Cleantech en-vision

The quarterly newsletter of Cambridge Cleantech

February 2014

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Government decides final CfD FiT strike prices

DECC set out on 4 December its final decisions on the strike prices available for low-carbon technologies under the forthcoming contracts for difference regime.

The updated strike prices have been informed by the feedback and evidence submitted in response to the department's Delivery Plan consultation in summer 2013. Based on this, the government revised its assumptions on build and operating cost reductions, as it was concluded that DECC's initial proposals had reduced offshore wind strike prices too quickly. Moreover maximum build rates for onshore wind and other technologies have been increased to take into account the observed pipeline of projects. Analysis was also updated to provide consistency with latest commercial data on investment decisions.

Onshore wind strike prices have seen a £5/MWh reduction across the first Delivery Plan period. Solar PV rates have been reduced between £5/MWh and £10/MWh in each year, but biomass conversions remain at £105/MWh throughout. By contrast the degression of offshore wind strike prices has been reduced. DECC also updated some of its policy positions on the contract terms, although it is yet to publish an updated document on the terms. The policy updates confirm that a 25% reduction in capacity without financial penalty is available between CfD allocation date and the substantial financial commitment date set out in the contract.

The government has also changed its approach to collateral. Generators that make payments in a timely manner will not now be required to post collateral, but generators that fail to comply with the payment obligations in the contract will. DECC confirmed its intention to protect against changes in law. But it has now extended the previous coverage of specific and discriminatory events to include revenue adjustments when generators are prevented from generating and strike price adjustments for changes in charges

covering transmission losses and balancing service costs.

Baseload generators will now have the option--not an obligation--of switching to a year-ahead baseload market reference price when a suitable measure is introduced. Limited circumstances where the reference price can be changed have been determined to cover scenarios where the market weight has shifted or market splitting affects the validity of the price. Offshore windfarms being completed in what DECC consider to be phases will receive the same strike prices for each phase. The strike price will be determined by the commissioning date of the first phase, and the minimum capacity required in this first phase has been reduced to 25% of the total project capacity.

16 projects have now qualified (8GW) for the second phase of Final Investment Decision Enabling for Renewables (FIDeR) including six biomass conversions (3GW), one dedicated biomass CHP (3GW), seven offshore windfarms (4.5GW) and two onshore wind projects (200MW). The greatest attrition between application and qualification was dedicated biomass with CHP (25% of phase 2 applications qualified). Qualifying generators will not get investment contracts automatically--they will be invited to submit binding applications, and DECC will assess whether the FIDeR affordability constraint necessitates a ranking and potential exclusion of projects based on their phase 2 evaluation scores. DECC has set a Levy Control Framework (LCF) envelop for FIDeR to determine whether to undertake down selection (~12% of the current LCF).

CfD contract terms and strike prices

Final Investment Decision Enabling for Renewables

Fourth carbon budget should not be weakened, says CCC

The government's climate adviser has concluded that there is no legal reason to lower the ambition of the fourth carbon budget.

The Committee on Climate Change (CCC) issued on 11 December the second stage of its review into whether there had been significant changes in the circumstances upon which the budget was based. The first part--published on 7 November--had focused on climate science, international circumstances, and EU pathways. It argued that in none of these areas had developments since 2010 justified revising the budget.

The second stage of the review analysed the most cost-effective path towards the national 2050 emissions target. It provided an assessment based on measures to meet the fourth carbon budget against one in which their implementation was delayed until beyond 2030. This suggested that early abatement measures could provide a saving of £100bn in present net value terms under central case assumptions for technology costs, fossil fuel prices and carbon prices. The report said this saving could approach £200bn if fossil fuel or carbon prices were higher than anticipated; under lower than expected prices for these, the cost saving would be eroded but would not become negative.

A substantial part of the cost saving associated with early action would, the report said, come from the power sector. Under central assumptions, deployment during the 2020s of 18GW of new nuclear power and 10GW of onshore wind (generating the equivalent of 3GW of baseload capacity) would save approximately £25bn over the course of their lifetimes. This is relative to gas-fired generation, subject to a rising carbon price, reaching £76/tCO2 in 2030 and continuing to increase beyond this. The report also said that deployment of offshore wind and carbon capture and storage (CCS) during the 2020s would create options for further deployment beyond 2030, at lower costs and faster rates. It projected that this investment would save up to £40bn over the lifetime of investments, or £20bn if a mature alternative like nuclear power were available.

The CCC argued that the deployment of CCS during the next decade would provide the necessary scale to develop CO2 infrastructure clusters and to reduce the cost of capital associated with the technology in all

sectors. This would enable its application in industry and on bioenergy, both of which the report said would be important contributors towards the UK's 2050 target.

The report concluded that a 'back-ended' path towards the target would entail a very rapid transformation of the energy system, and was likely to increase both costs and risks. The CCC said that such a path would most likely imply the need for the UK to purchase international emissions credits to meet the 2050 target, and it highlighted assumptions that the cost of carbon credits would increase by then to between £110-£325/ tCO2e.

The CCC's analysis suggested that investment in low-carbon power generation through the 2020s to achieve an average carbon intensity of power generation of 50g CO2/KWh in 2030 would entail a further cost of £20 on household bills in 2030, compared to 2020. The need for funding would, it said, increase from £8bn in 2020 to £11.5bn in 2025, before falling to approximately £10bn in 2030. The smaller increase in costs than during the 2010s was said to reflect the benefits of learning and cost-reduction. The CCC acknowledged that there was scope to adjust the 50g CO2/KWh ambition and to still meet the budget; it said it would return to the issue of whether and when lower ambition might be appropriate when advising on the appropriate level of the 2030 decarbonisation target--likely to be in 2015.

The CCC also said that it had seen since 2010 further evidence that carbon budgets could be met without exacerbating fuel poverty. But it suggested that policies might need to be strengthened in certain areas; in particular, it said that low-income households using electric heating would experience disproportionate impacts of policies to support investment in low-carbon generation, given that associated costs were added to electricity bills. It estimated that around 600,000 electrically-heated homes had solid walls, and most could be insulated at negative or low cost per tonne of carbon.

CCC

Government exploring potential of local energy

DECC responded on 9 October to the energy and climate change select committee's report on *Local Energy*.

The committee's report, issued in August, highlighted concerns that the financial support available under the existing policy framework and the forthcoming Energy Market Reform programme would be inappropriate for medium-sized renewables developments. It commended DECC for extending the feed-in tariff (FiT) threshold to enable community projects of up to 10MW to access the support mechanism. But it noted developments of 10MW-50MW would neither be served by FiTs nor likely able to access contracts for difference feed-in tariffs (CfD FiTs), which are geared towards larger developments. The committee therefore advised the government to develop alternative proposals to support projects within this range.

The committee had recommended DECC carry out an assessment of the potential that 5MW-50MW projects of all types could play in the energy mix. The government agreed there are a range of different ownership models for medium-scale projects and a lack of research to identify what their combined contribution could be. DECC said it would carry out further assessments in this area. But stated that its *Community Energy Strategy*, due to be published before the end of the year, would include a high-level assessment of the potential contribution of community-owned and -led energy projects under different scenarios.

The committee found the Power Purchase Agreement (PPA) market was currently problematic for independent generators, and could deteriorate with the move to CfD FiTs. The government agreed there were issues in the current market for the PPAs, but said these difficulties would be somewhat alleviated by the new support regime. CfD FiTs, it argued, would remove the long-term price risk from a generator as there would no longer be a requirement for price floors or fixed prices in a PPA to satisfy financiers that there would be a minimum price received. Removing this risk would, the government said, make PPAs simpler and less costly for offtakers to provide and should lead to greater competition in the PPA market. DECC also noted it had amended the *Energy Bill* to enable the government to implement an offtaker of last resort scheme. This aims to give banks greater confidence to lend to independent developers, supporting a wider range of participants while improving market competition.

On the committee's recommendation that the government create alternative proposals to support projects within the 10MW-50MW range, the government reiterated that CfD FiTs would be available for small- and medium-sized projects. DECC argued that as CfD FiTs removed some of the commercial risks for investors and supported market access for developers, it would improve conditions for generators of all sizes. However, DECC acknowledged that it may take some time for the market to adjust to CfDs--particularly for smaller market participants.

The committee recommended the government facilitate the grid connections for small- and medium-sized renewable developments to ensure they have priority access wherever possible. DECC agreed that connections should be secured within a reasonable timeframe and reasonable cost, and that improvements were necessary in the level of service provided by distribution network operators (DNOs). But it said it was Ofgem's role to ensure that DNOs delivered what customers needed and supported the government's overarching objectives. It also said Ofgem had made encouraging efforts to strengthen dialogue between DNOs and distributed generators through forums such as the Distributed Generation Forum.

A recommendation that the FiT definition be amended so that community organisation projects were included was rejected. Having finished a two and a half year review, the government said it had no plans to make any further changes to the scheme at this time. But, following Royal Assent of the *Energy Bill*, the government does intend to consult on the secondary legislation required to deliver its ambition of increasing the maximum capacity of FiTs with the definition of 'community' to be included in this exercise.

Parliament

A Warm Welcome to New Members

Cambridge Cleantech is delighted to have welcomed several new companies as members in the last quarter.

To find out more about these organisations or to contact them, please click on the new member below.

Founders:

- MITIE
- Crop Performance

Associate Founders:

- Rothamsted Research

Members:

- Cambridge Ahead
- Cambridge Transport Solutions
- Green Running
- Beach Energy
- Berti Investments
- Chalmor
- eTRV
- AppNearMe
- Solar Overtone
- Cambridge Nanosystems
- Aras Capital
- i2i-management.com
- Theresa Prevost
- Green World Initiative
- KisanHub
- RideBubble
- Juice Technology Holdings
- Unprinter Company
- Educe
- Green Heat
- eco-procure
- Bright Light Industries
- Bactest
- Trident Energy
- Intouch IS Ltd
- Graveley Associates
- Renovagen
- Sustainable OneWorld Technologies C.I.C.
- Clearfleau
- Cambridge Architectural Research Ltd
- Anther Investments
- Barr Ellison Solicitors
- Studio LK
- Flexisolar
- Inside2Outside
- i2o

Cambridge Cleantech is a leading membership organisation providing innovative business support services from access to finance, to contract opportunities and support for start-ups. Our 280+ members are at the heart of our activities that are driving the development of Europe's fastest growing cleantech cluster.

For any further information on any of our new members or for further information on membership, please don't hesitate to contact the team on 01223 750017

Diageo & Clearfleau Bio-energy Project wins 2013 Scottish Green Energy Award

Diageo and British Anaerobic Digestion technology company, Clearfleau have been recognised with two Scottish environmental awards for the bio-energy plant located on Diageo's Dailuaine distillery in Speyside. This on-site anaerobic digestion facility won the prestigious Project Award at the Scottish Green Energy Awards, announced on 5th December 2013. On the 26th November, the Dailuaine project was runner-up in the VIBES Awards, in the Environmental and Clean Technology Category.

The innovative bio-energy plant was built by Cambridge Cleantech member Clearfleau on the Dailuaine distillery, near Aberlour. It treats whisky co-products to produce cleansed process water, while generating renewable energy for the distillery. On a daily basis the plant (a replacement for an aerobic bio-plant) converts over 1,000m3 of dilute co-products into green electricity and heat for the distillery.

On receiving the Project Award at the Scottish Green Energy Awards Ceremony, at the National Museum of Scotland, Clearfleau Director, Richard Gueterbock said:

"We are thrilled to share the Project Award with Diageo. The project is a great example of Anaerobic Digestion on an industrial site – converting co-products into green energy for use on-site. As an emerging British company, Clearfleau looks forward to delivering more Scottish projects in the food and drink sector. We expect to employ more people in Scotland in 2014."

For more information on Clearfleau, please visit www.clearfleau.com

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Greenair Cars goes Carbon Positive

GreenAir Cars is believed to be the first transport company outside London to remove more carbon emissions from the environment than it creates, making it "carbon positive".

The move re-enforces the private hire taxi firm's commitment to minimising its impact on the environment, without any compromise on vehicle quality and service.

To achieve this, the family-run operation has partnered with the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire to support the Great Fen project, which aims to restore a huge wetland area between Peterborough and Huntingdon over the next 50 years. Donations from GreenAir Cars will be used specifically to help restore and manage 182 hectares of land at the aptly named Engine Farm, at the heart of the project.

The Wildlife Trust estimates that each restored hectare of the Great Fen will prevent the loss of 10,000 tonnes of CO2 equivalents. In addition, once the land is restored, it will begin to store carbon at an estimated annual rate of 2,300 tonnes per hectare.

GreenAir Cars co-founder Justin Ott says: "We realise our type of business can be damaging to the

environment. In addition, there's a growing desire within the Cambridge business community to make eco-conscious choices and invest in green technologies.
By working with the Wildlife Trust, we're helping to restore the wild fen landscape in a time where the Green Belt around Cambridge is shrinking. We chose a Cambridgeshire-based project in a bid to give something back to the community in which we live and work."

"Choosing GreenAir Cars for business travel means firms are making a positive environmental choice."

GreenAir Cars calculate the amount of carbon emitted per journey by converting the mileage into grams of carbon produced. This allows them to accurately track their environmental impact, and also means GreenAir Cars is the only taxi firm in the East able to issue carbon reports to business customers. The emissions are then converted into pounds. Donations to the Great Fen will be made twice a year and are anticipated to run into hundreds of pounds.

"Our focus is clients, climate and cost," added Justin Ott, "We aim to offer our business account customers the highest quality of service. Our fuel efficient vehicles keep costs down, meaning our service also doesn't cost the earth - in more ways than one."

GreenAir Cars

Larkfleet Group recognised as leader in sustainable building with Industry award success

Cambridge Cleantech Associate Founder Member, Larkfleet Group, has secured a prestigious accolade at the Green Apple Awards. Bourne-based housebuilder and developer Larkfleet Group (www.larkfleetgroup.co.uk) won a silver accolade in the 'energy reduction' sector of the esteemed national awards for their Larkfleet PassiveHouse project.

Constructed by Larkfleet next to its Lincolnshire headquarters, the Larkfleet PassiveHouse is a prototype house, designed and constructed using lightweight materials and off-site construction techniques which could revolutionise the construction industry.

The successful completion of the Larkfleet PassiveHouse proves the technical feasibility of materials and techniques that have the potential to reduce costs, time and carbon emissions in building construction. Researched, designed and constructed by Larkfleet as part of a consortium of companies, it is the first house of its type with the potential for widespread use across the UK.
Larkfleet competed against more than 500 other nominations and Karl Hick, Larkfleet Group CEO, was

presented with the Green Apple Award at a glittering presentation ceremony at the House of Commons in November2013.

This award success demonstrates just how Larkfleet Group is committed to investing in the future of the construction industry," commented Karl Hick. "Energy efficiency and sustainable building practices are integral to our work and I am delighted to accept this award as a reward for the hard work of all involved in the success of this project."

As a result of this success, Larkfleet has been invited to have its winning award submission published in The Green Book, the leading international work of reference on environmental best practice. Larkfleet will also be considered to represent the UK in the European Business Awards for the Environment.

LarkFleet Group

Patent Trends in the Clean Energy Sector

The Clean Energy Patent Growth Index (CEPGI) has recently released its results for the third quarter of 2013. The CEPGI is produced and published by US law firm Heslin Rothenberg and is a quarterly report on clean energy patents granted in the United States. The CEPGI tracks the granting of U.S. patents for the following sub-components: Solar, Wind, Hybrid/Electric Vehicles, Fuel Cells, Hydroelectric, Tidal/Wave, Geothermal, Biomass/Biofuels and Other Clean Renewable Energy. - See more here

The latest results show solar has become the leading sector within clean energy for patent grants, overtaking fuel cells, and that most of the growth in solar patents has been driven by small companies.

For more information about patents and other forms intellectual property in the cleantech sector, please contact Reddie & Grose LLP, Cambridge's leading cleantech patent and trade mark attorneys and Founder Members of Cambridge Cleantech. You can find more articles by Reddie & Grose on topical IP issues here.

Pictured: Will Ponder, Senior Associate

FREE Representation for Clean Tech companies at UKTI & EEN Trade Mission in Bulgaria 5-8 March

Are you interested in the clean tech trade mission to Bulgaria in March 2014?

Don't have the time to go?

Contact Adelina Chalmers to speak about how she can represent you for free at the trade mission and explore market opportunities for you completely free of charge.

Adelina is professional public speaking coach, helping clean technology companies talk about their business in a way that wins contracts, investment or opens up opportunities.

She is going with UKTI and EEN to Bulgaria, then to Romania. She is happy to network and build business contacts for 5 clean technology companies from the UK.

adelina@presentinggoodpractice.co.uk Mobile: 07932088821.

Business Presentation Coaching Programme:

Pitching for Growth

Does your company offer a genuinely great product/service, yet clients are sceptical when you present it to them?

We offer 10 clean technology SMEs based in the East of England **FREE one-to-one coaching worth £3,500** on:

- How to present to win contracts
- How to present to win investment
- How to talk about your business to a non-technical audience
- How to transform networking conversations into a potential sale, collaboration or business partnership!

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The one-to-one sessions are delivered in Cambridge on a day and time of your convenience.

NIAB and the European Regional Development Fund's support means we can provide this service **free of charge** to successful applicants.

More information at: www.innovationfarm.co.uk/pitching

Ministers Queuing Up to Visit New Cleantech Incubator!

First it was Ed Davey, sec of State DECC, now its Mark Simmonds, FCO Minister for Africa, who have visited the new cleantech incubator in Cambridge.

The Bream 6 stdd building, home to Cambridge Cleantech, has had not one, but two high-profile visits over the last few months. Firstly, the Rt Hon Edward Davey, Secretary of State for Energy and Climate Change, visited the new cleantech business incubator building in Cambridge on Thursday 28 November 2013.

Accompanying the Minister was Cambridge MP Julian Huppert, who cut the ribbon to launch Cambridge Cleantech 2 years ago and who commented: "This innovative building is an excellent example of how sustainable materials can be used to their full advantage to maximise energy efficiency. This cost effective solution combined with the support for start-up businesses means this centre should prove a model for future buildings, both in this country and internationally, and promote Cambridge."

Rt Hon Edward Davey was followed by the Minister for Africa and the British Overseas Territories, Mark Simmonds, who visited the business incubator building on Monday the 6th of January 2014. During Mr. Simmonds visit, a lively discussion with executives from Cambridge Cleantech member companies took place over a working lunch. Topics included the opportunities and challenges arising from developing trade links with Africa and the Caribbean. The opportunities for the renewable energy sector, not least in terms of solar, were also a particular highlight.

Both Ministers took a tour of the new facility and met some of the early cleantech tenant companies as well as local businesses which have supplied products for the construction of the 'environmentally excellent' rated building.

£9m has been spent on The Future Business Centre, which consists of 35,000 sq ft for 50 start ups and is a 'BREEAM Excellent' (Building Research Establishment Environmental Assessment Method) rated building. This means it is naturally ventilated with a high thermal mass and using recycled concrete in the frame. The building uses a mixture of solar panels and thin solar films built into the roof and cladding to produce electricity and uses solar thermal water heating systems to reduce energy demands. With LED lighting throughout, an electric car charging point and a rooftop garden the centre is a showcase for sustainable building.

Martin Garratt, CEO of Cambridge Cleantech says "we are looking forward to being a tenant at the new cleantech incubator, where we will be amongst our own community of cleantech start-ups. We will be supporting the cleantech companies with 'First Friday' surgeries, specialists in residence and a cleantech events programme. We believe we are ahead of other European centres and can develop a globally recognised centre of excellence in Cleantech. "

Biofertilizers : An alternative to conventional plant fertilizers

A biofertilizer developed by Professor P.J.Leggo and his colleagues far exceeds the capabilities of synthetic chemical fertilizers. The new material utilises the properties of zeolite, a common mineral formed by the alteration of volcanic ash. On deposition in either lake or shallow marine water this ash, which is chiefly volcanic glass, is altered to zeolite. Deposits of this sediment are, over geological time, compressed into a hard rock which on uplift above sea level can be obtained by open cast mining.

When the crushed rock is mixed with an organic component, such as animal or plant waste, the resulting biofertilizer is odourless, dry and friable. The decomposition of the organic component produces ammonia which, in ionic form, is captured by the zeolite and loosely held in its crystal structure. When a small quantity of biofertilizer is added to soil, plant growth is highly enhanced.

Acid sulphide mine waste , coal waste and marginal lands which are all of poor nutritional quality can be used to grow biofuel crops. This results from the fact that amendment with the biofertilizer sponsors nitrification as the loosely bound ammonium ions,which are back exchanged by potassium ions from the soil-organic component, are oxidised by soil micro-organisms to produce, via the formation of nitrite, nitrate and hydrogen ions. Hydrogen ions which protonate the soil porewater are highly unstable and dissociate cations from the plant substrate. The organic matter provides phosphorus and sulphur and other minor trace elements many of which are essential for normal plant growth. As the plant has available a large range of chemical elements, in ionic form, it selects what it wants unlike the practice with chemical fertilizers in which man decides what the plant requirements are.

THe new approach has produced spectacular results working with Tall Grass (/Miscanthus/), Ossier Willow (/Salix viminalis/), Sweet Corn (/Zea maize)/, Sugar Beet (/Beta vulgaris/), Oil Seed Rape (/Brassica napus/), and Linseed (/Linum usitatissium/).as it has with many other plant types. The outcome of our work demonstrates that biofuel crops can be grown on 100,000's of hectares of land in the UK which do not support lush vegetation. If the biofertilizer is used then highly productive land can be used to grow food crops. and it would appear that the supply of biomass for energy conversion can be sustained without the use of arable farmland.

Professor Peter Leggo, Department of Earth Sciences

Phoenix MarCom offers Cambridge Cleantech members exclusive deals on specialist PR and Marketing services

Phoenix MarCom, a Cambridge Cleantech Associate Founder Member, is a specialist B2B communications and marketing agency serving the renewables, environmental and life science markets. Based just outside Cambridge – a leading area at the heart of the UK's clean tech revolution – Phoenix MarCom provides expert marketing services across Europe, China and the USA. Learn more here.

The Phoenix team includes highly experienced professionals with experience in the clean tech and scientific industries, specifically water, environmental, low carbon and sustainability sectors. Our marketing and communications experts have extensive knowledge and skills in lead generation, market research, event planning, content generation and social media platforms, amongst many others.

Whether you are a large, well-established company, or a technologically innovative start-up, Phoenix can work alongside your team to identify strategic objectives and develop marketing strategies that suit your budget, creating tangible results – all leading to what matters most: an increase in sales.

Phoenix MarCom is offering one **FREE** press release for each Cambridge Cleantech member.

Members also benefit from a **10% discount** on all marketing and PR services, including advertising, copywriting, PR and digital.

Utilise the expertise of Phoenix Marcom to realise your potential and promote and grow your business. For more information on these exclusive offers, call 01480 471045 or contact marketing@phoenixmarcom.co.uk

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Final year astrophysics student seeking summer internship

Claire Puttock clairekputtock@gmail.com

Final year astrophysics student at the University of Edinburgh. Seeking a summer internship in the renewable energy/clean tech sectors requiring skills in physics, mathematics and computer programming.

Education

BSc (Hons) Astrophysics, University of Edinburgh Sep 10 – Jul 14
Class medal, third year – 83% average
Margaret Campbell-Scott scholarship
Courses include computation simulation, thermodynamics, fluid mechanics

Stirling High School Aug 03 – Jun 09
Advanced Highers – Physics A, Maths A
Highers – AAAAAA in Physics, Maths, Chemistry, Biology, English, Geography

Work Experience

Cavendish Laboratory, Cambridge Jun 13 – Aug 13
- Completed original research in galactic astrophysics

University of Malta Jul 12 – Sep 12
- Developed shape fitting algorithms using Bayesian inference

UK Astronomy Technology Placement Sep 11 – Sep 11
- Evaluated the allocation efficiency of a spectrograph on sample fields

Programming Languages: IDL, MATLAB, Java, Maple, LaTeX

Did you know Cambridge Cleantech has a Linked In group?

Within this group you can speak with fellow Cambridge Cleantech members about past events, upcoming events, important member news and any developments relevant to the community. Please join the group and share your thoughts. Please note that this group requires verification before you are a member.

You can find us on linked in here

DECC reinforces non-domestic RHI

DECC has confirmed that it will increase support for certain technologies under the non-domestic version of the Renewable Heat Incentive (RHI).

The department had decided to re-examine evidence on the assumptions used to set tariffs for the scheme as some technologies initially experienced low levels of uptake. DECC said on 4 December that, subject to state aid approval, it would increase the support available for combined heat and power plant, large biomass boilers, deep geothermal, ground source heat pumps, solar thermal and biogas consumption. DECC also introduced new support for air-water heat pumps.

DECC

GIB invests £20mn in energy from waste plant

The UK Green Investment Bank (GIB) announced on 28 November it is to provide £20mn for an energy to waste project in South Gloucestershire.

When complete the facility is expected to convert up to 300,000 tonnes of household waste to energy each year, enabling over 96% of this material to be diverted from landfill. The GIB also confirmed that the Severnside Energy Recovery Centre (SERC) facility is expected to support up to 200 jobs onsite during construction and 53 jobs once complete.

GIB chief executive Shaun Kingsbury called the investment a model for the GIB, as its mandate is to "mobilise" private money to invest in UK infrastructure. He said: "With this project, every £1 of GIB investment brings £11 of other capital, much of it from international investors."

Green Investment Bank

Political squabbles threaten renewables investment: Ernst & Young

"Intensified political point-scoring" surrounding the UK energy sector has left renewable energy investors in a state of uncertainty, according to Ernst & Young.

The analyst issued on 18 November its latest quarterly Ren*ewable Energy Country Attractiveness Indices*. The UK remained in fourth spot overall; behind the US--which continued to top the rankings--China and Germany. But the report warned that recent announcements from the three main political parties had signalled "inharmonious times ahead", which could dampen investor interest in the sector.

Ernst & Young environmental finance leader Ben Warren said that some of the £29bn of renewables investment announced over the last three years was contingent on government policy stability.

Ernst & Young

Energy park decision to "transform" Humber's future

The department of transport has approved plans for the £450mn Able Marine Energy Park (AMEP) on the south bank of the Humber.

The park will provide facilities purpose-built for the manufacture, assembly and installation of offshore renewable technologies at Able Humber port. AMEP is at the centre of the largest enterprise zone in the UK.

Speaking on 18 December, Able founder Peter Stephenson said go-ahead for the project would attract around 4,000 local jobs directly, and that renewable energy offered the opportunity to "transform" the economy of the South Bank and the Humber Region as a whole. "The major international companies needed to know that the UK was serious in its commitment to the future of offshore wind power", Stephenson added.

Able Generation

DONG to acquire Race Bank project

Centrica confirmed on 12 December that it had reached an agreement to sell its 580MW Race Bank offshore windfarm project to DONG Energy Power for £50mn.

Centrica has taken the project, which is situated 27km off the Norfolk coast, through the planning and Front End Engineering and Design phase. Pending a final decision to move forward with the project, construction could commence in 2017.

DONG Energy Executive Vice President Samuel Leupold said: "Race Bank fits very well into our existing pipeline of offshore wind projects and will contribute to the achievement of our strategic target of constructing 6,500 MW by 2020."

Following completion of the transaction, Centrica will retain equity interests totalling 290MW in four operational windfarms in the UK.

Centrica