its production by-products into clean, renewable energy using pyrolysis and gasification to produce 5.5 MW.

Biojoule's first fuel production facility is capable of producing an initial 20,000 odt/y of high quality wood fuel.

The Biomass cluster

Established biomass specialists in the East of England include:

Bio-Renewables Limited (ADAS) has a highly respected background based on over 20 years experience in all aspects of biomass renewable energy.

Waste To Energy Ltd designs and manufactures gasifier modules capable of producing energy from organic waste streams.

Econergy Ltd is the UK's leading wood heat company, designing, installing and operating woodfuelled boiler plants nationally.

Peter Brotherhood has proven expertise in energy efficient applications with a high-level of experience in dealing with fuels as diverse as agrifibres, coppiced wood, wood waste, meat and bone meal.

British Sugar, in partnership with ABF, is the largest agrifood company in the UK with a specific interest in the bioethanol industry.

Join a strong energy industry network

Renewables East, the renewable energy agency for the East of England, was established to help the sector grow in the region. Renewables East works to generate economic benefits, increase employment and investment, and develop a secure, competitive and successful renewables market.



450,000 tonnes of poultry litter is burned to produce 38.5MW of electricity, enough for a town of 93,000 homes

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The **Regional Biofuels Forum** aims to maximise regional benefit from biofuels and provide a 'voice' for the regional biofuels industry.

The **Centre for Sustainable Engineering (CSEng)** is a newly established national initiative supporting businesses developing innovative and more sustainable technologies. Based in Peterborough, it works with partners such as the **International Ecotechnology Centre** at Cranfield University.

First-class R&D and academic excellence

Cranfield University's Process Systems Engineering Group researches power generation from biomass, waste and sludge.

The University's **Institute of Water and Environment** is renowned for its research projects including those involving energy crops.

The **University of East Anglia** is one of the world's leading institutions concerned with the study of climate change and has a number of research groups.

Writtle College is home to **CERA, the Centre for Environment and Rural Affairs** which aims to transfer the lessons from research in the region to rural communities within its overall remit of rural economic development.

Access to Europe

Proximity to the East Coast Ports and the region's airports, including London Stansted and Norwich International, provides easy access to Europe and onward connections.