

The Bioeconomy Consultants

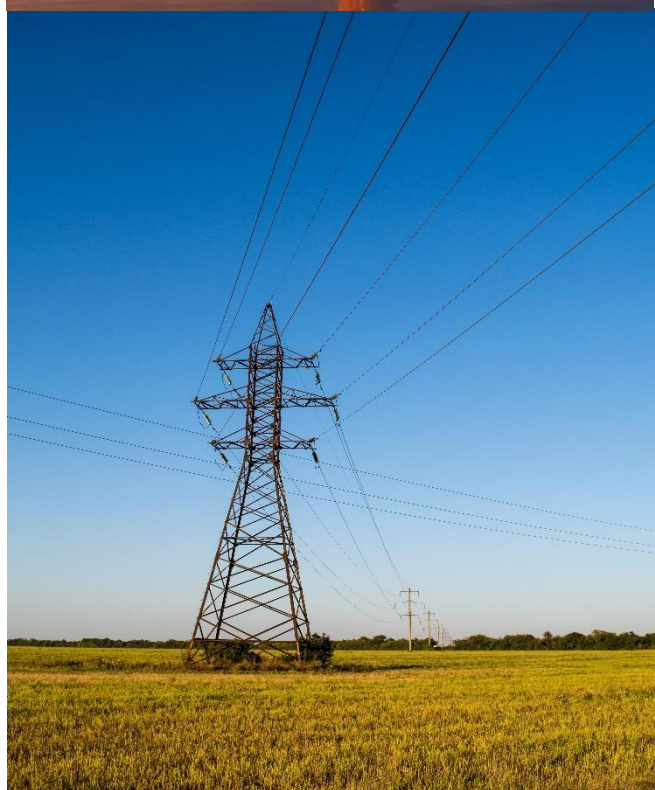


## News Review

Issue Sixty-Two

May 2017

**Each month we review the latest news and select key announcements and commentary from across the bioenergy sector.**



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# Foreword

Welcome, subscribers, to May's Bioenergy News Review (and given how warm it is in York right now, make that a *very* warm welcome... summer is definitely upon us at long last).

This month has seen a lot of news about the UK's renewable energy, with records tumbling, technologies being proposed and tariff schemes undergoing change. As of the 31<sup>st</sup> of March, of this year, we have bid a fond farewell to the UK's Renewable Obligation. Since 2002, this scheme has been a source of income for renewable power generators through the sale of RO Certificates to larger generators, and during that time the share of low-carbon energy generation in the UK has increased more than 18 times over, and the presence of the RO has no doubt contributed significantly. The RO has been replaced with the new Contract for Difference scheme, for which applications closed just over a month ago. The results of this second round have yet to be announced, and it is still yet to become fully clear how this new scheme will influence the renewables sector in the UK.

Elsewhere, emergency legislation was due to be passed by the UK's Department for Business, Energy & Industrial Strategy (BEIS) to prevent degeneration of the tariff values under the RHI. Unfortunately, with the General Election being called in the UK, purdah has prevented this legislation being passed in time, meaning that tariff levels on the UK's Renewable Heat Incentive are set to decrease in July, and could be set to drop further in October unless the new government is able to pass the emergency legislation after election.

However, it is not all doom and gloom, as (prepare for some advertising; it is our news review after all!) NNFCC's most recent [Anaerobic Digestion Deployment in the UK](#) report has found that growth in the AD sector continues to be strong, and new developments keep being tabled despite uncertainty over tariff rates. In order to help ameliorate this uncertainty, NNFCC have also teamed up with Amur bioenergy to offer a "Healthchecking" service for Anaerobic Digestion plants, to help ensure they are turning a profit despite falling tariff rates. Those interested can find details on our [website](#).

Read on for the latest market news.

# Policy

## UK RO: 2002-2017



*Geograph*

The Renewables Obligation (RO) scheme – one the UK government's main support mechanisms for large-scale renewable electricity projects – has closed to new generating capacity.

Since being established in 2002, the percentage of the UK's electricity generated from low carbon energy has increased from 1.3% to 23.5%. The RO played a key role in contributing to this increase.

The RO places an obligation on licensed suppliers to source an increasing proportion of their electricity from renewable sources.

To date, in excess of 23,500 generating stations comprising 25GW of installed capacity have been accredited, which includes 9.3GW onshore wind, 5GW offshore wind and 5.3GW solar PV.

Operators of accredited generating stations are issued certificates (ROCs) based on the amount of electricity they generate for a period of 20 years.

The certificates are bought and traded by market participants and ultimately presented to Ofgem by suppliers as proof they have met their obligation.

During 2015/16 90.4 million ROCs were issued on the basis of 69.1 TWh of renewable electricity generation.

The closure of the scheme, announced in July 2011, takes effect from 31 March 2017, although some installations may qualify for a grace period.

These grace periods are available for stations that have not commissioned by scheme closure and meet certain legislative criteria.

New large-scale renewable electricity installations have the opportunity to access support under the government's Contracts for Difference scheme.

Click [here](#) for more information.

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## RHI tariff set to fall until new legislation put in place

The Department for Business, Energy and Industrial Strategy (BEIS) has not been able to pass the emergency legislation it was hoping to, which would have updated the degression triggers in the Renewable Heat Incentive.

This means that the overall RHI scheme trigger will remain at £ 578.0 million for the "Total expenditure anticipated for subsequent year" and will remain at £ 289.0 million as the "Expenditure threshold when calculating C for the purposes of regulation 37A " (i.e. half of the total anticipated). So the RHI is likely to continue to be above its thresholds until the new legislation is passed.

Biomethane has an expected growth rate in legislation of £15.2 million per quarter. It is unlikely that, at the current tariffs, biomethane will

be 50% or above this growth. However, biomethane is likely to be above its total expenditure threshold of £175.4 million. This could mean a 5% depression.

While the depression mechanism can seem hard to understand at times, this essentially means that the current biomethane tariff of 3.56 p/ kWh for plants up to 40 GWh/ year could fall by 5% to 3.38 pence on 1 July. If the proposed new legislation is not in place by 1 October then the tariff could fall by a further 5% on 1 October.

According to the government consultation response, any plants commissioning in this period would also be able to claim the new higher tariff once any new legislation is in place.

Click [here](#) for more information.

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## **Ofgem issues response to FiT Draft Guidance Comments**

Ofgem E-Serve have issued a response to comments on their "Feed-in Tariffs: Draft guidance on sustainability criteria and feedstock restrictions".

The document contains a summary of changes made to the Feed-in Tariffs: Draft guidance on sustainability criteria and feedstock restrictions for anaerobic digestion (AD) generators document following a 4-week comment period, and answers specific stakeholder questions that were raised in the responses.

The Feed-in Tariffs: Guidance on sustainability criteria and feedstock restrictions is now available.

Click [here](#) for more information.

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## **European coal sector feels effects of pollution limits**



*Pixabay*

Power plants in the European Union will have to cut the amount of pollutants they emit such as nitrogen oxides under new rules (Best Available Techniques Reference Document or BREF) approved by EU member states in April. The decision imposes stricter limits on emissions of pollutants like nitrogen oxide, sulphur dioxide, mercury and particulate matter from large combustion plants in Europe. Large combustion plants account for a big share of air pollutant emissions across the EU: 46 percent of sulphur dioxide, 18 percent of nitrogen oxide, 39 percent of mercury and 4 percent of dust.

However, the directive has been criticized by NGOs for exemptions which have allowed more than half of Europe's coal plants to exceed limits for harmful pollutants, according to a report by environmental groups last year. Several countries which are heavily reliant on coal, such as Poland, Bulgaria, Germany and the Czech Republic, were opposed to the changes. The stricter limits will apply to all 2,900 large combustion plants in the EU, including coal-fired power stations and peat, oil and gas power plants, and will have to be met by 2021, though National Authorities can invoke exemptions on a disproportionate cost basis.

Enel, Europe's biggest utility by market value, has given the first hint of the impact of new EU

pollution limits, agreed last month, at a shareholder meeting where it announced the closure of two large coal power plants by 2018, and a new commitment to close all its coal and lignite generation by around 2030

IEEFA last week made a first-cut analysis of the revised BREF, identifying “low-hanging fruit” which are expected to be especially vulnerable, facing tough choices: to invest substantially in pollution abatement; cut running times dramatically; or shut down. IEEFA calculated NOX and SOX emissions rates for every large coal and lignite power plant in Europe, using raw EEA emissions data from 2014, the latest available. They defined the 108 “low-hanging fruit” as installations (which would include Enel’s 2 plants above) that are more than 40% above the revised BREF limits, for NOX and/or SOX emissions.

ENEL group expects it will no longer have any coal plants within 10-15 years.

Click [here](#) for more information.

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## Ever increasing support for renewable energy in the UK

RenewableUK is highlighting new official Government statistics which show that 79% of people support renewable energy.

The poll also shows that levels of public support for other renewable technologies reached their highest ever levels since the poll began in 2012. Onshore wind’s support reached 73%, offshore wind at 80%; wave and tidal at 79%.

The Public Attitudes Tracking Survey is published by the Department for Business, Energy and Industrial Strategy.

Click [here](#) for more information.

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## Missed opportunities delaying UK development of Carbon Capture Storage



*Pexels*

Carbon Capture Storage (CCS) is a process to avoid the release of carbon dioxide (CO<sub>2</sub>) into the atmosphere. CCS has the potential to help the UK achieve its ambitious targets to reduce CO<sub>2</sub> emissions, if it is used in the power and industrial sectors. However, the Department for Business, Energy & Industrial Strategy has not achieved value for money for its £100 million spend on the second competition for government financial support for carbon capture storage, according to the National Audit Office.

The Department also spent £68 million on the first competition on support for CCS, which it cancelled in 2011. The NAO report found that the Department’s plan to use a second competition to develop and deploy carbon capture and storage was ambitious, but ultimately, unsuccessful. Achieving this goal was challenging because the untried nature of the technology meant the costs and benefits of the proposed projects were inherently uncertain. Given the level of challenge, it was an achievement for the Department to sustain negotiations with the preferred bidders to the point where it gained valuable technical and commercial knowledge about how to deploy the competition projects. But any value that could be gained is contingent on the Department applying the lessons it and the sector has learnt as a result of the competition.

Many stakeholders think the government needs to carry more risk if it is to enable CCS to be deployed affordably to consumers. The Department's approach to allocating risk was in line with wider energy policy. But following the competition, many stakeholders think the government should bear more risks, particularly over stored CO<sub>2</sub>. Government taking a greater share of the risk could reduce delivery costs but would expose taxpayers to losses in the event of risks materialising. The NAO found that flaws in the Department's design and implementation of its Levy Control Framework, which caps the costs of certain consumer-funded policies, also impacted on CCS investors' confidence.

Click [here](#) for more information.

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## **UK Government announces Energy Catalyst funding competition**

The Department for International Development (DFID), the Department for Business, Energy & Industrial Strategy (BEIS) and the Engineering and Physical Sciences Research Council (EPSRC) are to invest up to £13 million in innovation projects to address the global need for clean, affordable and secure energy.

The aim of the Energy Catalyst competition is to support highly innovative, market-focused energy solutions in any technology or sector or international market.

The competition is open to any UK organisation and may also include international partners. Applicants must register before noon on 21 June 2017.

Click [here](#) for more information.

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# Markets

## **Record high biomass generation in the UK**



*Wikimedia Commons*

In the U.K., the latest Electrical Insights Report, produced by researchers at Imperial College London in collaboration with Drax, shows biomass generation hit a new high of 4.4 TWh during the first quarter of this year. According to the report, this means the U.K. biomass energy fleet ran at 95 percent capacity over the three-month period, higher than any other technology has achieved during the past ten years. Overall, the report shows biomass accounted for 5.4 percent of Great Britain's electricity supply mix during the first quarter, with biomass capacity at 2.2 GW.

Hydropower reached 1.6 TWh, 4 percent higher than its previous best set in 2014, wind generated 11.3 TWh, up more than 10 percent compared to the previous quarterly record set in 2015, while solar reached a new peak output level at the end of March, with 7.67 GW.

Coal output fell 30 percent when compared to the first quarter of 2016 due to high wind output and the mild winter. As a result, carbon emissions were 10 percent lower when compared to the first quarter of last year.

Click [here](#) for more information.

## UK coal power drops by 60% from 2015 to 2016

Government data released this week indicates a near 60% reduction in coal power generation between 2015 and 2016. Electricity generated from renewable sources also declined, falling from 24.6% in 2015 to 24.4% in 2016 due to lower wind speeds, less rainfall and fewer sun hours.

Domestic electricity use fell 1% between 2015 and 2016 despite similar weather patterns, indicating an increase in efficiency.

Click [here](#) for more information.

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## Renewables great for employment in Scotland

Employment in Scotland's low carbon and renewables sector increased by more than a third in 2015. The sector generated a turnover of £10.5 billion, 14% of the total UK sector, in 2015, according to figures released by the Office of National Statistics.

The number of employees in Scotland's low carbon and renewables sector rose from 43,500 in 2014 to 58,500 in 2015.

Scotland is a major contributor to the UK's green energy sector as a whole, according to the new information. 33% of all UK employment and 28% of turnover in low carbon electricity generation is in Scotland, as is 24% of UK employment and 26% of turnover in low carbon services.

Click [here](#) for more information.

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## Decline in clean energy investment at start of 2017

Clean Energy Pipeline, the online financial news and data service dedicated to the clean energy sector, released its preliminary analysis of venture capital, private equity, project finance, mergers and acquisitions, public markets and green bonds activity during Q1.17.

Global new clean energy investment totalled \$56.6 billion in Q1.17, a 10% decline on the \$63.3 billion of investment recorded in Q1.16. It also represents a 25% decrease on 2016's \$75.9 billion quarterly investment average and marks the lowest quarterly investment volume since 2013.

Click [here](#) for more information.

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## Iona aims to boost bioenergy jobs in Northwest England



*Iona Capital*

Iona Capital has revealed it expects to create hundreds of jobs over the next two years as a result of £130m of funding commitments for new and existing green and renewable energy projects in the North West of England.

The investment fund manager, which specialises in supporting biomass, combined heat and power and anaerobic digestion projects, said it had already funded the development of a portfolio of bio-energy plants in North Yorkshire, including the Gravel Pit Biogas plant near Sand Hutton and the New Mill Biogas facility in Easingwold.



Its investment has also seen the redevelopment of plants such as the Cumbria Biogas AD facility at Dryholme, which it acquired from Farmgen in November 2016 and is accredited under the Feed-in Tariff scheme.

Moreover, Iona Capital last year invested £18m in a project alongside resource and recycling firm Veolia to use waste ice cream to produce renewable heat and energy at the Leeming Biogas AD plant.

In total, the firm said it expected its investment in the region to have created 300 local jobs by June 2017, and a further 600 over the next two years.

The commitments have come via the investment fund manager's North West Environmental Infrastructure Fund and Iona Environmental Infrastructure Funds 1 and 2.

Investors in the three funds include a number of local government pension funds, such as the Merseyside Pension fund and the Greater Manchester Pension Fund, which are mandated to invest in environmental infrastructure projects with a financial return, Iona Capital said.

Established in 2011, Iona Capital has since financed more than 20 energy projects, including biomass combined heat and power plants and anaerobic digestion (AD) facilities in Wales, Scotland and England, all of which supply energy and/or heat to local grid networks.

Click [here](#) for more information.

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# Biomass Heat & Power

## **US to adopt ISO standard for woodchips as heating fuel**

The American Society of Agricultural and Biological Engineers has begun the process to adopt as a national standard an ISO document on wood chips used as heating fuel. The adoption of ISO 17225-4, Solid biofuels – Fuel specifications and classes – Part 4: Graded wood chips, is being led by a team supported by the U.S. Forest Service to establish a standard for the U.S. wood-heating industry and promote its use.

Click [here](#) for more information.

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## **Heat Networks Investment Project completes pilot**

The £320m UK Heat Networks Investment Project (HNIP) capital investment programme is expected to support up to 200 projects by 2021 through grants and loans and other mechanisms and to lever in up to £2bn of wider investment. The supported heat network pilot projects provide heat to approximately 5,000 domestic customers and 50 non-domestic buildings.

Of the 9 schemes supported, one is an energy from waste scheme in Sheffield and one is a biomass and gas CHP scheme in Crawley. The remainder are mainly gas projects and one heat pump project.

Click [here](#) for more information.

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## Cortus to provide bioenergy for Höganäs

Höganäs AB and Cortus Energy have concluded a long-term agreement to establish a continuous supply of renewable energy gas and other energy products on a commercial scale.

Collaboration between Höganäs and Cortus Energy is still under the Probiostål project, a project funded by, inter alia, the Iron and Steel Society of Sweden and funded by the Swedish Energy Agency. Projects and preparations are currently underway to build a 6 megawatt WoodRoll® facility at Höganäs Industrial Area in Höganäs. In the new plant biomass will be gasified to energy gas. For the plant, Cortus Energy has also received support from the Swedish Environmental Protection Agency (through the facility "Klimatklivet").

The first step in the cooperation aims at testing the technology under real conditions and adapting the process so that the energy gas meets the requirements of Höganäs metal powder production. Because a WoodRoll® plant carburizes biomass, so-called green carbon is a by-product in the process. This is also an attractive material for Höganäs because it could replace parts of the carbon used as a reducing agent in the production of raw powder, called iron sponge.

The plan is to start testing the energy gas in Höganäs production in the first half of 2018. After completion of the tests, the plant will be scheduled for regular delivery of renewable energy products, which means annual sales of approximately MSEK 15 for Cortus Energy from 2019. This will be a breakthrough for renewable energy gas in industrial Processes in Sweden.

Click [here](#) for more information.

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# Biogas

## NNFCC publishes annual AD Deployment Report

Although it's hard to believe, 12 months has passed since our previous 'Anaerobic Digestion Deployment in the UK' report was published, so today sees the release of the fourth edition. The annual report is the culmination of many hours of routine research throughout the year into the progress of the AD market here in the UK. The report is always seen as a valuable resource by those active or with a commercial interest in the AD industry, as it presents a comprehensive picture of both the scale and nature of existing development in the sector. The report goes beyond the present situation by providing projections for future development based on the current planning pipeline and NNFCC's in-depth knowledge of how AD projects tend to and are likely to progress given the current policy landscape.

At NNFCC we track the progress of all UK-based AD plants, including planning and construction progress, capacity and output, and planned feedstock inputs. In the market report this information is distilled and condensed, giving an overview of AD development activity and recent trends at both at national and regional level, painting a picture of the current and future AD landscape in the UK.

The past year has been full of uncertainty for the AD sector. The UK's vote to leave the European Union cast huge doubts on the UK's continued obligation to Europe's Renewable Energy Directive, thus putting the future of renewable energy support in the UK such as the RHI and FIT in jeopardy. The uncertainty was compounded later in 2016 with the government reshuffle and the formation of the Department for Business, Energy and Industrial Strategy (BEIS), causing a

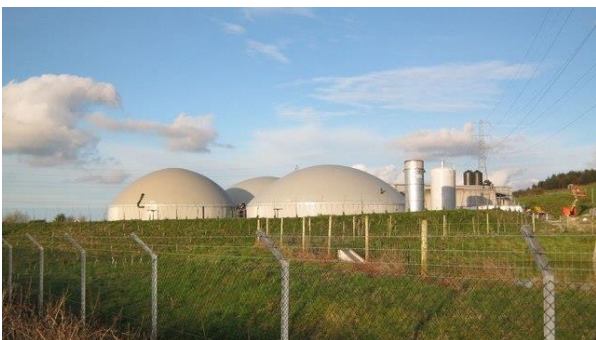
delay in public consultations on the RHI and the FIT, both of which had potentially huge ramifications for the AD sector. Eventually we got our answers and by early 2017 the short-term future for the industry was looking surprisingly positive, with BEIS responding favourably to the AD industry. However, we are not out of the woods yet, and with the recent closure of the RO, the upcoming election and the added frustration that the RHI regulations were recently laid and subsequently withdrawn from parliament leaves us in a state of limbo on when, and potentially if, this positivity will now transpire.

Despite all this uncertainty, the sector has still seen reasonable growth in the past 12 months, with 85 new AD plants becoming operational, taking the national total over 400, excluding traditional water-treatment facilities. Just over 50 new plants began development, which is a decrease on last year, but one that we previously forecast, and is no doubt down to the uncertainty over the future viability of AD and the typically long project development time.

Click [here](#) for more information.

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## UK AD sector could treble by 2019



*Geograph*

WRAP has just released the latest Organics recycling industry report, covering 2015. It provides an update on Anaerobic Digestion and Composting development in the UK.

The recent growth in trend in AD is set to continue at a rate which could potentially double or triple the size of the sector between 2014 and 2019. However, this level of deployment is highly dependent on the policy landscape, current reviews of renewable energy incentives and access to suitable feedstocks.

The majority of feedstock processed in 2014 was food waste.

Local authorities sent 314,516 tonnes of food waste to AD facilities in Great Britain. The majority (1.53 million tonnes) of food waste processed by AD facilities in England, Wales and Scotland came from commercial and industrial sources.

The compost sector is more mature than the AD sector, and continues to grow albeit at a steadier rate, from 271 permitted sites in 2012, to 310 in 2014 and 330 in 2015. The majority of feedstock into the compost sector was consistently sourced from local authorities (70-88%), and consisted mainly of green waste, contributing more than 70%, and food waste. The survey also highlighted difficulties in gaining data from accessible resources due to the incomplete nature of such data including the Environment Agency's Waste Interrogator.

Click [here](#) for more information.

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## NNFCC launches AD Healthcheck Service

NNFCC, lead strategic bioeconomy business consultants have joined forces with Amur, part of AB Agri, the UK's leading nutrition company and co-products supplier, and both businesses are proud and excited to launch this new "Healthcheck" service.

As the AD industry has faced uncertainty and continuous tariff reductions in recent years, the focus for developers has been to build as quickly

as possible to beat deadlines, and to secure as much support as possible for as long as possible, without really thinking about building the plant best-suited to their needs or aspirations.

Despite recent tariff reviews and a glimmer of hope for the future in the form of higher tariffs and more stable support, the hope is expected to be short-lived, if it in fact survives the current political shake-up and transpires into reality at the other side of the election.

Higher tariffs are not sustainable, and any industry so heavily reliant on public support is never a healthy one. This new service is therefore not only very timely, but also crucial to prolong the viability of the UK industry and to make it attractive to investors again following the pain of Brexit – optimising profitability is at the heart of its objectives.

For operators who have secured lower than ideal tariffs in recent years, or for those facing the decision of whether to accredit now or wait for the promised changes, the “Healthcheck” could make the difference between success and failure.

A “Healthcheck” will entail a site visit from an expert from both organisations, followed by a period of analysis and consideration, before reporting back with recommendations quantified in extra revenue terms.

The service is very competitively priced and will provide a rapid and clearly quantifiable return on investment, without the need for additional capital outlay.

Click [here](#) for more information.

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## Biogen acquired by Ancala

The Biogen logo features the word "BIOGEN" in a bold, dark red, sans-serif font. The letter "O" is stylized, with a green and yellow circular graphic element integrated into it. A registered trademark symbol (®) is located at the top right of the word.

*Biogen*

Leading food waste to renewable energy specialist Biogen has announced its acquisition by Ancala Bioenergy Limited.

Biogen’s seven anaerobic digestion plants recycle a quarter of a million tonnes of food waste annually from supermarkets, food manufacturers, the hospitality industry and local authorities to produce 13MW of renewable energy and a nutrient-rich biofertiliser. Biogen was established in 2005 by Bedfordia Chairman, John Ibbett.

Ancala Bioenergy Ltd is an infrastructure investment vehicle managed by Ancala Partners LLP. The successful completion of the sale will mean further growth opportunities for Biogen and provide an established platform for Ancala’s expansion in the waste-to-energy sector.

Click [here](#) for more information.

## New bioplastic bags degrade in AD

Novamont commissioned IGlux Witzenhausen GmbH and Witzenhausen-Institut GmbH to conduct a scientific study into the behaviour of biodegradable carrier bags made from MATER-BI—the bioplastic made by Novamont—in German anaerobic digestion plants.

The use of biodegradable bags made from MATER-BI was tested in a procedure which encompassed the entire process using equipment made by four different companies: Kompogas, Thoeni, Bekon and WTT.

The bags were monitored during pre-treatment, anaerobic digestion, post-composting and maturation at each plant. The percentage by

weight of MATER-BI in the input material was between 3.5 percent and 3.8 percent. Degradation began during the anaerobic stage and was completed during composting. In total the process took between five and 10 weeks, depending on the plant. No MATER-BI residue was found in any of the samples examined at the end of the test, demonstrating that it had completely degraded in all four plants.

The test was commissioned in Germany, where organic waste plays a significant role in the national renewable energy plan and is increasingly used to produce biogas. Efficient interception of this type of waste is therefore crucial for recovering the most energy-rich component, namely kitchen waste. At present, however, even where separate collection of organic waste is in place, studies show that a significant percentage of organic waste is still sent to landfill. This explains increased usage of carrier bags made from compostable bioplastic, with users convinced of their practicality and hygiene.

The test was entirely successful, with complete degradation of MATER-BI carrier bags within the time normally taken for the process at all four plants, which are representative of the majority of anaerobic digestion facilities employed to process organic waste in Germany, eliminating any reservations about use of the bags.

Click [here](#) for more information.

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### **AD Load Factors reach record high**

Annual load factors for the anaerobic digestion (AD) industry in the UK continued to improve, rising to a record 73% last year, up from 69% in 2015, representing a big boost to the industry. The load factor calculation is based on all electricity plants claiming REGOs, of which there are 245.

Load factors give the ratio of the actual amount of electricity produced and the maximum potential output, and are a good indication of how well the industry is performing.

Just six years ago, in 2011, the industry averaged a load factor of just 46%. This continuing optimisation is great news for AD operators, as they seek to improve both the revenue and profitability of their businesses, and diminish the average unit cost per kWh of electricity produced.

Click [here](#) for more information.

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### **Biogas in Europe yet to reach full potential**



*Wikimedia Commons*

A new study examines the use of biogas – gas produced from organic waste – as an energy source in Europe, and shows that it has not yet reached its full potential.

The study makes a number of recommendations for maximising the potential of biogas in Europe. It includes a call to create a long-term policy framework for the development of the biogas sector that also encompasses related areas, such as agriculture and waste management. In addition to creating a stable investment framework, several regulatory and technical barriers also still need to be addressed, including those hampering cross-border energy trade. The study also strongly recommends making more use of residual heat

from biogas installations, and informing citizens about local biogas projects, their benefits, and safety guidelines.

In 2014, 14.9 mtoe (million tonnes of oil equivalent) of biogas was produced in the EU: this represented about 7.6% of all primary renewable energy production in the EU. It was mainly used for renewable electricity production, followed by heat production and use as a transport fuel. The study examines the potential role, costs and benefits of biogas and the role that it could play in helping the EU to meet its targets of increased use of renewable energy and reduced greenhouse gas emissions by 2020 and 2030. It sets out four scenarios covering possible developments in the use of biogas in the EU by 2030. These show the different possible options for the use of biogas in cogeneration units (which convert it into heat and electricity directly) or for its upgrade to biomethane to be fed into the gas grid or to be used as a transport fuel. It also examines the barriers preventing the development of biogas markets: at the moment, only three countries (Germany, Italy and the United Kingdom) are responsible for more than 77% of the EU's biogas production. The absence of a stable and reliable investment framework and lack of effective support are identified as key obstacles.

Click [here](#) for more information.

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# Energy from Waste

## **Gasification plant for West Midlands**

The ETI has announced that work has started to build an innovative waste gasification plant in the West Midlands known as the SynTech Energy Centre, which will produce enough electrical power to supply 2,500 homes.

The Project is being led by Syntech Bioenergy UK based in Aldridge in the West Midlands, the gasification technology is being provided by US company Frontline Bioenergy, in whom SynTech US is a major stakeholder and will be built in the UK.

The project will convert about 40 tonnes a day of post recycling, refuse derived fuel (RDF) produced locally into a clean syngas. The syngas will then be converted into power using a modified high-efficiency gas engine, and waste heat generated from the engine will be made available to the local area.

ETI will invest £5m in the project with a matching investment from Denver-based SynTech Bioenergy LLC. The Plant will deliver a Waste Gasification system capable of high efficiencies and a potential future to deliver chemicals or fuels such as green aviation fuel.

Click [here](#) for more information.

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# Events

## **EUBCE**

### **12th - 15th June 2017, Stockholm**

The European Biomass Conference and Exhibition (EUBCE) is a world class annual event which, since 1980, is held at different venues throughout Europe.

The EUBCE covers the entire value chain of biomass to conduct business, network, and to present and discuss the latest developments and innovations, the vision is to educate the biomass community and to accelerate growth.

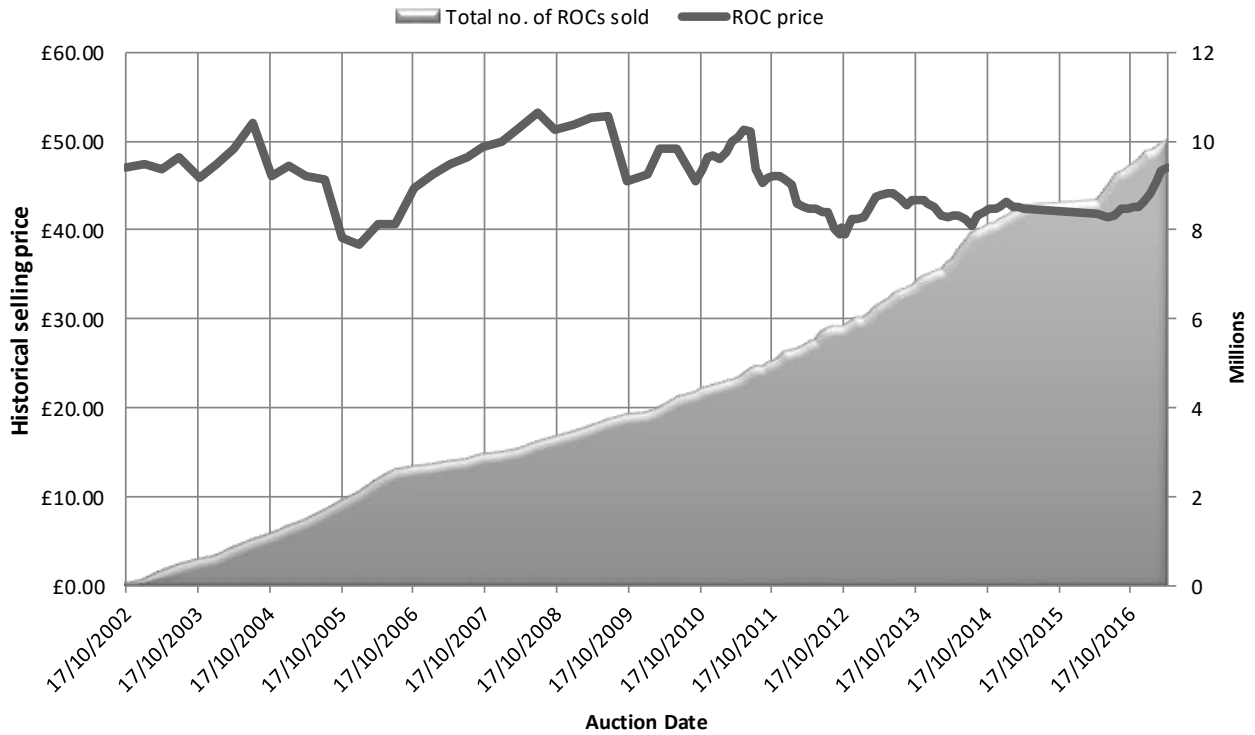
The EUBCE will host a dynamic international Exhibition for companies and research labs to showcase their latest products and bringing scientists, technologists and key players together with leading Biomass industries and organizations.

Click [here](#) for more information.

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# Prices

**Historical auctioned prices of ROCs in sterling pounds, and total amounts of ROCs historically sold.**



Click [here](#) for more information.



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